

MassRoots, Inc. (MSRT - \$1.15 - Buy)

COMPANY NOTE

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Sales and trading 7 a.m. to 7 p.m. ET, (646) 465-9090

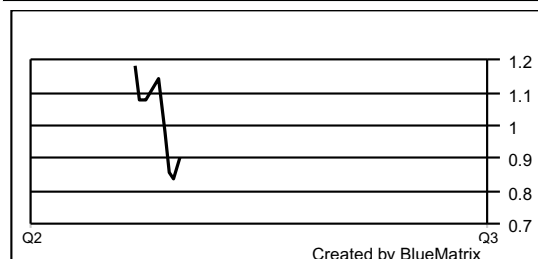
Sales and trading 7 p.m. to 7 a.m. ET, (646) 465-9063

| Stock Data | 08/03/15 |
|------------------|-------------------|
| Price | \$1.15 |
| 52 Week Range | (\$0.80 - \$7.01) |
| Price Target | \$2.50 |
| Market Cap (mil) | \$53.01 |
| Shares out (mil) | 46.10 |
| 3-Mo Avg Vol | 32,796 |
| Cash per share | \$0.00 |
| Total Debt (mil) | \$0.10 |

| EPS (\$) | | | |
|----------|--------|---------|---------|
| Yr Dec | 2014A | 2015E | 2016E |
| | Actual | Curr | Curr |
| Mar | – | (0.01)A | (0.03) |
| Jun | – | (0.03)A | (0.03) |
| Sep | (0.02) | (0.03) | (0.03) |
| Dec | (0.03) | (0.03) | (0.02) |
| YEAR | (0.17) | (0.12) | (0.11) |
| P/E | (6.8)x | (9.6)x | (10.5)x |

| Revenues (\$ millions) | | | |
|------------------------|--------|-------|-------|
| Yr Dec | 2014A | 2015E | 2016E |
| | Actual | Curr | Curr |
| Mar | – | 0.0A | 0.7 |
| Jun | – | 0.0A | 1.0 |
| Sep | 0.0 | 0.1 | 1.4 |
| Dec | 0.0 | 0.4 | 1.9 |
| YEAR | 0.0 | 0.5 | 4.9 |

One year price history MSRT



Initiating Coverage of MassRoots with \$2.50 Target

We are initiating coverage of MassRoots with a Buy recommendation and \$2.50 price target. MassRoots operates the largest social network for the cannabis community with almost 500,000 users and is on track to have one million users by early next year. We think this will expand further as the company's focus on the 8 million daily cannabis users in the US expands to the 22 million monthly users and the 52 million who have used marijuana in the past year. The company's network provides valuable information to growers, processors and retailers on consumption patterns and product preferences. This information is now being monetized and we believe MassRoots will introduce more products and services that build off this platform resulting in strong user, revenue and cash flow growth for many years.

The app enables cannabis users to share with each other tips, preferences and trends regarding their usage. This online community provides valuable market information that growers, dispensaries and accessory providers can use to respond in a timely way to new trends, demands and keep their inventory in line with changing consumer preferences. In addition, this information can be used to create customer loyalty programs that reduce churn and create brand loyalty.

Growth has been rapid since its inception in April 2013, despite a limited marketing spend and removal from the AppStore for a short period. We believe this shows the value of the app to the user community and the likelihood of a much larger user base as marketing dollars increase and new platforms are introduced.

To date the company has focused on building its platform and attracting users. Monetization efforts began recently with the introduction of paid business services in Q3 that will allow dispensaries, glass shops, cannabis brands and others the opportunity to connect with customers via premium profiles, access to geo-based analytics, trending analysis and sponsored posts. As of the end of Q2, there were over 1,000 cannabis businesses utilizing MassRoots for Business including almost half of the dispensaries in Colorado and 85% of dispensary chains with more than four stores. The company expects annualized revenue of \$12 million by year-end 2016.

In April, MassRoots purchased almost 9% of seed-to-sale vendor Flowhub for \$175,000. The companies are developing a partnership arrangement that will combine data from growers, point-of-sale systems and the MassRoots app in one platform. With this data, dispensaries and growers can monitor trends, target customers more efficiently and increase customer loyalty. We expect this partnership to be an important source of new user growth.

The MassRoots iOS app was launched in July of 2013 and a fully capable Android app in February 2014. Apple removed the app from the App store in November 2014, but reinstated the app in February this year after the app's users petitioned Apple for re-instatement and MassRoots agreed to make the app available only to users in states where marijuana is legal. We believe this demonstrates the loyalty of the user base as well as the difficulty potential competitors will have in entering the market. MassRoots is investigating a new web interface that opens its contents to search engines. It believes this could draw hundreds of thousands of unique monthly visitors and accelerate user growth and advertising inventory. We have not included this in our forecasts and is a source of upside to user growth and valuation.

Large social networking sites like Facebook, Twitter and Pandora trade at an EV/user ranging between \$38 and \$200. Private transactions in the space for WeedMaps and Leafly suggest valuation of \$300 million for revenue of \$10 to \$20 million. Using these comps results in a valuation of \$100 million to \$150 million or \$2 to \$3 per share.

Investment Summary:

MassRoots operates the largest social network for the cannabis community with 500,000 users and is on track to have one million users by early next year. We think this will expand further as the company's focus on the 8 million daily cannabis users in the US expands to the 23 million monthly users and the 52 million who have used marijuana in the past year. The company's network provides valuable information to growers, processors and retailers on consumption patterns and product preferences. This information is now being monetized and we believe MassRoots will introduce more products and services that build off this platform resulting in strong user, revenue and cash flow growth for many years.

Valuation:

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Risks to achievement of target price:

Risks are substantial. Marijuana is classified as a Schedule 1 substance on the Controlled Substances Act. While the Department of Justice has decided to not interfere with marijuana production and sales in states with legal marijuana programs (within certain parameters) and directed U.S. attorneys not to pursue banks providing banking services to the industry as long as they adhere to guidelines, this stance can change with a new administration or with a change in public opinion. This would have an adverse impact on the company. Even with the policy of benign neglect embraced by the DoJ, banking relationships for the industry have been difficult to maintain.

We estimate the company will need to raise capital to fund its operations over the coming quarters. This could result in dilution to existing shareholders. In addition, there are 3 million essentially costless warrants outstanding that could determine the stock's movement if the investor chooses to exercise and sell the shares.

Our estimates assume a successful launch of Flowhub and the consummation of a partnership where the two companies will share information to create an integrated platform. This is expected to drive user growth as well as MassRoots for Business customers. Delays in the development of the Flowhub platform and/or the integration of the two company's systems could have an adverse impact on our estimates.

Marijuana consumption in the US.

Annual marijuana consumption in the US is estimated in a range of \$30 billion to \$60 billion, growing between 6% to 8% annually. These estimates are mostly based on the National Survey on Drug Use and Health survey conducted by RTI International under contract to the U.S. Department of Health & Human Services and then adjusted for assumed under-reporting of consumption. Although marijuana consumption can only be estimated in a very wide range, it is a substantial market, probably as large, or larger, than consumption of cigarettes (excluding excise taxes) and about 20% of the size of the alcohol market.

