# Blockchain Working Group: Finance Subcommittee
## Meeting Minutes
## February 11, 2020
9:30AM to 12:30PM

### 1) CALL TO ORDER AND ESTABLISHMENT OF A QUORUM

Subcommittee chair Bartlett called the meeting to order at approximately 9:37AM.

ROLL CALL: Quorum established.

Attendees present: Audrey Chaing, Liz Chien, Arshad Noor, Orit Kalman,
Attendees missing at start of meeting: Michele Neitz

### 2) APPROVAL OF THE JANUARY MEETING MINUTES

*Vote to approve meeting minutes, pending a minor correction to subpoint #2:*
- Ben Bartlett: Yes
- Audrey Chaing: Yes
- Liz Chien: Yes
- Michele Neitz: Not present yet
- Arshad Noor: Yes

Motion has been passed to approve the January meeting minutes.

### 3) AGENDA AND MEETING GUIDELINES

Orit went over the agenda and meeting guidelines with members.

### 4) SUBCOMMITTEE DISCUSSIONS AND RESEARCH UPDATES ON EACH TOPIC OF THE FINANCE CATEGORY

Taxes: Liz
- Liz: As a reminder, we were looking at what type of tax we could use as a use case. Cannabis seems the most promising. Currently, cannabis taxes are paid by driving cash to Sacramento. We also wanted to look at what are the current pain points in terms of tax collection? I'll be talking to Tax Administration folks at the state to better understand how taxes flow through different systems, and if there's anything manual that could be automated. I'm also talking to folks at the OECD (Organization of Economic Cooperation and Development) to look at what other countries are doing in terms of blockchain and tax administration. I'm still in the research phase, and want to spend more time with Ken at the CIO's office.
- Arshad: On the topic of taxes, we seem to have two extremes. There's the cannabis problem, where there is no system in place, and then there are taxes which affect everyone. Both of these present risks for a pilot. I think it might be more effective to find

an area where there's a small population that's paying taxes and where there's a process that's already well-defined, and then see whether blockchain could improve the efficiency of that process. One example could be a boat/yacht tax. That's probably a small population.

- Liz: That's a good idea, it might overlap with the permitting use cases Audrey is looking at. I'm excited to talk to other countries too because these are things that they are likely thinking about too.
- Ben: There are a few different subprocesses to collect taxes. They are: Administration, Compliance, Enforcement/Appeal, and Collection/Refund. Within this framework, I think there are more opportunities to explore blockchain. With regards to the yacht tax idea, that's technically a sales tax. Cannabis will be the most wide open. Use of smart token?
- Liz: Request feedback from the CIOs regarding implementation. We need to figure out whether smart tokens are possible at all for the state, since any blockchain use in taxes would likely require a smart token.

*Michele arrives at 9:56 AM*

*Public comments:*
- I can see the importance for looking more into the cannabis blockchain use case, but there may be virtue in exploring blockchain uses in a more regular/boring context that's relevant to places outside of California.
  - Arshad: A non-confrontational/boring use case might be just to create a permissioned blockchain for the state, and you use it as an in-house ledger. All agencies could participate on a single, permissioned blockchain for the state.
  - Liz: Would like to gather more information.
  - Ben: This could dovetail with Senator Hertzberg's new proposal
- You should figure out which government agencies are most willing to partner with you for a pilot. For example, the DMV administers yacht taxes and they are probably not willing to work on a pilot.

Benefits (Unemployment, Worker's Comp, Medi-Cal, SNAP): Michele and Arshad
- Michele: We haven't heard back from state agencies. Contacted Cheney (Head of Innovation at Cal HHS) but no response.
- Arshad: I did find out there's a specific agency that is responsible for benefits at the state that's already looking at blockchain.

*Public comments: None about benefits specifically*

Remittances: Liz and Arshad
- Liz: We need to get a better understanding of the role of public banks, and the role of the state in remittances. We're trying to figure out if there is a state bank that functions as a retail bank for the unbanked, and if that public bank could provide remittances at a subsidized rate. If not, the idea of subsidizing remittances more generally.

