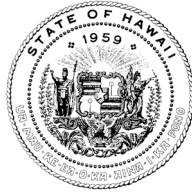


DAVID Y. IGE
GOVERNOR



DOUGLAS MURDOCK
CHIEF INFORMATION
OFFICER

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

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Testimony of
DOUGLAS MURDOCK
Chief Information Officer
Enterprise Technology Services

Before the

HOUSE COMMITTEE ON FINANCE
MONDAY, FEBRUARY 24, 2020

HOUSE BILL NO. 2594 HD2
RELATING TO BLOCKCHAIN TECHNOLOGY

Dear Chair Luke, Vice Chair Cullen, and members of the committee:

The Office of Enterprise Technology Services (ETS) supports the intent of HB 2594 HD2.

ETS will assist the Blockchain Working Group to review the promise of blockchain technology and provide recommendations how individuals, businesses, and state agencies may apply and benefit from the evolving blockchain technology.

Thank you for this opportunity to testify on this measure.



Written Statement of
Len Higashi
Acting Executive Director
Hawaii Technology Development Corporation
before the
House Committee on Finance
Monday, February 24, 2020
12:00 p.m.
State Capitol, Conference Room 308

In consideration of
HB2594, HD2
RELATING TO BLOCKCHAIN TECHNOLOGY.

Chair Luke, Vice Chair Cullen, and Members of the Committee.

The Hawaii Technology Development Corporation (HTDC) offers **comments** on HB2594, HD2 that requires ETS to establish a blockchain working group to determine a recommended definition for blockchain technology and recommendations for individuals, businesses, and state agencies to use blockchain technology and report to the legislature.

As part of HTDC's vision to create 80,000 new innovation jobs in Hawaii earning \$80,000 or more by 2030, HTDC supports initiatives aimed at accelerating the adoption of new technologies. HTDC is currently partnered with the DCCA on a pilot project for digital currency, based on blockchain technology. HTDC defers to the department on the measure and comments that we are supportive of serving on the blockchain technology working group.

Thank you for the opportunity to offer these comments.

HB-2594-HD-2

Submitted on: 2/23/2020 12:28:11 AM

Testimony for FIN on 2/24/2020 12:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jeff Sadino	Individual	Support	No

Comments:

Chair Luke, Vice Chair Cullen, and Members of the Committee,

I STRONGLY SUPPORT HB 2594 HD 2 relating to BLOCKCHAIN TECHNOLOGY.

As a user of blockchain for financial transactions over the past several years, I found that **it has real-world uses that offer far superior benefits** compared to traditional financial transactions.

Blockchain also offers tantalizing benefits in the fields of food distribution, records management (property rights, etc.), security, and other fields.

These prospective benefits deserve to be studied more.

Thank you for the opportunity to testify,

Jeff Sadino



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February 19, 2020

Aloha, Rep. Sylvia Luke, Chair; Rep. Ty J.K. Cullen, Vice Chair; and members of the House Committee on Finance:

I am writing to express my **support** of HB 2594 as it relates to blockchain technology.

Blockchain technology, which underlies a range of applications including cryptocurrency and bitcoin, is both mainstream and secure. Hawaii's current policy posture, largely controlled by the Department of Financial Institutions under the DCCA, needlessly opts the state and its citizens out of the benefits and opportunities available via blockchain technology.

Lawmakers should certainly not charge blindly into the unknown, so a working group is a reasonable first step. But I would encourage you to act swiftly and decisively in favor of next-generation technologies lest Hawaii be left in the backwaters of a global phenomenon.

Meanwhile, I will continue to work with leaders and builders in the local tech and innovation sector to be more proactive and supportive of government efforts to integrate and advance blockchain applications.

Thank you for your consideration.

HB-2594-HD-2

Submitted on: 2/21/2020 12:33:09 PM

Testimony for FIN on 2/24/2020 12:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
cheryl B.	Individual	Comments	No

Comments:

My comments: Do you, members of the House, understand exactly what the words block chain mean, how it is used and the significance block chain has to our community privacy and data collection? Do you know to whom block chain links our islands? There are so many people researching block chain, IA and SDGs and the long term affects on people. How deep have you looked into these areas?