A White House report, "What America's Users Spend on Illegal Drugs: 2000 to 2010," adjusts data generated by the National Survey on Drug Use and Health (NSDUH) to estimate marijuana usage and expenditures over the past ten years. The following table shows the results of NSDUH usage surveys from 2000 to 2010, categorized by intensity of use. In 2010 there were 18 million frequent (used marijuana in the past month) users in the US and over 29 million who had consumed marijuana in the past 12 months.

Table 5.1. Number of Marijuana Users, by Intensity of Use (NSDUH)

| Year | Infrequent | Light ^a | Weekly | More than Weekly | Daily/Near-Daily | Total, Past-Month Users |
|-------------------|------------|--------------------|-----------|------------------|------------------|-------------------------|
| 2000 ^b | 7,897,404 | 3,728,863 | 2,553,657 | 1,884,062 | 2,547,100 | 10,713,682 |
| 2001 ^b | 8,943,216 | 4,213,017 | 2,742,171 | 2,066,520 | 3,100,307 | 12,122,015 |
| 2002 | 11,352,301 | 4,620,674 | 3,562,462 | 2,582,778 | 3,817,922 | 14,583,836 |
| 2003 | 10,815,568 | 4,951,453 | 3,297,084 | 2,615,522 | 3,911,252 | 14,775,311 |
| 2004 | 10,917,262 | 5,125,332 | 3,107,401 | 2,584,386 | 4,164,693 | 14,981,812 |
| 2005 | 10,836,514 | 4,774,757 | 3,604,589 | 2,331,878 | 4,226,933 | 14,938,157 |
| 2006 | 10,439,821 | 4,851,109 | 3,307,378 | 2,943,745 | 4,203,008 | 15,305,240 |
| 2007 | 10,728,393 | 4,818,181 | 3,343,616 | 2,161,160 | 4,398,995 | 14,721,952 |
| 2008 | 10,357,957 | 5,062,140 | 2,986,563 | 2,768,616 | 4,782,539 | 15,599,858 |
| 2009 | 11,893,362 | 5,192,632 | 3,898,926 | 2,823,576 | 5,276,072 | 17,191,206 |
| 2010 | 11,746,901 | 5,111,656 | 4,068,273 | 2,858,795 | 5,961,035 | 17,999,759 |

^a This category was referred to as "occasional users" in previous editions of this report.

^b The 2000–2003 marijuana estimates are not perfectly comparable to the later years because of changes in survey questions and methods.

Source: *What America's Users Spend on Illegal Drugs: 2000 to 2010*

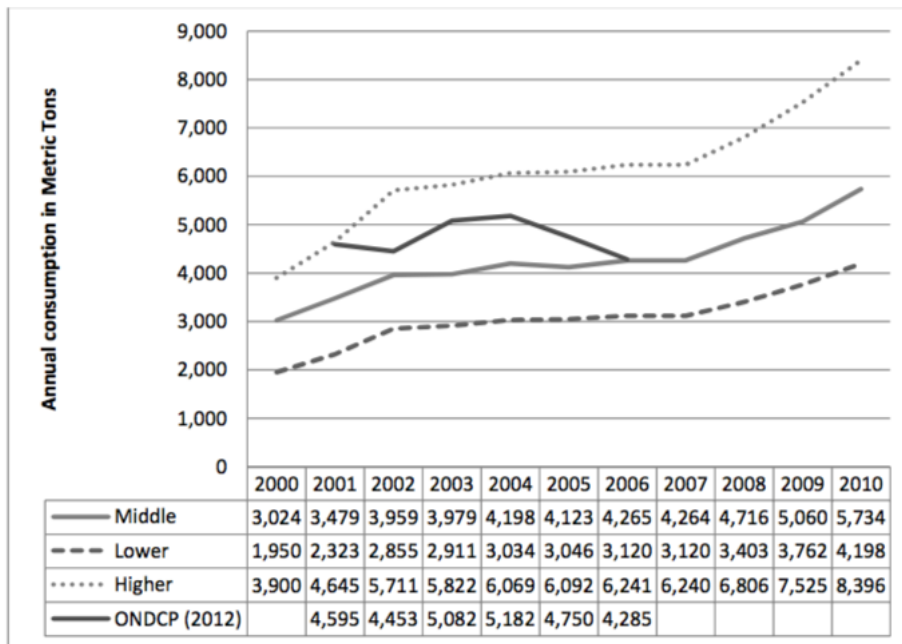
Surveys on sensitive behaviors frequently suffer from underreporting so adjustments need to be made to the NSDUH data. Researchers of marijuana use in Washington state suggest an upward adjustment of 2% to 43% is reasonable. The White House study believes an adjustment that is about in the middle of that range, or 25%, is also reasonable. This would put past-month users at about 22 million and users within the past 12 months at about 52 million.

Growth in the number of frequent users over the past five years has increased at a 3.8% compound annual rate, and over the past 10 years at a 5.3% rate, although the survey results for 2000 are not perfectly comparable to the most recent survey results due to changes in survey questions and methods. The growth rate is slightly higher than the total population growth of the US.

Usage varies by age group with 18.9% (in the most recent NSDUH survey) of the 18-25 year old cohort admitting marijuana use in the past month, dropping to 5.4% for the 26 and older group and 7.4% for the 18 and older segment. Marijuana use in the past year, in the same NSDUH survey, is 12.2% for 18 and older, 8.9% for 26 and older and 31.6% for the 18-25 cohort.

The White House report also presents estimates for marijuana consumption based on NSDUH survey data. The lower estimate uses the NSDUH, the middle estimate adjusts the NSDUH data for the likelihood of underreporting and the higher estimate assumes the amount reported is also underreported, based on results of alcohol consumption surveys which show a consistent underreporting of consumption.

Estimates of Marijuana Consumption (MTs), 2000-2010



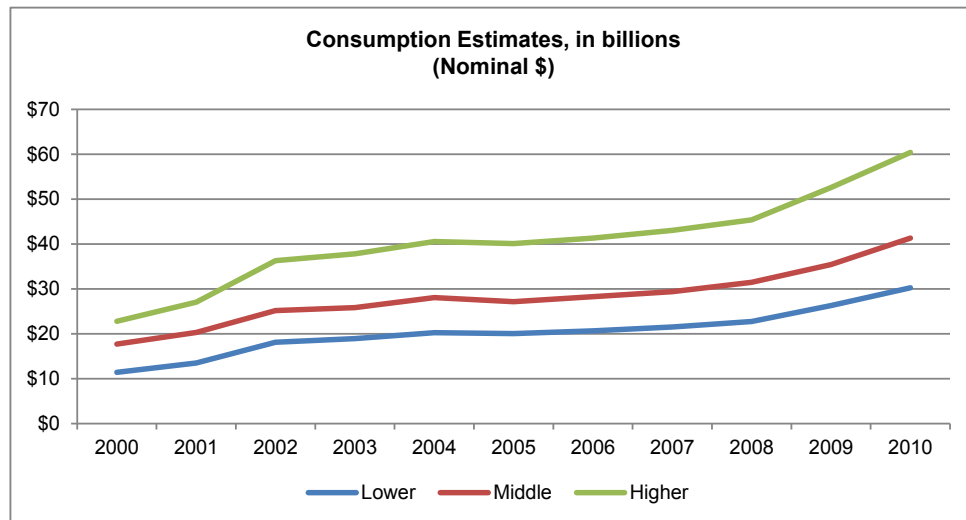
Note: The 2000–2003 marijuana estimates are not perfectly comparable to the later years because of changes in survey questions and methods.