- Arshad: I started doing research on public banks in CA. I found out the state will only license 10 public banks each year. Also, apparently the public banks have to get FDIC insurance. Even though they're a state bank, they have to get coverage from the FDIC. I don't know how that affects public banks and whether that makes the cannabis collection impossible/challenging through them.
    - Ben: I think the public banks are more for the remittance use case. It sounds from your research that we can't use public banks for cannabis payments.
- Arshad: I also did some research on foreign remittances. I understand that the US has an internal standard/automated clearinghouse. The US is trying to get US banks and institutions to move to an ISO standard for foreign remittances. That might be a potential opportunity to think about. Could a proof-of-concept leverage something like that?
    - Liz: Startups are forcing incumbent banks to start looking at new solutions.
- Orit: What are the next steps?
    - Liz: Learn more about public banks, and figure out whether the state needs to think about this remittance use case. Does the state participate in cross-border transfers (for example, foreign nationals paying their taxes)?
    - Ben: I've called and emailed Business Oversight, but they haven't responded.
    - Liz: Let's also confirm the FDIC involvement in public banks. We need more info on that.
- Arshad: The problem with public banks is that since there are no public banks, I can't talk to anyone. The only public bank around is in South Dakota. But since there are none in California, how can we find out what the opportunities are?
- Audrey: Wyoming does have state banks (I'm not sure if they are technically "public banks" or not). They have passed blockchain laws. They do not have FDIC insurance though. The FDIC insurance poses a problem in CA.
- Michele: We could also pull on universities or PhD students. Would be an interesting research question.
- Liz: Also, looking at other countries (e.g., Estonia?). There are probably public banks in other countries. Let's leverage the work already being done by the OECD Blockchain Center. Person at U. of Vienna was head of Tax Policy Center at OECD. Liz will visit next week.

*Public comment:*
- To the comment on public banks and remittances, currently companies like Ripple work with the Federal Reserve on implementing blockchain to replace Swift tech, that could potentially expand to the whole country. Question--can we implement the technology at a state level without having the federal government involved?
    - Liz: The Federal Reserve is looking at a US stable coin. Let's see what happens there. We may not need a state coin if a federal stable coin will eventually get developed. Also the state reserve is looking into it.

Banking: Audrey
- Audrey: With banking, there's a lot of overlap with the BWG regulatory subcommittee. Basically, I'll be looking at cannabis, municipal bonds, and public banks. I reached out to

a CEO of a cannabis company, and have reached out to some municipal bond contacts. We should also figure out how to tackle public banks.

- Arshad: There seem to be certain intractable issues we are dealing with. First, there's an unbanked population who can't get a bank account for various reasons (no ID, for example, cultural differences), but then public banks have to be FDIC-approved. Maybe the CA legislature creates a new type of "bank" that doesn't need to be FDIC-approved.
    - Michele: The potential for fraud if it's not guaranteed by the FDIC makes me nervous. Advocates of the unbanked probably would say that they need an FDIC-approved bank.
    - Ben: Most times the unbanked are unbanked not because they are undocumented, but because of financial literacy issues. Undocumented folks can have bank accounts.
- Liz: We should also look into EU e-banks.
- Liz: A metapoint: digital assets have price volatility, and we don't want to expose that risk to vulnerable populations. One of the reasons there is price volatility is because the market is not mature, and that's because there's not a clear regulatory framework at the federal level, nor at the state level. We need to help build market maturity so prices are stable.
    - We need a coherent regulatory framework across all the US agencies, and across the states. Crypto assets are considered currency in one state (or agency's) framework and assets/property in another. Currency vs other tokens. Are they commodities or currency? Regulated by different agencies.
    - Audrey: It would be interesting to look at small countries and locations, and what they're doing. Look at Marshall Islands federal coin.
    - Ben: Look at federal Cryptocurrency Act of 2020.
- Arshad: One of the reasons why the Treasury hasn't come out with much regulation on cryptocurrency is because the security of crypto is still being determined and developed. I personally think we shouldn't focus too much on a stable coin use case of blockchain. The security concerns are real--think of the pushback that has happened on internet voting. I think we should focus on other use cases of blockchain.
    - Orit: These are good criticisms that we want to hear.
- Ben: Only 7% of currency is paper right now. The rest is digital. Digital currency can be replaced (unlike one's vote).
    - Arshad: We should also perhaps wait until NIST security standards come up sometime next year. We may want to wait on stable coin recs because of this.
    - Liz: Arshad's point is fair. We should offer a balanced view of stable coins. We should also look at case studies in other countries--the US is not the first country to think about this. We should also look at the role of insurance.
- Audrey: I agree that we should pull in more security experts. Arshad was going to do this anyways.
- Arshad: Are there any countries that have a central bank stable coin?
    - Liz: I'm not sure. BIS (EU-based org) is looking at a central bank stable coin. I think the Bahamas have done this too?