LATE

HB-2594-HD-2

Submitted on: 2/23/2020 6:27:40 PM

Testimony for FIN on 2/24/2020 12:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Quinn	Individual	Support	No

Comments:

Request

Draft legislation that supports and encourages the use of blockchain technology to improve the food supply chains traceability and immutability. Funding is needed in this area to encourage companies to evolve into this new digital age. Verbiage in the current laws restricts vital aspects of this new technology, and discourages growth and sustainability within the islands. A pilot program is needed to allow for new innovations in the food industry, and gain visibility of the benefits of Blockchain technology.

Problems to Solve

Only 13 percent of food consumed in the state is actually produced here, and development pressure threatens to deplete lands that could be cultivated. Food shortage solutions are crucial everywhere, though are perhaps most necessary in geographically isolated places such as Hawaii. Climate change and the resulting food shortages and changes to shipping conditions also have the potential to drive importation costs up in coming years. Issues such as food fraud, safety recalls, supply chain inefficiency and food traceability in the current food system adds to the problem of food sustainability in Hawaii. The use cases of Blockchain in food go beyond ensuring food safety. It also adds value to the current market by establishing a ledger in the network and balancing market pricing. The traditional price mechanism for buying and selling relies on judgments of the involved players, rather than the information provided by the entire value chain. Giving access to data would create a holistic picture of the supply and demand. The Blockchain application for trades might revolutionize traditional commodity trading and hedging as well. Blockchain enables verified transactions to be securely shared with every player in the food supply chain, creating a marketplace with immense transparency. Blockchain's capability of tracking ownership records and tamper-resistance can be used to solve urgent issues such as food fraud, safety recalls, supply chain inefficiency and food traceability in the current food system. The current communication framework within the food ecosystem makes traceability a time-consuming task since some involved parties are still tracking information on paper. Over the past few years, we have seen blockchain technology evolve and become readily available to transform different industries, especially for food sectors. The space of Blockchain is crowded with innovators that utilize a combination of IoT, Blockchain, machine learning, and artificial intelligence to build a fully-transparent food supply chain. They provide the SaaS platform to growers and different players along the value chain for sharing data and tracking progress. As a result, the record of a food item's journey, from farm to table, is available to monitor in real-time.

LATE

BLOCKCHAIN IMPLEMENTATION

For The State of Hawaii

The Future of the Financial Economy

The islands of Hawaii Visitors to the Hawaiian Islands spent a total of \$1.39 billion in May 2019, a decrease of 2.1% compared to the same month last year, according HTA. On a statewide level, average daily visitor spending was down in May year-over-year. Visitors from Canada spent more per day, while travelers spent less from U.S. West, U.S. East, Japan, and All Other International Markets. By integrating digital currencies, along with Blockchain technology into the local economy visitors will not have the restrictions of any type of currency exchange, or limitations of the amount of currency they bring with them. Blockchain technology will allow for easier, and increased spending habits.

Beyond decentralization, blockchain offers the country the possibility of having compliance “baked into the currency protocol itself,” — in the minister’s words — “while maintaining privacy for individuals.” The technology, he notes, allows the state to automate much of its compliance obligations, lowering the costs associated with existing systems and thus helping it take a more proactive role in the global fight against money laundering and financing of terrorism. Other aspects of the essay point to the fact that fiat remittance services are currently extremely expensive for citizens, something that frictionless blockchain-based systems can help mitigate.

As recently [reported](#), China is now readying itself to launch a central bank-backed, blockchain-based digital currency for use in retail scenarios.

Apple Pay vice president Jennifer Bailey, [talking to CNN](#) at a private event in San Francisco, said “We think it’s interesting. We think it has interesting long-term potential.” The document indicated that Apple was involved in the drafting of “Blockchain Guidelines” for the Responsible Business Alliance’s Responsible Minerals Initiative and had been working with the RBA’s blockchain team. Elsewhere in the CNN report, Bailey said that in launching Apple Pay, the firm has made it harder for users to tip. The firm is looking at the problem, she indicated.

