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Hello, everyone. Welcome to the first episode of the Bitcoin brainstorm.

So arc is really thrilled to be introducing this new initiative and collaboration with Bitcoin Park. Our goal here is every month to bring together some of the world's most respected bitcoiners and really just have an open conversation about the promise of Bitcoin. You can really think of this less as an interview or a traditional podcast and much more as a brainstorm. So each month we want to have maybe some leading topics to guide the conversation, but really keep it as open-ended as possible to encourage some of this spontaneity. So we're really excited about the guests that we have on for this first edition. And as I mentioned, arc is partnered with Bitcoin Park, led by none other than Rod Rudy, who I've gotten the pleasure to know over the last few years. And Rod, as the main host of the series, we cannot be more thrilled to have you on board. So with that, why don't you quickly introduce yourself, introduce Bitcoin Park, and then most importantly, introduce these awesome guests we have today.

Man, Yasin, thank you for the kind introduction and welcome everybody to this inaugural podcast. My name is Rod, and I am the co-founder of Bitcoin Park. So what is Bitcoin Park? Bitcoin Park is a community-supported campus here in beautiful Nashville, Tennessee. As Yasin mentioned, focused on grassroots Bitcoin adoption and really a home for Bitcoiners to work, learn, collaborate, and build. We've been around for a little over a year and we've hosted 40-plus free and open Bitcoin community socials, bit devs, workshops, and summits. We've had over a thousand people in our meetup group. We've had the honor and privilege of having 3,000 attendees across all of our events. And I would say just what makes Bitcoin Park special, in my opinion, is the intimate and open conversations, discussions, and debates we can have about Bitcoin in person. We have a no social media policy. We have a no photos policy, just good old-fashioned in-person conversations. And now, thanks to Yasin, Kathy, and the ARC team, we're taking our monthly Bitcoin topic-based approach and applying it in this new monthly podcast series. Each month, we plan to have a different topic and invite subject matter experts from a variety of areas within the Bitcoin community. So our aim is simply to just drive Bitcoin conversations. So the topic for this month is investing and building on Bitcoin, which was our theme in June at Bitcoin Park. And so joining Yasin and I this month, we have Kathy Wood, founder and CEO and CIO of ARC Invest.

We have Preston Pish, show host and co-founder of the Investors Podcast, as well as advisor at Ego Death Capital. We have Harry Sudak, chief strategy officer at Grid, as well as a partner at Bitcoin Park. We have Obi Enwasu, co-founder and CEO of FETI. And to round out the folks joining us this month, Jack Mahler is founder and CEO of Strike. By the way, I will just say, Kathy and Yasin, we missed you last month in Nashville, Tennessee.

I think everybody in this group was in Nashville. It was awesome to see Jack, Harry, Preston and Obi.

So okay, we can go in many different directions with this and we will definitely go down many rabbit holes. So I think I'll start off with a specific subtopic and really focus on building.

And building on the Bitcoin ecosystem requires a number of innovative ideas.

Yet, I would say the argument from folks, potentially from the outside looking in, Bitcoin lacks builders or I'll even stretch it further, lacks innovative ideas.

With that frame or foot in mind, let me ask this to Jack first and this is around why Bitcoin.

So we can start it off a little bit spicy. And so you just had Jack Dorsey on your podcast and he was mentioning Bitcoin is money for the Internet.

So a broad question and then we can get in the group discussion.

Why is Bitcoin different than enabling, say, a stripe on e-commerce or even if I went further, building money on a public blockchain? Oh man. All right, I'll give this one a stab.

I think Jack, the other Jack, and I grew them, thinks of Bitcoin as the currency of the Internet because of the similar properties they retain. The Internet has actually in similar properties of maybe something like the United States of America. There's a freedom in a pinning. There's a freedom

in coming and going. Everyone is created equal. It's a system of users with no admins. And so it is a system that's designed to be peer to peer. And because of that, there is no natural relationship with a nation state or a corporation. And so it is naturally global. It is natively digital, which makes it incredibly accessible. And it doesn't inherently require systems like trust.

And so I think that that is why it is the currency of the Internet and more specifically, it's the first ever digital bear instrument. So bytes of data could represent physical value.

And so for something like a stripe, visa payments are promises of future settlement.

And so a stripe doesn't actually offer finality within itself. It forwards along messages of promises. And so for those reasons, but then to public blockchain, sorry, this is a loaded question, so I'm giving my best, is that Bitcoin doesn't have a natural issuer.

No one, Satoshi Nakamoto even paid for his or her there Bitcoin with energy. And so it is a commodity

like instrument in its truest and most natural form. And that's a very, very important property that even someone like the SEC is beginning to recognize. So I think the combination of those make Bitcoin tremendously unique. It has a big bang type of effect where theoretically, in my opinion,

it's impossible to replicate and retain and achieve the properties that Satoshi did.