*Public comment:*
- Community-check cashing  (there's a brick-and-mortar location in West Oakland, they are a non-profit) can also provide lending services (Community Bank of the Bay?). Some bitcoin-based ATMs, several in Calexico, Fresno, Bakersfield.  They are regulated under the deferred deposit law. You should explore this system, it's impressive. They also do financial literacy trainings before making loans. Coinflip operates Bitcoin ATMs.
    - Liz: I just want to make sure that with vulnerable populations, that they understand they're exposing themselves to very volatile prices. Digital assets are very volatile.
    - Arshad: We should invite this non-profit to give a presentation.
- There's a company called BitPay that might be interesting to look into. They've reduced the payment processing time.
- Look at Community Reinvestment Acts for possible partners.

Business Permits and Licenses: Michele and Liz
- Michele: Last time, we talked about how I got pushback from state agencies about using blockchain for business permits/licenses. Before I talked to a lot of heads of these agencies. Are there other agencies I should talk to?
    - Gabby: Department of Consumer Affairs
- Arshad: The Secretary of State issues things like LLCs for businesses. I have to do this for my business all the time. Maybe these could be done through blockchain?
    - Michele: That's an interesting idea
- Liz: Perhaps we should talk to the CIO of the Secretary of State. I like the suggestion.
    - Michele: If we did that, everyone who runs a business in CA would know about our blockchain experiment which may garner support. It might help digitize a lot of processes.
- Michele: I don't know what the current permitting process is to sell cannabis in CA
    - *Public comment:* You need a license with the state and the city you live in. Includes a conditional use permit. The Bureau of Cannabis Controls (BCC) issues these licenses.
    - Ben: Then there's local, county, city, and myriad of product development and supply chain agencies. There are myriad taxes, regulations, and certificates leading up to selling cannabis at the store.
        - Many of these businesses are migrating back to the illicit market because there's too much paperwork/bureaucracy.
- Orit: It's interesting that cannabis keeps coming back across domain areas.
- Liz: Let's look at the Netherlands when it comes to cannabis production and sales. Can we learn anything from that?
    - Audrey: Let's also talk to Colorado.
- Liz: Cannabis is a great use case across all these different domain areas.

*Public comment:*

- The City of Sacramento just received a $1.2 million grant (from BCC) to track and trace cannabis sales. The hope is that there will be a QR code on every package that can track cannabis production/sales. This group should look into that.