Source: *What America's Users Spend on Illegal Drugs: 2000 to 2010*.

Consumption from 2005 to 2010 is estimated to have grown at a 6.6% compound annual rate and a 9.3% rate for the ten years ending 2010. Since the number of users have grown at a 3.8% and 5.3% rate over the five and ten year period, respectively, consumption per user has grown due to the growth in daily and near-daily users relative to the total number of users.

Consumption data, like user data, suffers from estimation difficulties. The NSDUH survey asks users how often they consume marijuana and then estimates total consumption based on estimates of average use per type of user. Adding to the problem is the amount of marijuana consumed is based on 2001-03 data and assumes the weekly and more than weekly users smokes 1.92 joints per week, the light user smokes 1.68 joints per day and the daily user smokes 3.87 joints per day. Each joint is assumed to weigh 0.43 grams. However, since THC levels in marijuana have been increasing, it is possible the number of joints smoked by each category or user has declined, if users are seeking to consume a desired level of THC. Adjusting for THC potency would result in lower estimates.

Using the price and consumption estimates results in estimated expenditures for the US, ranging from \$20 billion to \$60 billion. The low end of the range uses the NSDUH survey data, the middle estimate adjusts the NDSUH data for the likelihood of underreporting and the higher estimate assumes the amount reported is also underreported, based on results of alcohol consumption surveys which show a consistent underreporting of consumption.



Source: *What America's Users Spend on Illegal Drugs:2000 to 2010*. BEA. Chardan Capital Markets.

We believe legalization for recreational use will increase marijuana consumption for a number of reasons. Prices could decline from an estimated range of \$200 to \$300 per ounce and depending on taxes, move closer to indoor production costs of ~\$35 per ounce or much lower for outdoor production. Price elasticity of demand is estimated at -0.25 so there could be a substantial increase in demand from lower prices. Legalization could also result in more consumers of marijuana since the latest survey on drug use suggests only 12% of the population over 18 has used marijuana in the past twelve months, while alcohol usage for the over 18 age group is 56%, suggesting ample room for growth. The introduction of new delivery form factors, such as edibles, could also result in greater consumption from existing users as well as consumption from new users who may be reluctant to smoke anything.

Medical Marijuana

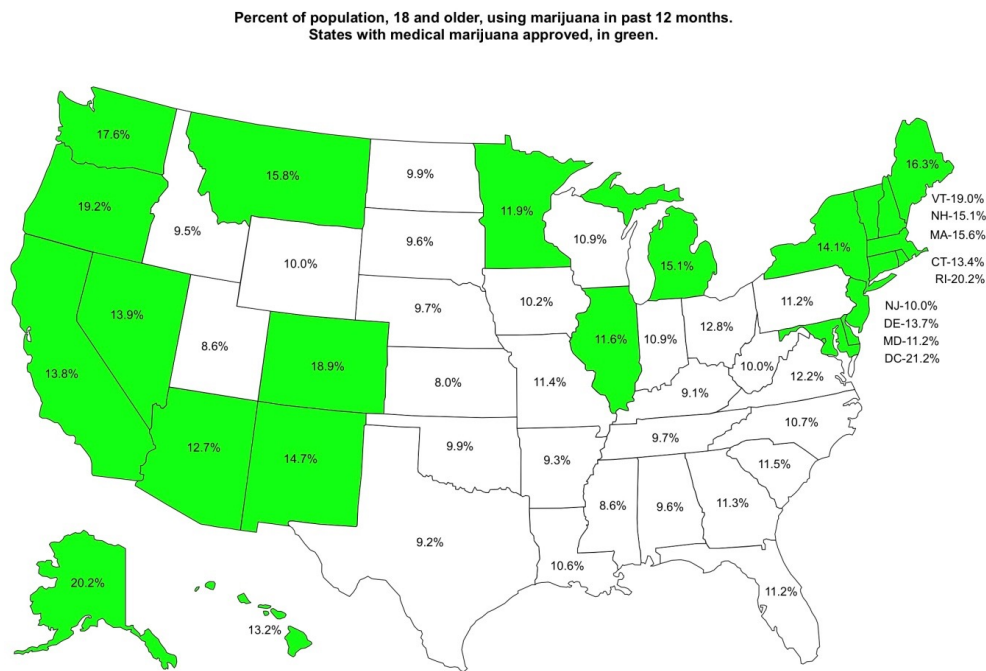
Medical marijuana is now legal in 23 states and the District of Columbia, although many have yet to open a dispensary or finalize rules for the program. For instance, Delaware authorized medical marijuana in May of 2011 but its first dispensary is expected almost four years after the legislature legalized medical marijuana. On average, since California voters first approved a ballot initiative legalizing medical marijuana in 1996, about one state per year has either voted to legalize or legislation has been signed to legalize medical marijuana. However, in the past five years, eleven states have legalized medical marijuana demonstrating the legalization momentum is accelerating. In our view it is important to note that since 2010, 9 of the 11 states, or 81%, have legalized medical marijuana through legislation, suggesting politicians are seeing the issue as widely supported by the electorate. In the previous 13 states, ballot initiatives were the means to legalization 69% of the time.

These 23 states, and the District of Columbia, have a combined population of 145 million, but medical marijuana patients total only about 1 million (source: www.medicalmarijuana.procon.org). The small numbers of users could be the result of reluctance of health care providers to prescribe marijuana and the availability of marijuana in the black market and we suspect medical marijuana facilities could facilitate an active grey market.

Colorado publishes sales tax receipts from medical marijuana and with that we can calculate retail sales of medical marijuana in Colorado. In the early part of 2014, just as recreational marijuana sales began, medical marijuana sales were about \$33 million per month. During the middle of the year, sales fell to about \$29 million per month but this could be seasonal as well as from market share gains by the recreational market. Recently, medical sales have rebounded to about \$31 million per month.

If we assume the amount a patient in Colorado uses is representative of what patients in the rest of the country consume in a typical month, we can generate an estimate of nationwide medical marijuana sales. Colorado currently has 111.8 thousand registered medical marijuana patients, out of a total nationwide patient base of 1.2 million. Applying the Colorado consumption and price base to the nationwide patient base yields an annual medical marijuana market between \$3.5 and \$4.0 billion. Of the 1.2 million patients, half are in California, and 350 thousand are in Colorado, Washington and Michigan, states which have high percentages of its population already using marijuana, a sign, we believe, of an overall disposition to consume marijuana. Adjusting for likely different usage levels in the rest of the country, we believe a nationwide market could approach \$10 billion if all 50 states legalized medical marijuana.

The picture below shows states with legalized medical marijuana and the latest survey by NSDUH of the percent of users, 18 and older, who have used marijuana in the past 12 months. There is a strong correlation between usage rates and states with medical marijuana programs. We believe this is causation: higher usage results in an electorate demanding relaxed marijuana laws. Whether we use the latest survey data or data from a decade ago, the states with the highest usage are those states with legal medical marijuana.