I think that irreproducibility aspect is one of the most underappreciated aspects of Bitcoin.

You have that sort of immaculate conception or founders myth. And you see that every sort of attempt to recreate that by the very definition of how Bitcoin went from zero to one, it's impossible to replicate. And when you think about that context of monetary history, that's why sort of Bitcoin is so unique relative to its competitors. I view it much more as a monetary revolution than a technological revolution. And when you think about sort of the systems that are the properties that a monetary system must inherit, those cannot be necessarily created forcefully. That's why I think Bitcoin's organic growth and organic evolution makes it so unique.

Something the other Jack also says that I really appreciate and I think is a compliment to everything you just said is he views Bitcoin as discovered as opposed to created. So it's not as if someone can

found a better one or a faster one or a cheaper one. It's, can you find a better one? And the answer is no, right? So it's this idea that Bitcoin was discovered and that when we'll discover the next one. Yeah. So shout out to Jack Dorsey. I hope, I love that guy. I hope he's well. Smart man. On that point, one of the best framings I've had on its discovered is you can really almost think about Bitcoin as this digital natural resource. And it's kind of like oil or even air, but it's digitally native. Harry, you obviously have probably a lot to say about that given your mining background, but I think that's really an interesting framing of discovery, not creation. Yeah. I just want to pile on one moment and I apologize, Kathy. It's just when you think about what the core innovation that Bitcoin represents, it's really just two very simple pieces, right? It's proof of work plus the difficulty adjustment enables all of the properties that Jack just outlined. Like that's why we're able to achieve settlement finality on a block by block basis. And that's why the decisions that from a design perspective that Satoshi made around what pieces of the Bitcoin ecosystem and software project are endogenous versus what pieces of the economic system end up being exogenous. So being able to have the discovery of net new blocks and therefore the inclusion of net new transactions be a fully endogenous process and have it be fully self-referential. That's what ensures that, and I'll go even further and just say that I think Bitcoin has a place on the periodic table almost. And because of that self-referential nature, that's why it deserves a place on the periodic table because if you cut it in half, you only get more Bitcoin the same way that if you cut a piece of gold down to the atom in half, you're only going to get more gold. And so there's really nothing else that has this endogenous property that lets it be infinitely divisible and remain itself. Yeah, I was going to add one more. When I'm trying to describe two investors or future investors in Bitcoin, what it is, I usually say, okay, I'm going to say, I think it's five words and each one is very important in terms of helping them understand. It is the first global, so this hits some of what you said, Jack, as well. Digital, private, no government oversight, rules-based, that might be the most important word, monetary system in history. And we did a podcast with Art Laffer, Nashville. He's very proud of the fact that Nashville is attracting more adjusted gross income than any other state, including Florida. Florida may be attracting more people, but there's more income per capita going to Tennessee. And he is so fascinated with this because he's been looking for it ever since the breakdown of Bretton Woods and the closing of the gold window. He has been looking for a rules-based monetary system. He is 83 years old, and I think this has rejuvenated him in a magnificent way. He's so excited about it and I think can become a real ambassador for it, I think. And something that Yassine and I have discussed and our crypto team have discussed is a little bit about the discovered comment Jack used. This had to be almost surreptitious in its evolution. As Hayek suggested, it would have to be. And it's a beautiful thing. And to hear an economist who is a monetary scholar, just so excited, he wants to, we're going to do another podcast and maybe it could be part of this monthly where he just wants to break it down and he understands cryptography and he wants to understand what's this anonymous versus pseudonymous. And if they can never discover me, okay, fine, pseudonymous is fine. But that's really important to him and we have to help him understand what this is. So may I stretch it and say Dr. Art Laffer is a Bitcoiner?

Yeah. Well, he was willing to collaborate with us in 2015 on our first Bitcoin paper. And it was then that he said, oh wow, I've been looking for this since they closed the gold window and I can't wait to get rid of the dollar. Here's an American and an economist and a monetary scholar whose mentor was Robert Mundell, who won a Nobel Prize for monetary theory. So it's pretty exciting. I may take the counter there and I will say, yes, we're all long Bitcoin and such. And in terms of doing away with the dollar and I'll maybe tee up Obi because he has a lot of experience in the global south where they are asking for the dollar. So we've talked a lot about sound money principles and such. But I'm curious to maybe your thoughts because we're talking about building Obi and your thoughts on innovation and what you're seeing in the global south. So what we do is rollouts are offering globally, but we are ordering our focus because the product is to be a scaling solution for Bitcoin beyond lightning, both functionality, privacy, and also transactions. It's a globally relevant product, but we're ordering our focus in terms of who needs it most. And so for that, that's people who are living in the global south and also people who are living under the Yobel-Boforotain regimes and dictatorships, which is a high crossover with the global south, by the way. You just add on post-Soviet Europe and North Korea and then the rest is in the global south. And that's actually our highest priority group, the people who are living under the Yobel-Boforotain regimes, but they happen to be mostly in the global south. And so these are people who are unbanked, underbanked or debunked.

