Bitcoin

The Bitcoin believers

A growing band of young evangelists believe the virtual currency Bitcoin is the economic future. But how long before regulation catches up with them?

From left, Josh Rossi, Jonathan Mohan and Jonathan Warren

Stephen Foley and Jane Wild JUNE 14, 2013

"My goal is to get rich," says Jonathan Mohan, blunt as you like. Given that the 23-year-old Queens native is studying entrepreneurship at New York's Baruch College, the statement is hardly surprising. What marks Mohan out is that when he daydreams of wealth, it is not dollar signs that flash up before his eyes, it is Bitcoin.

More and more people are dreaming that Bitcoin, a virtual currency so far most famous for its wild price swings, will one day become a ubiquitous form of payment. They hope that the value of the finite stock of digital coins will soar, and that a host of entrepreneurial opportunities will present themselves in a new "Bitcoin economy".

Intellectually self-confident and eager to plunge into debate, Mohan is quickly becoming a catalyser of the New York Bitcoin community. He is organiser of a regular "meet-up" group which aims to connect the Bitcoin-curious, and which has helped build interest even after an apparently life-threatening price crash in April. Mohan wants to get rich, and he wants to wreck government as we know it, too. Through Bitcoin, a currency outside the purview of banks and government control, Mohan sees "a chance to build a financial business with no regulation. Government is coercion and force. You don't fight coercion with coercion, you just ignore it. Bitcoin allows you to ignore it."

One of the stickers on his laptop is for the Seasteading Institute, a project backed by the billionaire PayPal founder Peter Thiel, which aims to build a floating city in international waters where "the next generation of pioneers can peacefully test new ideas for government". And Mohan is taken with the notion, voiced by the extraordinarily persistent Republican presidential candidate Ron Paul, that even war can be eradicated, if only governments were denied the ability to finance deficits through printing money. "Would you rather buy a diamond or a blood diamond?" he asks rhetorically. "Obviously a diamond. So, would you rather use a Bitcoin or a dollar? When I gave someone $5 in Bitcoin, I didn't kill any children in Iraq."

The strongest evangelisers of Bitcoins have always been libertarians. This is broadly the political hue of the Bitcoin Foundation, set up by some of the earliest users and entrepreneurs of the currency to steward its development. But an increasing majority of the people interested in Bitcoin are only "libertarianish", despairing of government rather than opposed to it. And they are hardly just in the US.

Around the world, a generation is growing up whose intellectual framework was forged in an economic conflagration which destroyed the reputations of government, finance and central banks alike. The only heroes in this landscape are the hoodie-wearing tech entrepreneurs with their billion-dollar businesses.

At Mohan's meet-up, it is not politics that is at the fore, but entrepreneurship. There are more than 30 people in the room. Five are women. Probably no more than three are over 35. Many are software developers, sniffing around for an interesting project and preferably a lucrative one.

The formal part of the evening is a lecture on the "basics of Bitcoin", yet the discussion often turns to stunts that might build Bitcoin's profile. Someone suggests stamping secret codes on real dollar bills which lucky finders can then exchange for virtual currency, creating a kind of countrywide treasure hunt. Mohan is trying to persuade a friend of a friend to let them on to the floor of the Chicago Mercantile Exchange, to make a symbolic Bitcoin transaction in the home of derivatives trading. A driving aim is that next week's meet-up should be bigger than this week's and that the one after be bigger than that.

To be a Bitcoin user is to be a Bitcoin evangelist. This must be the case: no central bank certifies a "promise to pay the bearer on demand" the sum of anything in particular; no Treasury has declared it "legal tender for all debts, public and private". The Bitcoin in your pocket (or more accurately, your digital wallet) is worth only as much as other people's desire to use it or at least to possess it.

These have been a giddy few months within the Bitcoin community. For reasons that remain a mystery, the price of the currency began rising sharply in March, and when some people claimed this might have something to do with the bailout raid on Cypriot bank deposits and a crisis of confidence in traditional banking, media interest helped to accelerate the ascent. The price for a single Bitcoin, less than $14 at the start of the year, spiked to $266 before crashing. It now hovers at about $110. The volatility may have set back the currency's utility as a reliable means of exchange but, as with a previous price spike in 2011, it only appears to have piqued more interest.

Bitcoin was created four years ago by an unknown computer scientist with the pseudonym Satoshi Nakamoto, who conceived it as an alternative to government-controlled currencies and a means to transfer money quickly, cheaply and anonymously outside the slow, expensive and highly regulated international banking system. Transactions are recorded in the "blockchain", a massive block of code stored across a peer-to-peer network of computers. These computers are called miners because their owners are rewarded for their service with occasional payment in new Bitcoins. The total number of coins will never be allowed to exceed 21 million.

