Bitcoin industry leaders, finance executive talk cryptocurrency in Idaho at Boise Environmental Summit







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Cryptocurrency might be all virtual, but the physical currency that keeps it running could be coming to the rural Mountain West.

The intersection of our environment and the future of technology collided in several panels at the Boise Environmental Innovation Summit last month, which brought several experts in Bitcoin from around the country to talk about its growth, the infrastructure required and the potential for how it will change states like Idaho. These two panels was part of a half-day event held at the Arid Club in conjunction with Boise Entrepreneur Week that featured talks with industry leaders on cryptocurrency, the future of farming and energy in Idaho.

Bitcoin is an online-based, decentralized currency that allows users around the world to track and confirm transactions, instead of relying on a central bank like Wells Fargo to do it for the users. It was introduced to the world in 2009 and has boomed in recent years, with people and companies around the world embracing the new financial network. The process to create new Bitcoin is called "mining." To create new Bitcoin, people use networks of computers to process bundles of new transactions and if they process the transaction first, they are rewarded with newly created Bitcoins.



This process takes place in mining facilities popping up around the country. It's become a way for entrepreneurs to set up lucrative tech businesses in rural areas that might otherwise be struggling, but the burgeoning industry has also been criticized for its power usage at a time when people around the world are trying to conserve power due to climate change.

Bitcoin and Idaho's power grid

A Bitcoin mining facility will include rows and rows of computers to complete the necessary transactions, which requires ample electricity to run it.

Tom Merkle, the founder of Bitcoin mining software company 2140 Labs, said in order for miners to make money they need to construct their facilities in places with cheap and plentiful energy.

"It uses a lot of electricity, but the reality is in order to run them profitably you need to find a place where that price of electricity is low enough," Merkle said. "That means the electricity is a surplus and it's not being competed away by other resources. When there's more of it, it's cheaper so miners don't just seek out cheap electricity they seek out places where no one else is using it."



This heavy electricity isn't necessarily a bad thing, according to Merkle and Stegan Phillips. Phillips owns a Bitcoin mining operation in Burley, where he employs 15 employees with the hopes to grow. He said growing the cryptocurrency industry in Idaho can help use industrial land or closed landfills that won't be usable for farmland, but can still bring in jobs.



Phillips, Cavaleri and Merkle participate in a panel on Bitcoin and the power grid at the Boise Environmental Innovation Summit. Photo. Margaret Carmel/BoiseDev

Plus, Bitcoin mining can help balance the power grid in times of low demand when there's nowhere for the power to go.

"The power companies and the cities like us because in the winter months when the (water) pumps are off and the pivots are off and they don't have anything to do with the power, we can utilize as much as we need in the winter months and in the summer we haven't had to back down yet, but there's talks of it," he said. "But that's okay because 9 months of the year we have plenty of energy."

Another potential energy source for Bitcoin mining is excess natural gas from energy extraction that would be burned off anyway, but instead can be used to help power a cryptocurrency facility. Amanda Cavaleri, a Wyoming-based Bitcoin miner, said the industry also provides a path to growth for a state like the Cowboy State where over 80% of its energy is exported and graduates in STEM are leaving in search of jobs elsewhere.



"What if, if I'm an undergrad at the University of Wyoming studying computer science and energy, what job am I going to have when I graduate?" She said. "A lot of those students are going to Denver, Seattle or Boise so what can Wyoming can do as a state? If this is the future, if there's a combination fo computer science, energy and future-oriented jobs in Bitcoin so this makes a lot of sense. What if just 5% more of our electricity stays in the state and goes to data centers and bitcoin mining?"

Bitcoin becoming mainstream

Many people may be new to the concept of cryptocurrency, but it's becoming more and more accepted both by Idaho's laws and Idaho banks.

Rep. Dustin Manwaring, R-Pocatello, appeared on one of the panels at the summit to talk about his work on the Idaho Digital Assets Act earlier this year. The legislation, which had been in the works in recent years, classifies digital assets like Bitcoin as personal property and allowed banks to voluntarily provide custodial services for investors in cryptocurrency.



"One of the things I thought was important was to make sure we can use local banks and local institutions for our digital assets," Manwaring said. "We have this stuff so that I could walk into my local bank and say 'I have a digital asset, can you help me protect it? Can I take a loan against it?' That would be great, but until we laid the groundwork in Idaho nobody wanted to touch it until people knew what it is and how Idaho treats it."



This legislation lead to Idaho Central Credit Union launching its own Bitcoin services for members who have cryptocurrency. Mason Oswald, the assistant vice president of eCommerce at ICCU, spoke on the panel with Manwaring and said the credit union's move into Bitcoin was an effort to bring the new type of investing to customers, but in a way they felt comfortable and could use to educate themselves.

"We take a lot of pride in being relevant," he said. "It was an opportunity to be where our members want us to be, help them where they want to be helped and so we're doing that. Along the way, most of that was make sure you're doing it in a smart and safe way and making sure you're working very closely in the state you're in and with other regulators that are all about protecting consumers."