They have banking in some of these places, but if they were to use it and receive money because of things like the tabloid rule and so on, they could be imprisoned, tortured, killed. So they need private money that they can custody themselves. They need private communication as well. So Bitcoin and Bitcoin-adjacent technologies are incredibly important to these guys. They are very, very innovative already, out of necessity. And so there are many mechanisms in which they get money in before Bitcoin existed. Aid agencies would bring in bucket loads of cash and have to pay up to 50% in bribes to get the remainder to people. But that was innovative and they would use many different systems. They would use existing traditional systems like Huala, etc. There's a management of money when they were unbanked. They are things like SACOs in Kenya and others, these community savings and loan schemes, again. But tools that can take

their existing, the technology of community and combine it with freedom technology. So that's Bitcoin, that's Lightning, that's Fedement, that's Nostra, that's simplex and so on. And bring them together. These are the things so that we can level up these existing communities and existing innovation. That's what we are doing as a community and that's what we can do uniquely within the Bitcoin ecosystem. That's well said. And I think a great frame in the comparison to Dr. Art Laffer discovering Bitcoin and finding this and then finding, you know, that person in Kenya that has discovered Bitcoin and how they need it as well. I love it, the 83-year-old versus maybe the 16-year-old that's in Kenya. And then looking at this different tool stack and then using it for their own purposes. And that's a good point to say that they discover it there. I mean, obviously, there's a broad range. There's some very, very technical people there. But especially in these communities, they may not be technical at all. They come to Bitcoin because they have to. It's out of necessity. So they find it and they are actually using it every day to transfer value in place of more expensive remittance options. We're seeing, you know, Jack can talk a lot about that. But they are also using it in mechanisms to hold value locally

when they cannot use banking systems because they're excluded from those banking systems. And many other ways. We're exploring ideas around replacing or augmenting existing community savings and loan schemes and working with significant aid organizations, helping them deploy capital at scale. Over 80% of all aid that's delivered around the world comes from the United States or Western Europe. And these organizations sometimes have to deliver that in bucket loads, minutes, loads of tests right now. So it's obvious that using Bitcoin would be a better solution. OB, which countries are moving the fastest in this way? And why one set of countries versus another when it is in dire need in many of these countries? So if you look at countries with the level of adoption and on a per capita basis, you'll see that it's overrepresentation within Africa, Latin America, on a per capita basis. In terms of net value, it's lower because salaries and so on are lower. But if you take specific countries, then it's this sort of then diagram between the level of technical skill on the ground. They do having a certain level of internet and telecom infrastructure is useful as well. And if internet is banned, like in North Korea, it makes it harder to penetrate there, for example, but we eventually want to get there at some point. And then also in terms of how strongly diaspora is so that there is a connection between the West and the global south. So examples are in Africa, West Africa, Ghana, Nigeria, people living under the colonial Frank there, Kenya are strong examples. In Latin America, you have Mexico, multiple countries in the Latin America, Central Latin America region as well, right? I'll give you examples. Hey, Obi, I got a question for you as well. So I think for people that are coming to Bitcoin, they immediately understand the value prop from a store value standpoint. But you hear a lot of criticism on the immediate settlement side, using lightning and layer two, and that it's not getting this inherent adoption. And the argument that I tell people and I'm really curious if you're seeing this as you're going around to different countries and seeing how people are actually employing it. I argue that the reason you're not seeing it highly used as immediate settlement is because all of their bills are denominated in either their local currency or in dollars or something other than Bitcoin. And so if they have any type of disposable income, they're using it as a savings technology, they're not going to be using it as something to settle. But I'm curious if the ease of use for layer two in some of these domains is starting to incentivize the use to start denominating goods and services in Bitcoin versus their local currency or the dollar. So you're dealing with the world and multiple different countries. So there are different cases for different countries. That being the case, one thing that as a Bitcoin, you have to come to terms with is that for many people holding value stably, especially if you're dealing at the end of the spectrum that really needs this money and they don't have too much disposable cash, holding it stably locked into value to their local currency, even if it might be inflating at a high rate. So that's the currency they know, and that's where everything else is denominated. Or at the second level after that, holding it in USD. Because that's for them, what they know as their gold standard. And then you have a highly educated subset of people who understand the value of Bitcoin as a long term sort of value, and they tend to be more well capitalized. And they're very happy to take their existing money and stock it for your Bitcoin. So if you're receiving Bitcoin from the diaspora, for example, there will be someone that you know who's very happy to take your Bitcoin off your hands and stock it for local currency. Because they are educated, they're more well capitalized, and they understand the long term benefit of this. Now, there only needs to be one for every 1000 people like that, because they have more capital

and they know, I understand the concept of inflation. I know what the inflation rate is here, and I want to have an access to this global asset. But most other people on the ground, for every one of those, or every one in 100 of those, most people just want the local currency, because that's what they need. And they're receiving it from sons, children, parents from abroad to help cover their day-to-day costs. They receive the money and they spend most of it, if not all of it, before the end of the month. So it's different for different people.