So far, Bitcoin is accepted at only a smattering of ecommerce sites – most notoriously, the mail-order drugs site Silk Road – and an even smaller handful of real-world shops, all run by evangelists. An average $30m of Bitcoin transactions are recorded every day.

In recent weeks, high-profile venture capital outfits, such as Thiel's Founders Fund and Fred Wilson's Union Square Ventures, have plunked down just-in-case bets on new Bitcoin payments businesses, reinforcing the headlines. Angel investors and business incubators are nurturing new Bitcoin ideas around the world. The financial establishment doesn't know if the currency is friend or foe: money transfer businesses Western Union and MoneyGram are said to be looking at the feasibility of accepting Bitcoin, but there are suspicions that banks are using concerns about money laundering as an excuse to shut down the accounts of businesses that could become rivals.

Evangelists will almost always preface their remarks by saying that Bitcoin is still an experiment, but they share the same under-the-skin itch: a sense that this thing could make them a lot of money.

Josh Rossi is built to evangelise. The 31-year-old hops around like a sack of rabbits as he explains his attraction to Bitcoin. "It's a hot tech start-up, mixed with emerging markets, mixed with gold, mixed with forex [foreign exchange]. It's a gold rush. It's a land-grab. It's the Wild West. There's going to be a Goldman Sachs in this economy. If you build a better mousetrap, you could be a millionaire."

Josh Rossi with 'Bitcoin millionaire' Charlie Shrem at the latter's EVR club in New York

Rossi is sipping whiskey at EVR, a midtown club part-owned by another Bitcoin evangelist, Charlie Shrem, which has made much of being the first New York bar to accept the currency. Shrem, at just 23, might be one of the youngest "Bitcoin millionaires", having amassed his stash long before the latest price surge, and set up one of the first Bitcoin payments-processing companies, BitInstant. His habit of wearing a ring engraved with the codes to his Bitcoin wallet has gained him plenty of adoring press, which he is milking to promote the club.

Also propping up the bar is Kirill Gourov, a 21-year-old currently interning at a mutual fund while completing his finance course at Baruch. He proposes a back-of-an-envelope valuation for the entire stock of Bitcoin: $70bn, or $3,000-plus per "coin", even if it is used for just 1 per cent of the transactions in the $7tn black market. (He emails several days later with a more thoughtful calculation, based on the value of a country's monetary base relative to its GDP.)

It seems less than a coincidence that Rossi and Shrem both have nightclubs on their résumés. After moving from the West Coast to New York "as you do, to find yourself", Rossi flitted from venture to venture, which included promoting club nights. Gourov, too, tried his hand at this in college and grins when it is suggested that Bitcoin, like a nightclub, needs its promoters; that like a nightclub, it needs "buzz" if it is to grow in value. "Even if there are only 10 people in the club," he says, "you want to have 100 people outside. Bitcoin has that built in. Scarcity means value."

A Bitcoin meet-up in New York

It was Rossi's idea that Bitcoin fans should gather regularly in Union Square to trade in the style of the early brokers who founded the New York Stock Exchange under a buttonwood tree in 1792. Men in their twenties or thirties now gather, largely indistinguishable from the other students, tourists and hangers-on who throng the square – except that every now and again two of them swap Bitcoin addresses on their smartphones and someone hands over a hundred dollar bill.

Who on earth are the buyers of Bitcoin? Typically, they cast themselves as long-term investors. Evan True, a 29-year-old scenery builder, sees the potential for Bitcoin "as a tool, particularly where it can start to stab a screwdriver into the rusty ol' tanks of the international banking system". He says he is not "starry-eyed", though. "It has some of the emotional aspects of a Ponzi scheme. Without needing to steal from someone."

The temptation of making a fast buck repeatedly proves irresistible. At Union Square, a Wall Street banker who wants to be quoted under the pseudonym Moses, claims to be making money going in and out of the currency, following trading patterns that are revealed by plotting the Bitcoin price on a logarithmic scale. He has "never seen anything grow this fast, except bacteria when I studied biology". He makes the analogy again for anyone who asks.

Even those attracted to Bitcoin by the beauty of the technology can't seem to escape the lure of the lucre. Jonathan Warren, a computer science graduate who lectured on "the basics of Bitcoin" at a recent meet-up, experimented with arbitraging the dollar prices on different Bitcoin exchanges, but did not find it profitable. A friend who set up a computer program, or bot, to run the same trading strategy electronically found himself out of pocket, too, Warren says, because exchanges have gone under, leaving digital profits in limbo. Such disasters are legion, with digital wallets failing and exchanges shutting down unexpectedly.