Source: National Survey on Drug Use and Health: Comparison of 2011-2012 and 2012-2013 Model-Based Prevalence Estimates (50 States and the District of Columbia)

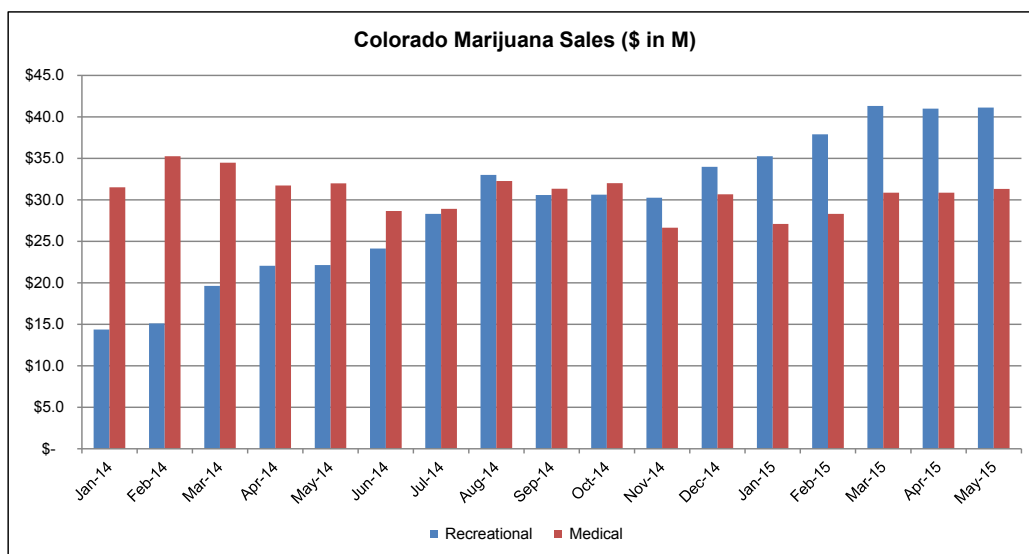
Recreational Marijuana

Recreational use has been approved in four states, Colorado, Washington, Alaska and Oregon and the District of Columbia. All were approved via ballot initiative and the five jurisdictions have five of the seven highest usage rates in the country.

We used total US consumption estimates, usage data in the NSDUH survey and adjusted for population to generate estimates of marijuana consumption in the four states, and the District of Columbia, that have legalized use of recreational marijuana. The recreational market in Colorado is about 30% of the high-end estimate and could go higher depending on a number of factors including quality of the legal product relative to the black and grey markets, the price differential between the legal and illegal markets, excise taxes, retail outlet convenience and the regulatory burden placed on the legal market.

| | CO | WA | AK | OR | DC | Total |
|------------------------|--------|--------|--------|--------|--------|--------|
| Pop. > 18 (M) | 4.0 | 5.4 | 0.7 | 3.1 | 0.5 | 13.6 |
| Usage Rate | 18.9% | 17.6% | 20.2% | 19.2% | 21.2% | 18.6% |
| Est.Sales -Low (\$B) | \$1.05 | \$1.30 | \$0.15 | \$0.81 | \$0.17 | \$3.47 |
| Est. Sales- High (\$B) | \$1.54 | \$1.90 | \$0.22 | \$1.19 | \$0.23 | \$5.08 |

Marijuana sales for recreational use in Colorado began at the beginning of 2014 and retail sales in the state have reached \$41M+ per month or a \$480 million annual rate. Recreational sales exceed medical sales and it appears recreational sales have cannibalized some of the medical marijuana market.

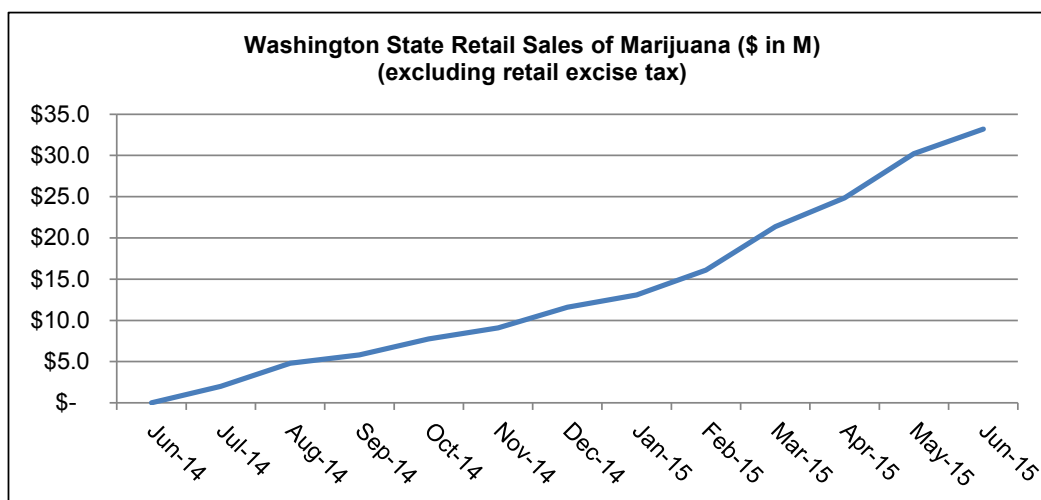


Source: Colorado Department of Revenue

By our estimates there is still a substantial black-market in Colorado. We used NSDUH survey data to estimate marijuana consumption in Colorado between \$1 and \$1.5 billion annually. This suggests legal recreational and medical marijuana has captured 60% to 80% of the total market.

Sales of recreational marijuana began in Washington in June of last year at just a few of the 334 stores the Washington Liquor Control Board will license. At year end there were 85 stores licensed by the state and retail sales in December exceeded \$11 million, or over \$130 million annualized . By the middle of this year over 160 retailers were active in the market and with annualized sales of almost \$400 million. Depending on how quickly

additional stores open, recreational sales in Washington could exceed the monthly \$41 million level generated in Colorado by early next year.



Source: Washington State Liquor Control Board

Oregon's law took effect July 1, 2015 and will be regulated by the Oregon Liquor Control Commission. The Commission has until Jan. 1, 2016 to draft rules. The state must begin receiving licensing applications by Jan. 4, 2016 with the first licenses issued in the first half of 2016. Governor Kate Brown recently signed legislation that allows sales of recreational marijuana at existing medical marijuana dispensaries. Applications for retail dispensaries will be accepted beginning January of next year and the first shops are expected to open in autumn of next year.

In Alaska lawmakers will decide this year if the Alcoholic Beverage Control Board or an entirely new marijuana board will regulate marijuana sales. The board has a nine month deadline to implement rules and if it misses that deadline, local governments can attempt to create their own regulations.

The District of Columbia's Initiative 71 legalized adult marijuana use and allows adults 21 and older to possess up to two ounces and cultivate up to six marijuana plants for personal use. It is still illegal to sell marijuana.