So I'd say I subset one Bitcoin, and that's growing over time, because if they hold it, they notice the gain from it, that grows over time. Then there's a subset of people who want something, but they're used to USD, that's what they know, or something like that, USD or Euro, for example, or GDP, if they're from the Commonwealth, there might be the currency, but majority will be USD. And then some will, and the majority would want local currency.

So there do need to be mechanisms who, especially because if you're living hand to mouth, and I don't want to, not everybody in the global service living hand to mouth, there's some very, very wealthy people. But if you have, on average, if you have less disposable income, then even a sort, and you're only thinking short timelines, even a small reduction in value could have an impact. That's why you need technologies that allow you to lock your value to other assets. So with strike, again, Jack will say more than me, and the partnership he has in place, when people receive, they can easily lock to local currency. And with something like Feddy Mint, because of its equivalent of smart contracting capability, people can have Bitcoin backed abilities, but it's Bitcoin, but it can lock in value to any assets, for example, similar in concepts of Bitcoin backed stablecoin, but far more decentralized, using concepts from as drivers to speak about contrast to difference type ideas.

So all you can use people like Galloway and their systems, stable sets and so on, there are different options out there. Yeah. And if I could jump in, I think you've touched on a few of the scalability solutions, but I think scalability has been a long standing concern here in Bitcoin, right? And I'm curious to the group and maybe whether it's Harry or Jack that want to jump in, your thoughts on the current scaling solutions being implemented and feel free, it's okay to shill strike because what you guys are doing across the globe. There you go. And so to OB's point. Yeah, on top of that, I was going to ask Jack, in addition to scalability, if you can actually address OB's point on being able to lock that value to sort of, to the other, that'd be awesome. I could do my best. I got a ton of thoughts that started cultivating in my brain when I went to El Salvador. I think the modern day monetary policy, modern day central bank monetary policy, the current state of fiat and something like the US dollar has destroyed the middle class, in my opinion. Why is that?

If the things that you need in your life are getting more expensive than you can possibly earn, your saving capital goes down. Your non-working capital as a human, the money that you earn that you don't then need to spend goes down. And those that were able to acquire and are able to obtain hard assets that do appreciate fastly against something like the dollar get wealthier and wealthier and those that can't get poorer and poorer. That's a huge problem, especially outside of a developed country like the US. And so what we see in what's described as the global south, in my opinion, is a wealth class within the world that's just been driven into severe poverty because their lives and everything that they need to import as a country, they want to export, it's getting way out of reach for them. So long story short, I think that you have a large portion of the world that's probably at 50% at this point that has no capital that they can save.

They're not earning enough money to be able to save money. And so to Preston's point, if their services aren't priced in Bitcoin, Bitcoin is unfortunately too volatile for them to live a life with only capital that they have to spend constantly. So what's interesting for us as a business is we have seen demand for stablecoins and for something like the dollar because as poor as the dollar maybe performs for the eggs at my local Whole Foods, it performs phenomenally well against the Kenyan shilling. And so if I'm living my life in extreme poverty because the middle class has been destroyed because of this concept of inflation that's relatively recent in human history and monetary history, I need something that can outperform my local currency and that's relatively stable enough because yes, Bitcoin averages, I think it's between 100 and 150% year-over-year appreciation against the dollar. But on a shorter time frame, if I'm living week to week, I can render myself insolvent basically with a poor Bitcoin week. I don't know if that was articulate enough to make sense, but so what we've seen is a natural attraction to what is an open system that's native to the internet, it's permissionless to be a part of and to build tooling for your own self and your own needs. So there is a energy around the global south that they're allowed to be involved and they get to build tools for themselves. They can make it legal tender and be a part of this thing whether someone likes it or not. And that's a very inspiring idea and that they get to work on the same thing Jack Dorsey gets to work on. That's very empowering, but there is an issue that the level of poverty that a lot of the world has been driven to, they can't afford to hold an instrument that is this volatile and this young. And so there's a natural attraction to something like the dollar to help bridge that gap, which has brought my company into, I mean, I'm talking about features that we're thinking about, there's a lot of interesting takeaways from that. Like I think that a feature of the global south should have is they should be able to borrow against Bitcoin so that you can give them liquidity and access to a currency that's a bit more stable and allow them to retain wealth and hold wealth and some, right? And then they would be able to be like, so I think that there are solutions you can deliver in ways that you can solve this problem. But from a high level, I think that's what has happened. And that's why it's just not as easy and organic and natural to just switch on to Bitcoin because the wealth gap that has been created, whether intentionally or non-intentionally, over the last 50 years. On the question of scaling, I mean, there's so much to say here, but when we set up FedE, it was to bring Bitcoin to billions. And the fourth process started many years, a couple of years back, thinking about what does the world look like with eight billion people using Bitcoin and thinking about that and working backwards. Once you think about that world, it becomes clear that Bitcoin needs a layer two to scale and that's lightning, but that won't be enough by itself. You need another layer as well. You need to scale privacy. You need to scale expressiveness, extensibility, ads, what we might call smart contracting or other functionality. And you also need to scale lightning as well to be able to get to billions of users. And in that frame, FedE Mint was born. FedE Mint effectively is this missing piece of the Bitcoin ecosystem, we describe it. So the combined of Bitcoin lightning and FedE Mint, you get to billions of users using Bitcoin. Why does that happen? Because each FedE Mint is equivalent to an incredibly simple to set up. So simple that any non-technical community can set it up, roll up the layer two for Bitcoin. Each one able to provide cryptographically perfect privacy, extensibility, anybody who's able to build for Web 2 can build functionalizing on top of a FedE Mint.