For every person who wears their Bitcoin riches on their sleeve, there are others who sheepishly admit that the currency is not proving a one-way bet. Even Rossi, it emerges, may be down on the deal since buying into Bitcoin in January, a full year after he began investigating ways to make money from the currency. Though he bought his first Bitcoin at just $19, a sixth of the current price, he forayed into options trading and says an ill-timed investment means he has lost some of the $5,000 he has put in.

Amir Taaki, coder, project developer and Britain's leading Bitcoin proponent

In London, the UK's most prominent Bitcoin evangelist is fighting for its future. Amir Taaki's ire is directed at the "suits" from venture capital and at the Bitcoin Foundation. Taaki is angry about a single body becoming "a monopoly". "They're suits and bullies, trying to remove Bitcoin's political agenda, but that's impossible," he says. Like many others, he cites a reference to bank bailouts embedded in the currency's original code by the creator as evidence that it is inherently political.

A former professional poker player from Kent, Taaki was expelled from school for hacking, and with his quirkily styled hair he cuts an unconventional figure as a spokesman. There is respect for his achievements as an influential coder and project developer, including his work on Intersango, London's only Bitcoin exchange, which was subsequently shut down by the banks. But his unapologetic support for using the currency to subvert government controls makes some people uneasy.

"If you truly think that Bitcoin is something amazing you have to want to defend its integrity completely, like what Cody Wilson is doing with the [3D-printed] gun ... That's why it's very important we try not to look up to the old hierarchy, and build our own system independently. Bitcoin is a decentralised, black market economy where you can buy drugs online and avoid tax and that undermines so much power. Anyone who tries to deny Bitcoin is revolutionary is living in fantasy," he says.

Amir Taaki is the best-known resident of the self-styled “Bitcoin HQ”, a squat in a former commercial building in central London. It is here that, at the height of the buying frenzy in April, people converged to trade Bitcoin. On the wall a scrawl of marker pen denounces the financial status quo.

Residents of the self-styled 'Bitcoin HQ' squat in London

One of the newest residents is Jonathan Harrison, who swivels round in his chair and points to his screen, showing an app – WhatsKash – he is developing to transfer Bitcoin. Formerly a gold day-trader, he began buying Bitcoin two years ago and this March gave up his flat and sold his possessions to begin squatting. “I was evangelising to everyone I could speak to,” he says. “All my friends thought I was mad. ‘Go and buy your magic beans,’ they said. But I was vindicated this year.”

Harrison is one of the organisers of the London Bitcoin meet-ups, regular get-togethers in a Paddington pub that have grown from five people to 50 – tech fans, the curious and, lately, he says, quite a few “suits” from financial industries.

Jonathan Harrison, former gold trader; currently developing a Bitcoin transfer app

Mihai Alisie, a 25-year-old former professional poker player from Romania and now editor of Bitcoin magazine, has visited Bitcoin communities around the world, including in Israel, Athens and Cyprus. “I think there are two main poles in Bitcoin: Europe and the USA. Europe is more anarchic. There is a more legal and organised approach from the US, seen with the Bitcoin Foundation.”

As lawmakers, regulators and the police start to take a closer interest in Bitcoin, these poles are starting to push apart. Bitcoin adherents are facing choices. Will they tack to their governments' laws in order to build businesses around the currency and get it into the mainstream? The claim that it can be both mainstream and black market – like any other sort of money – seems more of a stretch after recent developments in the US. Citing rules designed to prevent money laundering and terrorist financing, the US federal government has seized bank accounts belonging to Mt Gox, the largest Bitcoin exchange, and other exchanges. The Bitcoin Foundation no longer expects Mark Karpeles, Mt Gox chief executive, to travel to the US from Japan for its board meetings.

Erik Voorhees, founder of an online gambling site called SatoshiDice, whose players pay in Bitcoin, has already moved to Panama City. He is no stranger to uprooting: previous addresses have included Dubai, where he worked as an estate agent, and New Hampshire, as part of a libertarian project to “colonise” the tiny US state. Panama has the potential to become a Bitcoin hub in the way that Gibraltar became the jurisdiction of choice for online poker sites when the US acted to drive out internet gaming.