Many states will look at the experience of these early adopters before possibly proceeding with their own legalization efforts. But like medical marijuana, we expect states with high consumption rates to lead the way. States are looking at legalization as a source of tax revenues. Federal excise taxes on alcohol total \$9.7 billion and state excise taxes are about \$3.3 billion. Federal excise taxes on cigarettes generate about \$14 billion for the US government and \$17 billion for state and local governments. Excise taxes as a percent of total sales are about 6.5% of alcohol and 41% for tobacco. Washington state imposes a 37% excise tax on retail sales and in Colorado the 10% excise tax on retail sales and 15% excise tax on unprocessed product equals about 15% of total retail sales, and run rate taxes on marijuana in the state exceeds \$120 million. Adjusting for Colorado's usage relative to the rest of the country, and assuming similar excise tax nationwide, and assuming the legal recreational market is about 25% of the total market, excise taxes would exceed \$3.5 billion nationwide, about the same amount generated by alcohol. This excludes any federal excise tax and we believe the assumption of 25% market share for legal marijuana is low.

Company Overview

MassRoots operates the largest social network for the cannabis community with almost 500,000 registered users and is on track to have one million users by early next year. Monetization efforts began in Q3 with the company targeting the 1,000 businesses already using the app. We believe the providers of cannabis products and services can use MassRoots to create greater customer loyalty, discover user preferences and trends and give them an ability to manage inventory more effectively.

As of Q2, the company had 220,000 Instagram followers, 102,000 Twitter followers and 109,000 Facebook followers.

The MassRoots iOS app was launched in July of 2013 and a fully capable Android app in February 2014. Apple removed the app from the App store in November 2014, but reinstated the app in February this year after the app's users petitioned Apple for re-instatement and MassRoots agreed to make the app available only to users in states where marijuana is legal. We believe this demonstrates the loyalty of the user base as well as the difficulty potential customers will have in entering the market.

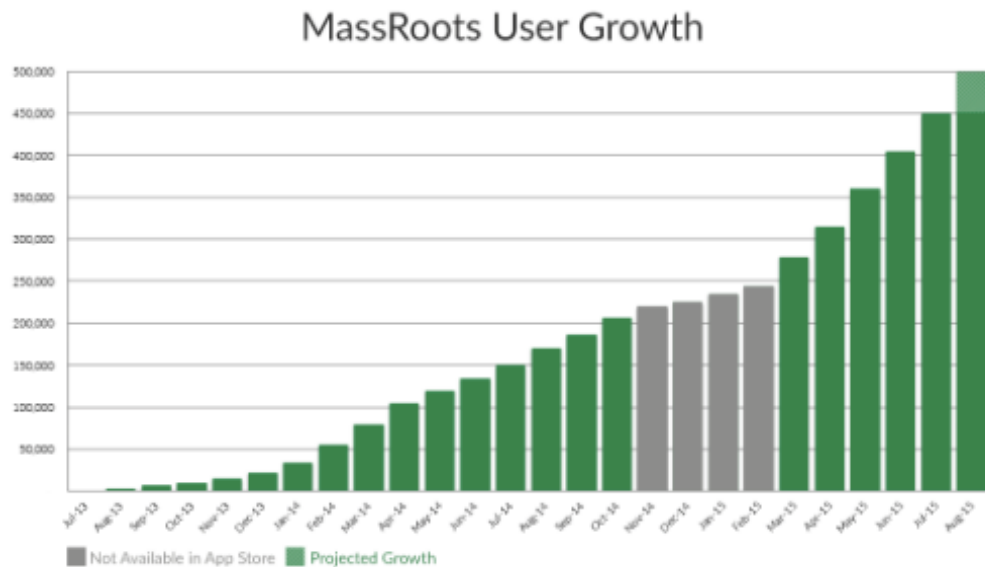
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In April, MassRoots purchased almost 9% of the seed-to-sale vendor Flowhub for \$175,000. The companies are developing a partnership arrangement that will combine data from growers, point-of-sale systems and the MassRoots app in one platform. With this data dispensaries and growers can monitor trends, target customers more efficiently and increase customer loyalty. We expect this partnership to be an important source of new user growth.

The company expects annualized revenue of \$12 million by year-end 2016. It expects to realize this from the 1,000+ cannabis businesses utilizing MassRoots for Business including almost half of the dispensaries in Colorado and 85% of dispensary chains with more than four stores. In the short-term we think the most important task for the company is to grow its user base while developing the products and services that businesses will use to interact with the MassRoots base.

Monetization Strategy

As of late July the company had almost 500,000 users of its app, and it expects to achieve one million users by early 2016. This is despite the limited marketing dollars spent by the company as well as a four month period when the app was not in Apple's App Store. The popularity of the app is evident since even during the period it was absent from the App Store, the number of users still grew. User growth in Q2 was about 145,000 and in order to achieve its one million user target the company will need to maintain that rate over the coming quarters. We have assumed the company can achieve this growth with the additional marketing dollars it has available as well as the partnership it is creating with Flowhub, which will drive end-user and dispensary reliance on the app. However, we have been a bit more cautious than the company and have modeled one million users by the middle of 2016.



Source: MassRoots, Inc.

We believe this network of users and providers offers significant value for all parties. For users, the app is a way to share their product preferences with other users, dispensaries, growers and product makers. For dispensaries the app will allow them to retain customers more effectively with loyalty programs or customized discounts, control inventory and keep abreast of changing consumer tastes and preferences. Since MassRoots is the largest social network for cannabis we believe it has a significant advantage over potential competitors who would find it difficult to match the company’s scale, scope and integration with dispensaries, growers and product manufacturers.

The integration of MassRoots and Flowhub could encourage dispensaries to purchase the Flowhub seed-to-sale system which would give the dispensaries access to data on users purchasing patterns and intentions. We believe MassRoots’ partnership with Flowhub could result in signage at dispensaries encouraging customers to download the MassRoots app in order to gain access to special programs at the dispensary. This, along with the greater marketing dollars should result in the higher user additions over the coming quarters.

Monetization is beginning this quarter. The company intends to offer premium services to the over 1,000 business using MassRoots for Business. This includes almost half of the dispensaries in Colorado and 85% of dispensary chains with more than four stores. Currently there are four premium upgrades offered including premium profiles, data access, market insights and sponsored posts ranging from \$50 to \$350 per month.

**MassRoots for Business – Expected Premium Business Memberships
(Rollout Planned in Q3 2015)**

| Premium Upgrade | Cost | Benefits |
|------------------|-------------|---|
| Premium Profiles | \$49/Month | <ul style="list-style-type: none"> • MassRoots Verified Badge • Enhanced Profile Access |
| Data Access | \$149/Month | <ul style="list-style-type: none"> • Detailed Geo-Based Analytics • Area Activity Heat Maps |
| Market Insights | \$349/Month | <ul style="list-style-type: none"> • Insight on Trending Strains, Products, Services, and Hashtags • Area Reach and Exposure Data |
| Sponsored Posts | \$20/CPM | <ul style="list-style-type: none"> • Targeted, Enhanced Exposure Posts |

We think the addressable market is large and will become much larger as legalization in additional states progresses. Colorado and Washington have released detailed data on their marijuana programs that suggest a very large current and future business market for MassRoots. In Colorado there are 990 licensed recreational growers, retailers, product manufacturers and testing facilities, and 1,400 medical growers, retailers and product manufacturers. There is significant overlap of these lists so there is probably upwards of 2,000 potential businesses in Colorado alone serving the legal marijuana market. In Washington there are over 500 producers, processors and retailers of recreational marijuana but ultimately this market could be 25% larger than Colorado's.