But it also provides you transactional scalability because it uses a thing called charming and e-cash. That gives you loads of things for free. It gives you privacy, but it also gives you a bearer instrument. So it gives you these superpowers like sending Bitcoin or about an internet connection. And it also gives you scaling above layer one and above layer two to reach billions of users. So that's incredibly powerful as well because the cost for running each one of these is amortized across a community. So instead of each person needing their own lightning node, Bitcoin node, and so on, one light node can serve 10,000 people. So the cost can be amortized. One LST can connect up to a federation. And because of the expressiveness of the FedE Mint, the lightning node, the LST will think it's connected to 10,000 individual users who magically open channels and close channels in a second for zero cost. So it's just this really cheap part of the lightning network. So the cost can be amortized. What does that enable? Anything you can do on the Web, you can do within a federation, a FedE Mint, without a single point of trust because there is no single point of trust within a federation, a FedE Mint federation. And that's obviously, and your costs get amortized. So it scales to billions. But it works across the spectrum. We have people contacting us who are on the, we announced our last fundraiser at the Microchargy Conference and a number of corporates, although our priority is the people who need it the most first, which is very clearly, we reconfirm this with starting with the human rights offenders and then the global south. There is a lot of interest from, to put it mildly, from corporates as well. One example is someone's looking at the \$50 trillion pensions in annuity market. And there's this old concept called pontines, which allow groups to effectively insure each other and provide a way of putting money in and receiving a pension annuity. But instead of denominated in US dollars, it can be denominated in Bitcoin. So unlike US dollars, pensions which go down in value over time, this will go up in value because your payment is denominated in Bitcoin. That's very interesting for the West, you know, where you want to receive a yield return in Bitcoin. So we're seeing this spectrum. And right now today, and when you add on top of that Bitcoin aligned technology that not so simple X and so on, which are also gaining traction, there is something that's really important for people into the sand, which is but most people don't, but they will over the next year or two. There is nothing that you would want to do that you cannot do within the Bitcoin ecosystem. That today, right now, not in the future, today, better, faster, more privately, more extensively than any other alternative platform, whether that be web two, or the new crop of crypto, when you combine Bitcoin, lightning, and loss, etc. We can do it all now today here.

I got an opinion on scale. I asked the group because I got maybe a little bit of a hot take. You know, like tools get adopted when they solve problems. And so that's just humanity 101 in my opinion. So when I hear people concerned about Bitcoin scaling, it either sounds to me like potential insecurity of existing investors that want this thing to change the world because they want it to go up and because they want to be right, or malicious misleading efforts from those that want to sell you a token.

And so it's either or, but in my opinion, I was talking to a reporter recently that was like, there's only X amount of nodes on the lightning network. I'm like, well, how many nodes are on the visa network, like 30? And that's a \$500 billion company. So the notion that you can have an open value transfer protocol that allows people to permissionlessly interoperate is an immensely valuable concept, potentially worth trillions of dollars. So maybe you're looking at the wrong thing. So to me, it's unclear what problems this thing is solving because it's

no older than a toddler. And it just needs to find its place within the immense list, like a Santa Claus laundry list of problems that payments has globally and that money has globally. But I'm not sure that Bitcoin has a scalability issue. I think it's going through a natural evolution of, I think of Bitcoin like acid, like anything it touches, it just melts through and absorbs. And so it's just kind of slowly seeping its way through and it will encounter things like payment processing and internet tipping and stuff. But I don't think we have this issue that 8 billion people are trying to have a non-custodial node setup and we're hitting bandwidth constraints.