<u>Banking, Municipal Bonds: Ben and Expert Ally Medina</u>
- *Ally Medina presents on stable coins and cannabis tax remittance. See diagram.*
- See also this article about AB953 about using stablecoin to pay for cannabis.
- Liz: Since this is being transmitted through wires though, aren't you still bound by federal law because of federal wire rules?
  - Ally: We've talked to legislative counsel about this idea and they haven't flagged any federal wire rules
  - Ben: You're not using the wires to make the purchase. It's like ATMs inside of a cannabis store.
  - Liz: With a process like this, you still need to exchange crypto for fiat currency at some point, and that's where I've found the difficulty is. Because of the price volatility of digital assets, that could pose a problem. We should look into it more, and read the bill.
- Michele: How do you figure out what stable coin to use?
  - Ally: It'll probably be an RFP, and there might be multiple stable coins. There needs to be one wallet though.
- Liz: The exchange between crypto and fiat currency is very hairy, and there are still the problems with who bears the risk of hacking. I think the idea is very interesting and I'd love to learn more, but it'll be thorny. If we don't know enough, it'll potentially open up the state to a lot of exposure and risk.
  - Ally: That makes sense. I'll send over the language we have in the bill right now. I agree that we don't want the state to bear any risk.
  - Liz: We do need to figure out this hacking risk.
- Arshad: If you had to summarize it, what is the crux of the bill?
  - Ally: Allow cannabis businesses to pay things through a stable coin. This bill is going to be heard in the legislature in March probably.
  - Michele: This security issue is going to come up with all of our use cases. We need to discuss more about this.
  - Michele: This might be a great sandbox situation. There are questions about liability and security that need to be answered.
- Ben: Essentially, there is no safe wallet. All wallets can get hacked. We need to figure out policies to negate hacking.
  - Arshad: I agree there needs to be legal protections somewhere in the policy. Even with the best security protections, I'd still be worried about safety.
  - Liz: Many of the existing stable coins are not serialized, they are fungible. This is why a state stable coin is important. You can figure out which stable coins have been compromised, and then say they are no longer usable.
- Liz: Calderon is on the task force. There needs to be more coordination between our group and Calderon. We want to make sure that the time we spend is time well spent. We need more information on this bill, and that we can weigh in on it.

- - Orit: That will be an action item for us to follow up on.
- Ben: I've submitted a draft of this municipal bonds paper. Essentially, the proposition is to leverage blockchain tech to issue bonds. Municipal bonds are currently very antiquated. We did a pilot study in Berkeley and found that using this policy I've proposed could save the City of Berkeley 42% in issuing municipal bonds.
  - You can register the bond on the blockchain, with the compliance built in. Regulators can have a real-time audit. Can be issued in smaller denominations.
  - Arshad: If Berkeley is already doing this, what does the state need to do? There's no law preventing cities to do this by themselves?
  - Ben: Correct. I wanted to just highlight it and describe it, and this could possibly trigger some sandbox activities.
  - Arshad: You're already running a pilot though. You should make a case study out of this. This won't be done for 18 months though, but that's ok.
- Orit: Are there potential lessons learned in your Berkeley pilot that would be applicable at the state level?
  - Ben: Just a good example of explaining blockchain outside of BitCoin/crypto context. Please send me notes on my paper though.
  - Arshad: What you've learned as a city is that the state can't prevent you from doing this. State also allows local municipalities to create their own currency. That in and of itself is something that should be in the report.
- Liz: Do these bonds qualify for tax exemption?
  - Ben: Yes. They are no different than regular municipal bonds, just are more efficiently deployed.

- *Public comment:*
  - Government Blockchain Association: In my opinion, one of the only entities that could potentially introduce "convertible value currencies" is the State of California.

## 5) NEXT STEPS

- Orit: Lots of action items and next steps have been aligned (see above meeting notes). Members should read and edit each other's papers.
- Arshad: I'd love to also have a presentation by the non-profit check-cashing group in West Oakland. That would be very useful too.
  - Audrey: Yes, we'll arrange some sort of meeting or field trip.

## 6) FUTURE AGENDA ITEMS
See above Next Steps point above.

## 7) PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

*Final public comments:*

- We should dedicate some time in these meetings for the intent of this group, which is public-private partnerships. I think we should have more presentations on the potential of this technology.

*Subcommittee chair Bartlett adjourns the meeting at 12:35PM.*