However, Colorado is only about 10% of the nationwide medical marijuana market, with California the biggest. Significant changes are expected in the California market that will encourage the growth of dispensaries and we believe it will be a significant market for MassRoots for Business. If the same ratio of growers, dispensaries and retailers to medical marijuana card holders in Colorado holds across the country, there is a potential market for MassRoots today, just in the medical marijuana space of 14,000 businesses as potential customers. This would equal a market exceeding \$100 million for premium services with paid posts on top of that. Again, if Colorado is indicative of the national market, the legal market, will be larger than the medical market and could become so in a relatively short period of time.

By the middle of next year we believe the company could have one million users and 1,000 businesses paying for MassRoots for Business. At those usage levels, the company's revenue potential is upwards of \$7 million annually from premium services and \$6 million to \$12 million in paid posts. However we have assume much lower ARPU while the company builds both of these revenue streams.

Our estimate for revenue from premium business services is based on metrics from Leafly and Weedmaps. Both generate revenue selling services to business with monthly ARPU of about \$600. Weedmaps has over 3,000 dispensaries, deliveries, and doctors offices as customers and expects to triple that. We do not have data for Leafly, but we believe it targets a similar market and has a comparable customer base. We expect MassRoots to have 1,000 paying business users by the middle of next year, with potential annualized revenue of \$7 million. Using the potential 14,000 businesses in markets with medical marijuana suggests an addressable market of \$100 million. However, in our model we assume the company does not reach the industry ARPU for a number of years, so annualized revenue in 2016 from premium business services will be far below the \$7 million annual potential market.

Our estimate for revenue from paid posts is driven by metrics from ad-driven networks, Facebook, Twitter and Pandora. These networks generate between \$0.50 to \$1.00 per month per active user. Based on one million users by the middle of next year yields a potential annualized revenue of \$6 million to \$12 million. If we use the 22 million monthly active marijuana users as the initial target market for MassRoots, the potential addressable market for ad-based revenue ranges between \$130 million and \$260 million. Again, however, in our model we assume the company does not reach the industry ARPU for a number of years and ad-driven revenue in 2016 will be far below the \$6 million to \$12 million potential.

Flowhub Investment and Partnership

In April, MassRoots purchased almost 9% of seed-to-sale vendor Flowhub for \$175,000. The companies are developing a partnership arrangement that will combine data from growers, point-of-sale systems and the MassRoots app in one platform. With this data dispensaries and growers can monitor trends, target customers more efficiently and increase customer loyalty.

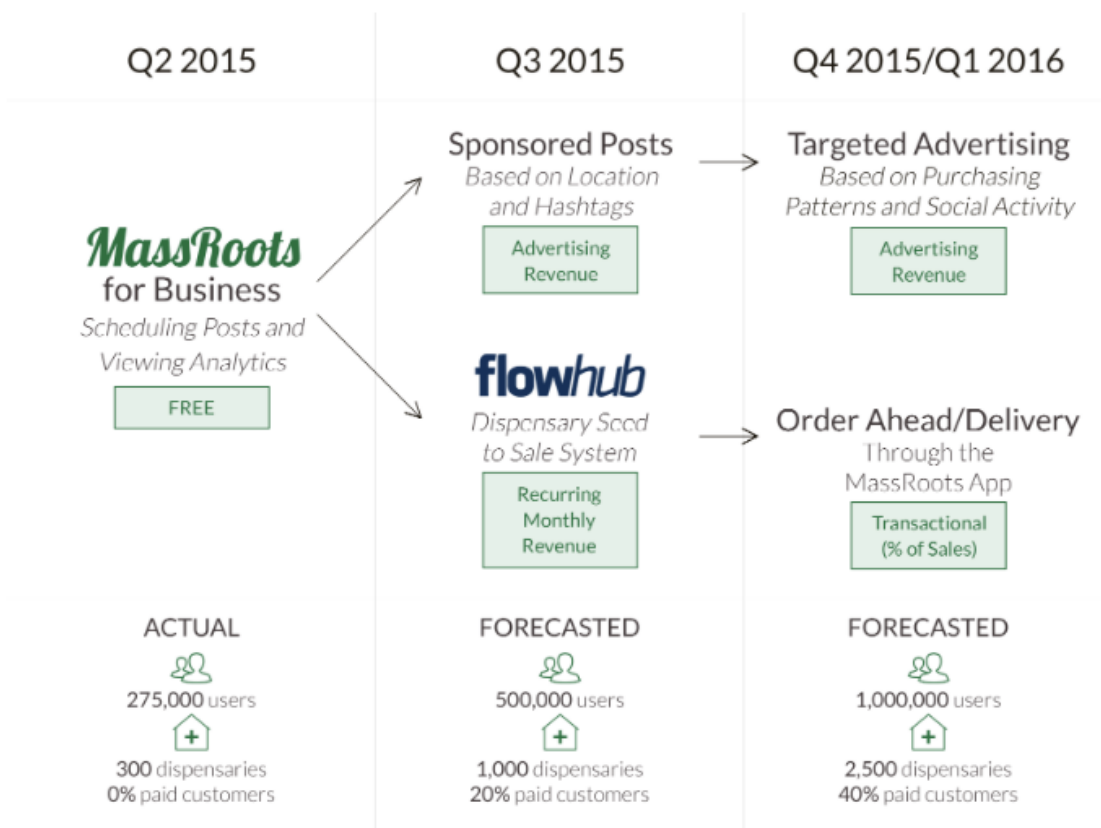
Flowhub is building a cloud-based seed-to-sale system and will compete with seed-to-sale systems from MJ Freeway and BioTrackTHC. Flowhub's system is being built from the ground up and could avoid some of the issues with other seed-to-sales systems that have been adapted for this industry. The cannabis market and its regulations have unique and stringent characteristics and would benefit from a seed-to-sale system that has been customized for those strict and unique needs.

Another important aspect of this investment is the partnership that will enable,

"MassRoots' users access to live pricing, inventory, and an order ahead system. At the same time, Flowhub will be streamlining dispensaries' operations and enabling them to target ads to specific customers based on purchasing patterns and social activity."

We expect this data sharing to aid Flowhub's efforts to enter the market. MassRoots already has 1,000 dispensaries using its MassRoots for Business service. Dispensaries using the Flowhub system will benefit from access to data on user's changing preferences as well as give them the ability to create loyalty programs which attract and retain high-value customers. In turn, this can be used by MassRoots to attract more users and become a more valuable platform to dispensaries and Flowhub.

With this Flowhub relationship as well as increased marketing spend the company will exceed its target of 500,000 users by the end of Q3 and should also meet or beat its estimate of one million users by the end of Q1 2016. Monetization efforts is expected to result in 200 paid customers by the end of Q3 and 1,000 by the end of Q1 2016.