I don't think we're there yet. And I think a lot of it is insecurity, anxiety, or people being malicious and trying to sell you the faster Bitcoin that they made in their basement. We know that Jack Dorsey has, I think he's using Bitcoin as sort of his way to enter the emerging markets. But we don't hear a lot about it. I should say we're a shareholder of Block, but I'm always listening for it. First of all, analysts don't ask many questions about it. So I'm just thinking about emerging markets here generally. It seems like Block started here in the U.S. with merchants and unbanked and underbanked. If you look at a map, we drew a map of where Square was proliferating and it was exactly in those areas. Is it having success in the emerging markets? Nobody's talking about it. Or in other markets, any markets, it doesn't have to be just emerging. Yeah, I think we're just early. In my opinion, I think what Jack achieved with Block and he effectively repositioned that business without ruining culture while retaining shareholders, while continuing the business success. And he was able to, I think that that can be a trillion-dollar company because of the work he's done over the last few years to reposition that business, to continue to innovate in what is potentially a disruptive transition in his industry. Masterful leadership work and no one really noticed, except maybe you, Kathy. So shout out to you. There you go. That's why you're so smart and I look up to you as well. So that's my take on Jack and Block. And I think what I'm curious about is what they're building. So Jack is so smart. I think he's probably one of the best consumer product minds of all time, if not the best ever. And they're building consumer hardware. They're investing a bit in lightning infrastructure. So building a protocol implementation themselves, building a lightning service provider. But they have not extended those products to the consumer quite yet outside of potentially some hardware. So to me, that just gives me a pulse on where he thinks opportunities are and how developed he thinks the industry is. I mean, the tried and true business model so far in this industry is buying and selling Bitcoin. And I think that's been the last decade. It's a very carved out market. Retailers understand it. There's natural demand and the unit economics. I think the next decade will probably be payment innovation. And I just think we're severely early. And it's reflective in the products Jack has brought to market. It's reflective in his decisions. I run a business myself far smaller than Jack. But I could tell you it's reflective in some of our numbers as well. But I'm very bullish. And yeah, on the global part, the last thing I'll say is people don't appreciate that cash apps went from having target audience of maybe a couple hundred million people

to eight billion people overnight. And even if it's just a hardware piece for Bitcoin, if you give Jack Dorsey time to sell to eight billion people, I bet on his conversion numbers there, he's got a pretty good resume. So that's that's my my take. And I do think he's going to change a lot of lives in Africa and Latin America, my opinion. Kathy, I think this goes back to a point we were talking about earlier, which is on the payment side, although it's been engineered,

and although we have this technical solution in place right now, like you can go to El Salvador, you know, I can take a picture of a QR code of buying a cheeseburger, I can post it on Twitter and some random person from anywhere in the world can pay that and I can receive my cheeseburger at

El Salvador. There's this running narrative that lightning won't scale. And I think they look at all there's only this many nodes or there's only this much capacity in the channels to do it. But I agree with Jack wholeheartedly here, in that you, you don't have the incentive in place right now, because when you, if you lined up 100 people, global citizens around the world, how many of them have any disposable income out of 100? Right? I don't know what the number

is, but I bet you that number is really, really high. And if the person doesn't have disposable income, and all of their bills are denominated in dollars or their local currency or whatever it is, the last thing they want to do is roll a dice on something that has a lot of volatility and induce further turbulence in their day to day life. So you're not going to have this situation where the demand for more people opening channels, because they can collect fees by opening these channels, you're not going to have that or even running a node. It's not there. You don't have a natural incentive structure for that right now, even though the solution has already been engineered

and is already being demonstrated all over the planet. So, so what we'll bring that incentive is once we start to see Bitcoin outpace the dollar's performance over like, let's say we go through another bull market, let's say we see another 100% of Bitcoin performance outside the dollar, you're going to see more people saying, Hey, maybe maybe I can afford to introduce a little bit of this quote unquote volatility in my life by owning more of this. As that performance continues to outstrip the dollar, especially but any other local currency, you're going to see more and more of the global population start to say, Hey, I think I think we need to start charging in both of these currencies, right? And I think you're going to see this natural incentive kind of emerge in the world where people are now going to start saying, I need to run a node, I need to open some channels, I need to add more capacity into layer two. And it's just going to naturally take place. So, in summary, I think the engineering solution is already in place, it's already been demoed, it's already working in some parts of the world, but you lack the second part is you just really kind of lack the incentive structure to drive immediate payment right now versus store value.

Yeah, I think also one last point you reminded me of pressing as a if I'm an investor, well, I also own block, but you know, personally, and like my Robinode account, right? But as an investor, I think it's really important to understand investing in Jack's Bitcoin business inside Cash App doesn't you're investing in the Cash App Network, which they're very open about being able

to grow and how dominant they are in that and how sophisticated they are in their understanding of who these people are, how to acquire more of them, how to serve them. Jack's innovation in Bitcoin and payments, you're making an investment in the Bitcoin network.