Bitcoin Foundation chairman Peter Vessenes

The Bitcoin Foundation's chairman, Peter Vessenes, who runs Seattle-based CoinLab, says he hugged Voorhees and others from Panama when he saw them at Bitcoin 2013 in San Jose, the foundation's inaugural US conference, attended by 1,300 people. "They are great entrepreneurs," says Vessenes, "they have beautiful women follow them wherever they go, they are well dressed. All I wanted them to do was have a sane approach to US regulatory policy. I'll maybe have to travel to them in a few years."

For all the hugs, there are philosophical, legal and even technological fights brewing. CoinLab is suing Mt Gox over the alleged failure to consummate a partnership deal covering the US. "I personally believe that regulation is not a bad thing," says Vessenes. "There is absolutely no world in which the large Bitcoin exchanges won't be regulated. It's just not going to happen. Mt Gox is clearing $1bn a month. Someone is going to want to know who gets that money."

A recent flashpoint has been the escalating amount of gambling traffic from Voorhees' business and others. This has vastly increased the amount of data stored in the blockchain, which threatens to become unwieldy. Increasingly, the community is having to weigh up Bitcoin fixes and upgrades that might have a significant impact on people's businesses.

And the transatlantic split grows. From London, Taaki scoffs at the recent Bitcoin 2013 conference; he is planning a November gathering in Vienna called "UNsystem", where he says he will fill the conference hall with "thousands of anarchists, squatters and radicals".

Mohan's prediction is that regulators will be persuaded to accommodate successful Bitcoin businesses, rather than to crush them, and he predicts that the illicit and the licit Bitcoin economies can coexist, just as dollars can be used for fair purchases or foul.

Meanwhile, his New York meet-up group is about fattening up his Rolodex, "creating a professional network I can draw on when I actually do my let's-make-money-business". Mohan says he has a

Bitcoin idea up his sleeve that he isn't revealing yet. He'll be graduating at the end of the year, but before then "my whole summer's going to be Bitcoin".

But if the community splinters, if the suits don't win their battle to move it into the mainstream and if the US government moves in to shut this experiment down, which way will the entrepreneur jump?

He smiles. "I hear Bolivia is awesome."

Stephen Foley is an FT markets correspondent based in New York. Jane Wild is a reporter for the FT in London

The rise of virtual currencies

When Preet Bharara, US attorney for the southern district of New York, unveiled charges against the creators of a virtual currency called Liberty Reserve last month, he proposed an update to an old law enforcement adage – "follow the virtual money", **writes Stephen Foley**.

Costa Rica-based Liberty Reserve enabled what Bharara alleges is the biggest money laundering scam ever prosecuted, with $6bn going into and back out of the currency in a way that made it hard to trace.

It is the threat of criminals washing their ill-gotten gains which most exercises authorities around the world. An earlier currency called e-gold was also shut down by US action.

We have seen non-governmental currencies before. Airmiles began life as a payment method for flights and expanded into a currency that could be spent on hotel stays and other travel goodies. More recently, Facebook has experimented with "credits" for use within its network of online games, and Amazon is rolling out "coins" for payments within Kindle apps. There is a whole economy within the multiplayer game World of Warcraft, where "gold" can buy you swords and superpowers.

But what makes the latest iteration of virtual currency alarming to the authorities is the possibility of switching your stash back into real-world money, in a way that might not be captured through the traditional, regulated banking system.

This is a particular problem with so-called distributed currencies – including Bitcoin, but also half-a-dozen others including Litecoin, Namecoin and now a new rival called Ripple. With distributed currencies, transactions are processed and recorded across a network of users' computers and balances are stored on a user's hard drive rather than in a seizable bank account.

Entrepreneurs see in distributed currencies an opportunity to shake up the global payments business and land a few blows on the duopoly of Visa and MasterCard. Transferring money across a peer-to-peer computer network costs a fraction of what those giant money movers charge.

Government officials have been careful not to damn virtual currencies outright, for fear of squashing innovation that could benefit commerce and consumers. Instead, they are homing in on the exchange businesses which swap real money into virtual currency, and insisting that these impose the same money-laundering checks as banks.

It is a tension Bharara acknowledges. "The internet is an amazing gift," he says, "but it also has an ugly underbelly."

How Bitcoin works

Bitcoin aims to make storing and transferring money cheaper, simpler and anonymous. Your stash of Bitcoins is held, not in a bank account, but in a piece of software called a digital wallet on your laptop or smartphone. To pay for something in Bitcoin, or to transfer money to another person, you send a code from your wallet to theirs.

Behind the scenes, every Bitcoin ever created, and every Bitcoin transfer made, is recorded in a huge string of code called the blockchain, stored on a network of computers known as miners. These are so called because, in return for completing workmanlike computational tasks, their owners get Bitcoins credited to their accounts.

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