Financial Outlook

We expect the company to begin generating modest revenues in Q3 this year as dispensaries begin paying for access to the MassRoots premium services and paying for sponsored posts. We have assumed by the end of next year MassRoots will have 1.3 million users and MassRoots for Business 2,500 paying customers. Advertising revenue per user is assumed to be \$0.30 per user per month, far below the \$0.50 to \$1.00 per user per month advertising generated by Twitter, Facebook and Pandora. However, over time, we expect this to increase. We have MassRoots for Business users increasing to 2,500 by the end of next year and paying \$110 per month. This is far below the \$600 per month generated by both Weedmaps and Leafly. Again, we expect ARPU to increase over time. This results in revenue this year of \$482 thousand, \$4.9 million in 2016 and \$11.7 million in 2017.

For the rest of this year we expect operating losses of \$1.5 million per quarter, about equal to the Q2 level. We believe the company will post similar losses in 2016 as revenue will remain modest, but growing, and MassRoots will need to continue to spend on marketing and research. However, as revenues ramp significantly in 2017 we believe operating losses will decline sharply, to about \$1 million and the company could become profitable in 2018.

Cash at the end of Q2 was \$171 thousand but the company raised another \$600 thousand in July. The operating cash losses in Q1 was \$409 thousand and losses increased to \$943 thousand in Q2. We believe the company will have similar operating cash flow losses over the coming quarters. This will require additional capital raises over the coming 18 months. The company expects to raise a majority of its capital needs via warrant exercises. As of the end of Q2, there were 4 million warrants exercisable at \$0.40 per share that if exercised, would generate \$1.6 million, 150,000 warrants with a strike price between \$0.50 and \$0.60 per share, generating \$80 thousand and 866,000 warrants with a strike price of \$1 which would generate \$866 thousand. This is a total of \$2.5 million, and will not be enough, in our view, to meet the cash needs of the company over the coming 18 months. There are also 3.1 million warrants with a strike price close to zero, raising very little cash but could determine the direction of the stock.

| | <u>Exercise Price per Share</u> | <u>Shares Under Warrants</u> | <u>Remaining Life in Years</u> |
|--------------------|---------------------------------|------------------------------|--------------------------------|
| Outstanding | | | |
| | \$ 0.001 | 3,113,659 | 2 |
| | \$ 0.4 | 4,000,000 | 2 |
| | \$ 0.5 | 100,000 | 5 |
| | \$ 0.6 | 50,000 | 5 |
| | \$ 1 | 866,000 | 3 |
| Exercisable | | | |
| | \$ 0.001 | 3,113,659 | 2 |
| | \$ 0.4 | 4,000,000 | 2 |
| | \$ 0.5 | 100,000 | 5 |
| | \$ 0.6 | 50,000 | 5 |
| | \$ 1 | 866,000 | 3 |

Valuation

We approached valuation from two directions, EV/Users and EV/Sales. Using either valuation tool we believe there is significant upside to the shares. Publicly-traded companies which derive a significant portion of their revenue from advertising and premium business services, such as FaceBook, Twitter, Pandora trade at \$192/user, \$77/user and \$38/user respectively. MassRoots, based on existing subscribers of almost 500,000 is trading at \$101/user but at \$50/user using the one million user estimate we have for the company by the middle of next year. If we use the average EV/user of \$102 this results in an estimated EV of \$102 million or over \$2.00 per share based on our one million user estimate by the middle of next year.

Privately-held Weedmaps and Leafly are also instructive comps for MassRoots. We believe Weedmaps raised capital at a \$300 million valuation on expected revenue between \$10 and \$25 million. We estimate MassRoots can achieve this revenue level in two to three years and discounting a \$300 million valuation at a 30% discount rate results in a \$155 million valuation or over \$3 per share.

We expect the company to continue adding users well beyond the one million user interim target so we view our price target as likely to move up as the company's users increase.

Risks

Risks are substantial. Marijuana is classified as a Schedule 1 substance on the Controlled Substances Act. While the Department of Justice has decided to not interfere with marijuana production and sales in states with legal marijuana programs (within certain parameters) and directed U.S. attorneys not to pursue banks providing banking services to the industry as long as they adhere to guidelines, this stance can change with a new administration or with a change in public opinion. This would have an adverse impact on the company. Even with the policy of benign neglect embraced by the DoJ, banking relationships for the industry have been difficult to maintain.

We estimate the company will need to raise capital to fund its operations over the coming quarters. This could result in dilution to existing shareholders. In addition, there are 3 million essentially costless warrants outstanding that could determine the stock's movement if the investor chooses to exercise and sell the shares.

Our estimates assume a successful launch of Flowhub and the consummation of a partnership where the two companies will share information to create an integrated platform. This is expected to drive user growth as well as MassRoots for Business customers. Delays in the development of the Flowhub platform and/or the integration of the two company's systems could have an adverse impact on our estimates.

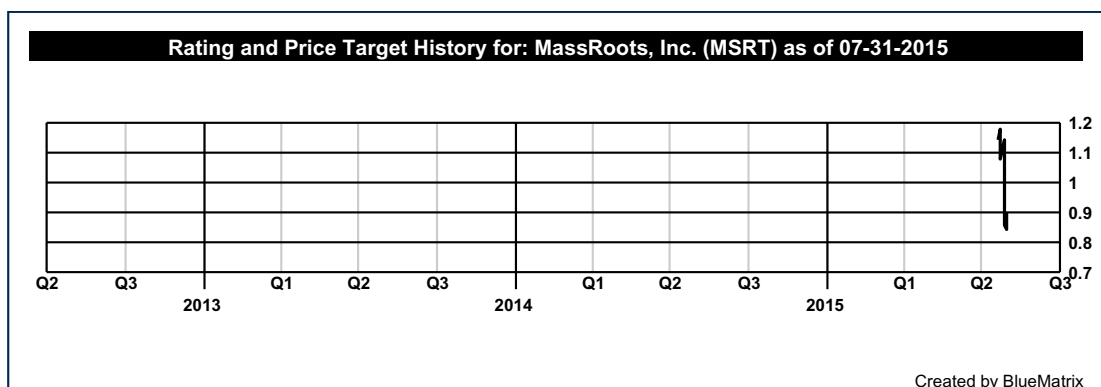
MassRoots, Inc.
Income Statement (\$ in 000's)