And so the solution and the technology is only as valuable as the network in some respects, there is a correlation there. And so it's very difficult, right? Like Jack doesn't need a network of Bitcoin or Bitcoin nodes and interoperable participants globally to sell 80 million Cash App users Bitcoin and sell billions of dollars worth of quarter or whatever. He does, though, need a growing network. So the analogy I like to use is how valuable is Google, if they're the

only website on the web, that business is worth zero. So Google is a relative capture of the internet itself. And as the internet grows, the business gets more valuable. And really, the story of Google is that one product. And it's, there's, there's some mathematical function of, you know, how powerful is the internet and you could derive that how valuable is Google and their ability to index that information. So my, my broader point is I just do think that it's going to take a little bit of time and some natural network effects and economies of scale for the network to grow for Jack to have or myself to have like immense, immense disruptive business success. It's an interesting business line, though, because Jack and I are very close friends, we're not competitors, which is very interesting. We're cheering for each other because it's not a winner take all our winner take most market. In fact, early entrance to the network benefit the most from each other. So it's very collaborative early innings of this, but that's an interesting distinction of like Jack's success with Cash App and Bitcoin and that business right now isn't necessarily indicative next quarter of some lightning product he launched. I think they're just two different businesses that are leveraging two different networks.

He's pretty good at that as well. Yes, very much so.

I think that's something that separates it from other ecosystems and to Jack's point, the introduction of a token leads to these negative incentives, because you want your token to be number one, no matter what you say, if you're in an ecosystem of multiple tokens, you want it to be number one. Whereas if you contrast that compare and contrast that with Bitcoin, we understand that we win by ensuring everybody in the ecosystem wins. And so there's only one token that we're all focused on doing our little bit to improve the value proposition for whether it's functionally for a certain set of the market that we understand, or whether it's from a value point of view with an ETF or whatever you're trying to do, it's all focused in one token. And therefore, yes, my people on paper may be competitors, but we understand that the opportunity outside of Bitcoin is so many orders of magnitude larger that we should all focus together. And you see a level of cooperation here. And we will talk about the Bitcoin AI for all initiative, for example, but there was multiple different organizations came together to fund that same offering because it was everybody's benefits if we move the needle there. And just to go back on, in what I see and what we see on the ground is that, yes, there are certain users in the global south who are going to get their eventually, and that could take a decade for some of them. But there is a bit of a sticking in the egg. So some people, for example, if we're talking to aid agencies, they might want to start a significant project if they don't feel comfortable that the system is technically capable to roll out now. And so now it is technically capable. So they're having the conversation where it's before the people that they took advice from would say it wasn't capable, and therefore they didn't start. But then we make, we move a step forward there. And you see an example from a significant NGO or human rights defenders group or whatever, and they show success. That then leads to more increase in demand. So we push the edges of the jar and it slowly expands. The way that that organic growth happens is through a series of actions through different people. It doesn't buy actions by strike or by cash or by us. That's how when you look at it at a high level, this dotted line that goes up and to the right, but down on the ground, it's like hundreds of people constantly trying to envisage the future with billions of users and pushing, pushing that, pushing and adding pressure so it grows. I'm going to just come over the top a little bit and say I'm a proud left curver on the

bell curve meme and just say that like what I've observed, and I run a mining business, so it's very, very different. You all are talking about going up the stack and I'm talking about going down the stack to dams and nukes and other stuff. Bitcoin doesn't break the fundamental laws of business physics. And so what gets me really excited, it just enables them. It allows them to return to their more natural state. And so what gets me excited is if I were launching a business, the most attractive property of Bitcoin is I just opened up my TAM by like seven and a half billion people. And so if I want to sell something, Stripe works on the Visa Mastercard Network, lots of these payment processing options just artificially constrains my ability to sell. And so if I'm building a product that has economic viability and positive margins, I should be able to extend that base of customers massively by using digitally native, permissionless money. So to me, that's my dumb guy take is like, I can sell more stuff to more people. So yes, I will. And then the other point, and I'm curious if you guys have any reactions to this, but one of the things that I think is interesting about lightning as a comparison to our current macroeconomic environment is that I think that we've just had this hugely artificially low velocity of money, certainly in the US and in Europe. And I think we may just not need to see that much Bitcoin in lightning channels, because we're just going to have a naturally higher velocity monetary state in that environment, because we're going to take off the yoke of artificial monetary policy and debasement. And so you're just going to see higher velocity. So you're going to see the same kind of, you know, if we use the GDP calculation, you know, minus the government, you know, the productivity of that economy is going to be, you know, higher because the velocity of the money is going to be higher. And I won't need to see that much Bitcoin locked up because it's moving much faster. And so transaction volumes are going to be there on a smaller monetary base, because Bitcoin is just a smaller monetary base. But but it doesn't make the economy smaller, just it just makes the the economic, you know, the monetary base smaller.

