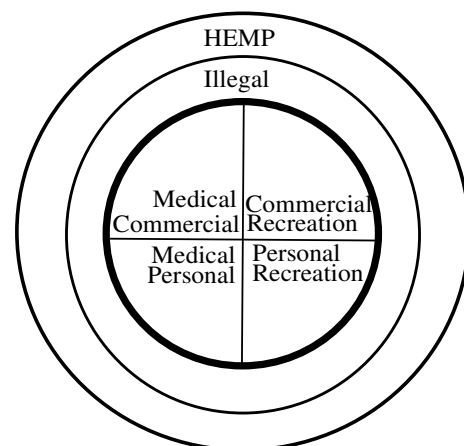Shaun Savage

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<div align="center">Oregon Marijuana Matrix</div>

Measure 91 legalized recreational marijuana in Oregon. It also stated OMMP not changed. This paper will discuss a model that that OMMP and OLCC work together to solve the banking problems in Oregon of the problems other states are having. The need for a public state chartered bank that marijuana participants not worry about federal banking regulations, but this is out side the scope of this paper.

HEMP
Illegal
Medical Commercial
Commercial Recreation
Medical Personal
Personal Recreation

The Oregon Marijuana Matrix is a matrix of Medical v. Recreational and Personal v. Commercial marijuana with illegal and hemp activities (Measure91). This model tries to break Oregon Marijuana into components and flow making analysis easier. Once it is broken down, then intelligent discussions can follow on the interactions between areas. It will also offer a tracking solution that addresses the difference between OMMP and Measure 91. Once the pieces have been defined, econometric can be used to tune the system to use market economics to achieve high level of compliance with marijuana regulations and auditing.

The Oregon Marijuana Matrix OMM tries to combine the OMMP (OMMP) and Measure 91 using documentation for the seed to sale RFP (RFP) as a base. This matrix defines the model where S2S data analysis now has meaning. The Recreational side is defined by Measure 91 and the Medical area defined by OMMP and OMMP Dispensaries (Dispense). The Hemp is defined by the AG dept (ORHEMP). The Illegal segment is defined by prices, demand and externalities. Each segment of the OMM has different requirements.

The two sides are Medical and Recreational. The OMMP is administrated by DHS and

Recreational is administrated by OLCC. The object is to create a single program that would track both. The problem is OMMP is not required to track as closely as recreational marijuana. By creating a crypto-currency for tracking Oregon marijuana, this create a simple way to audit as well as increasing compliance. It could be based on a "Oregon Cannabis Credit",OCC, a unit of marijuana. This OCC is a cryptographic token that can be can be divided and added together, crypto-currency. The unit will need to be defined later. There will be some required fields that would define the marijuana, weight, locked ,ID, consumed, Medical/Commercial.

Oregon Cannabis Credit is worthless by it self, but only has value when locked to a ID. A person could get a OCC by just down loading the token, the next level is the supply an ID and have a locked OCC. Commercial growers are required to have a locked OCC. The transfer of marijuana is where the OCC really come into play. There should some requirements for personal marijuana to enter the Oregon market, make it mandatory to use OCC and also give tax rebates as incentives. For personal and medical marijuana a OCC is optional, but the incentives would encourage participation.

Now that the model has been defined, the flow of marijuana between segments needs to be defined. The Cole Memorandum (Cole) essentially states, prevent illegal stuff. The line drawn in the figure between illegal and the legal matrix is thick to represent this. Using Colorado (CoRec)(CoMed) as an example, we try to define the stages of flow where data analysis becomes meaningful. Key stages can be used as choke points in the auditing and taxes processes.

The stages are Grow, Process and Sale. The S2S also tracks transportation and licenses, but they are regulatory and bookkeeping processes not in the marijuana flow. There are a number of issues about

"seed" or clones that will need to be addressed at another time.

The Grow is the first stage for auditing and analysis it is also the hardest to monitor. Using the law of diminishing returns, the amount of enforcement at this stage needs to evaluated. Simple statistics can find producers whose yield is too low. The Illegal flow is important data that is wanted. Until the auditing process of the OLCC includes Medical, the total flow will not be known. Because Measure 91 states it does not change OMMP, this paper uses the concept of Anonymous Chain Cryptographic, ACC, to allow for Medical producers to voluntarily audit themselves. To simplify this issue, it is assumed that S2S system has a significant portion of Medical producers are using ACC to supply audit information to the S2S due to market economics.

The next stage is Process, Sale or getting stoned. Input into Process or Sale stages are checkpoints for auditing and taxing. Any marijuana entering the Process stage and all future stages are tracked turning S2S into a source tracked inventory system, with little inventory leakage. The Process and Sale stage can use an official Cannabis Credit created by ACC as input along with commercial marijuana tokens. OMMP dispensaries that are unaudited by S2S can only sell unprocessed marijuana. S2S audits the rest of Sale stage busineses.

Oregon Marijuana Matrix is a system model that facilitates compliance and improved auditing by modeling actual Oregon Marijuana economics while addressing legal issues by system design. Beyond just analyzing S2S data, regional demographics can be used in conjunction to find crime and safety correlations. The mechanics of data analysis can be found on Google. It takes a system architect to put all the pieces together and know where to data mine for meaningful information.

A picture is worth a thousand words: Your questions will be answered in the presentation.

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