| | 2014 | Q1 15 | Q2 15 | Q3 15 E | Q4 15 E | 2015 E | Q1 16 E | Q2 16 E | Q3 16 E | Q4 16 E | 2016 E |
|------------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Revenue | \$ 9 | \$ 1 | \$ 2 | \$ 60 | \$ 422 | \$ 485 | \$ 688 | \$ 980 | \$ 1,399 | \$ 1,863 | \$ 4,929 |
| COGS | 1 | 1 | 0 | 48 | 338 | 387 | 543 | 735 | 979 | 1,211 | 3,468 |
| Gross Profit | 8 | 0 | 2 | 12 | 84 | 99 | 144 | 245 | 420 | 652 | 1,461 |
| Total Opex | 1,616 | 565 | 1,493 | 1,523 | 1,553 | 5,135 | 1,585 | 1,616 | 1,649 | 1,682 | 6,531 |
| Operating Income | (1,607) | (565) | (1,491) | (1,511) | (1,469) | (5,036) | (1,440) | (1,371) | (1,229) | (1,029) | (5,070) |
| Interest & Other | (829) | 14 | (26) | (24) | (24) | (60) | (24) | (24) | (24) | (24) | (97) |
| Pretax Income | (2,436) | (551) | (1,517) | (1,535) | (1,493) | (5,096) | (1,464) | (1,396) | (1,253) | (1,054) | (5,167) |
| Income Taxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Net Income | \$ (2,436) | \$ (551) | \$ (1,517) | \$ (1,535) | \$ (1,493) | \$ (5,096) | \$ (1,464) | \$ (1,396) | \$ (1,253) | \$ (1,054) | \$ (5,167) |
| Basic Shares | 14,375 | 40,391 | 43,536 | 45,326 | 46,647 | 43,975 | 47,647 | 48,647 | 49,647 | 50,647 | 49,147 |
| Diluted Shares | 14,375 | 40,391 | 43,536 | 45,326 | 46,647 | 43,975 | 47,647 | 48,647 | 49,647 | 50,647 | 49,147 |
| Basic EPS | \$ (0.17) | \$ (0.01) | \$ (0.03) | \$ (0.03) | \$ (0.03) | \$ (0.12) | \$ (0.03) | \$ (0.03) | \$ (0.03) | \$ (0.02) | \$ (0.11) |
| Diluted EPS | \$ (0.17) | \$ (0.01) | \$ (0.03) | \$ (0.03) | \$ (0.03) | \$ (0.12) | \$ (0.03) | \$ (0.03) | \$ (0.03) | \$ (0.02) | \$ (0.11) |
| Revenue | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| COGS | 7.6% | 74.4% | 0.0% | 80.0% | 80.0% | 79.6% | 79.0% | 75.0% | 70.0% | 65.0% | 70.4% |
| Gross Profit | 92.4% | 25.6% | 100.0% | 20.0% | 20.0% | 20.4% | 21.0% | 25.0% | 30.0% | 35.0% | 29.6% |
| Opex | NM | NM | NM | NM | 367.9% | 1058.0% | 230.4% | 165.0% | 117.9% | 90.3% | 132.5% |
| Operating Income | NM | NM | NM | NM | -347.9% | -1037.6% | -209.4% | -140.0% | -87.9% | -55.3% | -102.9% |
| Interest & Other | NM | 1519.8% | -1236.7% | -40.3% | -5.7% | -12.4% | -3.5% | -2.5% | -1.7% | -1.3% | -2.0% |
| Pretax Income | NM | -58502.6% | -71368.6% | -2558.7% | -353.6% | -1050.1% | -212.9% | -142.5% | -89.6% | -56.6% | -104.8% |
| Tax Rate | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Net Income | NM | -58502.6% | -71368.6% | -2558.7% | -353.6% | -1050.1% | -212.9% | -142.5% | -89.6% | -56.6% | -104.8% |

MassRoots, Inc.
Balance Sheet & Cash Flow Statement (\$ in 000's)

| | 2013 | Q1 14 | Q2 14 | Q3 14 | Q4 14 | 2014 | Q1 15 | Q2 15 |
|---------------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|
| Cash | \$ 80 | \$ 327 | \$ 133 | \$ - | \$ 142 | \$ 142 | \$ 55 | \$ 171 |
| A/R | 0 | 0 | 0 | 3 | 11 | 11 | 24 | 0 |
| Prepaid Expenses | 1 | 1 | 276 | 250 | 131 | 131 | 749 | 980 |
| Current Assets | 81 | 328 | 409 | 252 | 284 | 284 | 828 | 1,151 |
| PP&E, net | 1 | 7 | 7 | 9 | 14 | 14 | 23 | 48 |
| Deposits | 0 | 0 | 0 | 0 | 3 | 3 | 36 | 35 |
| Prepaid Expense | 0 | 0 | 0 | 0 | 66 | 66 | 66 | 66 |
| Investment in Flowhub | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 175 |
| Total Assets | \$ 83 | \$ 335 | \$ 416 | \$ 262 | \$ 367 | \$ 367 | \$ 952 | \$ 1,476 |
| A/P | 0 | 5 | 0 | 1 | 26 | 26 | 46 | 70 |
| Accrued Expenses | 0 | 0 | 0 | 0 | 24 | 24 | 21 | 26 |
| Accrued Payroll | 2 | 0 | 0 | 0 | 2 | 2 | 0 | 0 |
| Derivative Liabilities | 0 | 0 | 0 | 0 | 1,100 | 1,100 | 1,226 | 386 |
| Current Liabilities | \$ 2 | \$ 5 | \$ 0 | \$ 1 | \$ 1,151 | \$ 1,151 | \$ 1,294 | \$ 482 |
| Cv. Debentures | 0 | 139 | 155 | 172 | 162 | 162 | 148 | 152 |
| Equity | 81 | 192 | 261 | 88 | (947) | (947) | (490) | 842 |
| Total Liabilities & Equity | \$ 83 | \$ 335 | \$ 416 | \$ 262 | \$ 367 | \$ 367 | \$ 952 | \$ 1,476 |
| | | | | | | | | |
| | 2013 | Q1 14 | Q2 14 | Q3 14 | Q4 14 | 2014 | Q1 15 | Q2 15 |
| Net Income | (919) | (682) | (318) | (277) | (1,159) | (2,436) | (551) | (1,517) |
| D&A | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 3 |
| Other | 833 | 557 | 28 | 56 | 833 | 1,475 | 150 | 570 |
| Working Capital | 1 | 3 | (5) | (16) | 55 | 37 | (10) | 2 |
| Operating Cash Flow | \$ (85) | \$ (123) | \$ (294) | \$ (237) | \$ (270) | \$ (923) | \$ (409) | \$ (943) |
| Capx | (2) | (6) | (0) | (9) | 1 | (15) | (10) | (28) |
| Investing Activities | \$ (2) | \$ (6) | \$ (0) | \$ (9) | \$ 1 | \$ (15) | \$ (10) | \$ (203) |
| Debt | 17 | 182 | 88 | 0 | 0 | 269 | 0 | 0 |
| Preferred | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Common | 0 | 194 | 12 | 105 | 419 | 730 | 332 | 1,263 |
| Financing Activities | \$ 167 | \$ 375 | \$ 100 | \$ 105 | \$ 419 | \$ 999 | \$ 332 | \$ 1,263 |
| FX | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Change in Cash | \$ 80 | \$ 246 | \$ (194) | \$ (141) | \$ 150 | \$ 61 | \$ (87) | \$ 116 |

Important Research Disclosures



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| Rating | Count | Percent | IB Serv./Past 12 Mos. | |
|----------------|-------|---------|-----------------------|---------|
| | | | Count | Percent |
| BUY [BUY] | 39 | 70.91 | 15 | 38.46 |
| HOLD [NEUTRAL] | 13 | 23.64 | 2 | 15.38 |
| SELL [SELL] | 2 | 3.64 | 0 | 0.00 |
| NOT RATED [NR] | 1 | 1.82 | 0 | 0.00 |

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