Cryptocurrency exchange Binance has announced that it’s launching a project that will develop cryptocurrencies and digital assets pegged to fiat currencies around the world. Dubbed Venus, the “localized” stablecoin initiative will see the firm utilize its existing infrastructure, such as its public blockchain, Binance Chain, and international payment system, “to empower developed and developing countries to spur new currencies.” Binance said it’s seeking to create new partnerships with governments, enterprises and cryptocurrency and blockchain firms to assist the effort.

The blockchain technology can optimize the global financial infrastructure, achieving sustainable development, using more efficient systems than at present. In fact, many banks are currently focusing on blockchain technology to promote economic growth and accelerate the development of green technologies.

The future of blockchain will disrupt all intermediaries, such as title companies and escrow. removing this part of the home buying process will streamline everything to enhance the buying and selling experience.

The main problem we face as consumers is the unfair fees involved in the record keeping and escrow process involved in real estate transactions. Smart contracts and public ledger will soon remedy the problem by enabling everything these title companies do in a free, and more public way that allows the home owner to own the data about their own as well. Without smaller businesses leeching off the real estate industry consumers will be more empowered than ever and will allow the entire industry to flourish.

Humana, Multiplan, UnitedHealth Group's Optum, UnitedHealthcare and Quest Diagnostics are embarking on a pilot program to apply blockchain to healthcare provider demographic data.

Currently, organizations across the healthcare industry usually keep separate copies of provider data. Reconciling the data can take a lot of time and money—as much as \$2.1 billion annually, according to the companies. By using the encrypted system of data exchange that relies on a distributed ledger, they aim to make this data both more accurate and administratively friendly.

Blockchain is a popular buzzword both within and outside of healthcare. Some hope the technology will enable greater sharing of patient records, thereby driving interoperability. Others think it will make claims processing and payments more efficient. With [Change Healthcare's blockchain network](#), for instance, hospitals, physicians, and payers can track claims status.

Digital currencies are reshaping local, and worldwide economies.

<https://www.kitv.com/story/40718446/hawaii-visitor-statistics-released-for-may-2019>

<https://cointelegraph.com/news/marshall-islands-launches-national-crypto-with-fixed-supply>

<https://www.coindesk.com/cryptocurrency-has-long-term-potential-says-apple-exec>

<https://www.coindesk.com/crypto-exchange-binance-announces-new-stablecoin-initiative>

<https://www.modernhealthcare.com/article/20180402/NEWS/180409999/humana-optum-others-team-up-for-blockchain-enabled-data-sharing>

Written Testimony of
Jacob Henderson on behalf of
PUNCHBOWL & KING LLC

500
LATE

House Committee On Finance
Monday, February 24, 2020
12:00 p.m.
State Capitol, Conference Room 308

In consideration of
HB2594, HD2
RELATING TO BLOCKCHAIN TECHNOLOGY.

Chair Luke, Vice-Chair Cullen
Members of the House Committee on Finance

Punchbowl & King LLC **Strongly Supports the intent of HB 2594, HD 2.** Blockchain technology has the potential to solve legacy pain points within our state government and increase business opportunities for local residents.

The distributed ledger format can be leveraged to support an array of government and public sector applications, including land registration, identity management, supply chain traceability, health care, corporate registration, taxation, voting (elections and proxy), digital currency/payments, and legal entities management.

Blockchain technology can create the following advantages for:

- Secure storage of government, citizen, and business data
- Reduction of labor-intensive processes
- Reduction of excessive costs associated with managing accountability
- Reduced potential for corruption and abuse
- Increased trust in government and online civil systems

Blockchain and Bitcoin are not the same:

A quick summary of the key differences:

- Bitcoin is a cryptocurrency, while blockchain is a distributed database.
- Bitcoin is powered by blockchain technology, but blockchain has found many uses beyond Bitcoin.
- Bitcoin promotes anonymity, while blockchain is about transparency. To be applied in certain sectors (particularly banking), blockchain has to meet strict Know Your Customer rules.
- Bitcoin transfers currency between users, while blockchain can be used to transfer all sorts of things, including information or property ownership rights.

Jacob Henderson
Punchbowl & King LLC
info@punchbowlking.com

Written Testimony of
Jacob Henderson on behalf of
PUNCHBOWL & KING LLC

LATE

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