So, you know, I get a lot of questions of like, my dad, he's the classic. He's like, well, isn't isn't like he's a he's a Bitcoin or and he's he's with it, but he's a little more of like the, you know, doomer bunker version. Like if we win, like things are terrifying. But I don't really believe that. Because I think that, you know, what he's misunderstanding is that like the deflation, you know, the use the Jeff Booth sort of technical deflation argument, we're just going to lead way more prosperous lives on a smaller monetary base and a higher velocity economy. And that's going to mean that we're all going to have much, much higher quality experiences. And, you know, what we pay for is going to be of significantly higher quality. And so we get sort of the, the all the utility curve gains, even if we don't get, you know, sort of the number go up in the dollar portfolio. So what's interesting about that is typically velocity goes up in an inflationary environment. You know, if you think prices and interest rates are going higher, you're going to get rid of your money faster and turn it over faster and faster. But to your point about innovation, that that's a deflationary environment. And so what you're really saying, I have to think a little bit about what you're saying on the velocity, it's probably more of a monetary base multiplier than it is velocity. If I had to, if I had to, yes. What if we didn't think about sort of Bitcoin holistically, you know, Bitcoin, you know, Lightning channel Bitcoin and let's call it net worth Bitcoin, you know, if I go park 5% of my Bitcoin and Lightning channels for, for consumption, and I assume that my, my consumption behavior is going to be aggressive around that. And maybe that's where I'm taking, you know, 5% of every paycheck into my Lightning

channel environment, because that's what's funding, you know, my electric bill and, and, you know, my groceries and these other kinds of things that there's really a savings regime that's able to emerge across consumer behavior and producer behavior that creates, you know, an environment where

I am engaging in, in, you know, more aggressive purchasing behavior within my Lightning channel environment. But I'm also building a savings base that's more robust and more aggressive because Bitcoin empowers me to do both in lower friction ways. I have to think about it.

I'm still thinking about it. This thought emerged in real time here. We're brainstorming.

I think Harry's getting at the capacity of, of Lightning channels. And when you're comparing the capacity of Lightning channels to like legacy, you know, fiat channel rails,

when you just look at the settlement times, like you're not in a different planet, you're not in a different galaxy, you're literally in a different universe with the speed at which this is happening.

And because of that, you don't necessarily have to have a whole lot of Bitcoin loaded into these channels in order for it to meet the demand of immediate settlement on a global scale is really kind of where he's going. Yeah, that's right. I have a few responses to you, Harry. Preston,

I 100% agree in running a business on Lightning. It's, think of it as working capital. How much

working capital do you need to offset, by the way, two way flows? So I'm receiving and I'm sending, I'm acquiring and I'm issuing. How much working capital do I need if the message is the money at close to zero? In fact, I'm not incentivized to overcapitalize myself. So,

and then the other thing is, I'm extending this poor reporter, I'm talking to the reporters, like if Jack Dorsey and I have a channel, who's do you like, where you say I can't clear \$10

billion today through that? So it's irresponsible to think that channel count and how much working capital do I need to do that to serve customers? That also that math hasn't clearly been thought

out by the public or the public on Twitter. So our x.com, whatever. So I think that that's just broadly misunderstood. But I actually, here on your point of using something like Bitcoin

extends your TAM to \$7.5 billion or \$8 billion and Stripe can't do that. There's really nuanced understanding of how payments work that I think is super cool relative to Bitcoin. You know,

if before something like Bitcoin, before value could be digital and bearer,

every payment was a promise of future settlement. No matter what, because when you're sending messages to each other, they're instructions to settle at some later date, which is a promise.

It implies a sense of credit worthiness. And it is an extraordinary task to actively assess the credit worthiness of planet Earth. And so when you have things like KYC or really

onerous pervasive things from government or from someone like JP Morgan Chase,

yes, could they be acting in a malicious self-interested manner? Of course, but they also are

beholden to trying to assess the counterparty risk of everyone that they serve. And so for a lot of the world, they just say, I can't serve you because I can't possibly assess your counterparty

risk and how whole you can make a promise, which is everything we do, no matter even if they have a scan of my eyeball from Sam Altman or whatever. It's just impossible. So what's fascinating is

that Bitcoin removes the idea of a promise inside of the message in an intent to pay is the bear instrument itself, which makes it the most inclusive. So even someone like a Stripe,

if they spend all their money on all their licensing and all their infrastructure,

they're never going to be able to solve the problem of making humanity be beholden to an

active digital promises within a digital internet-based economy. And so I think that there's a

fundamental misunderstanding and that it's not that Stripe hasn't launched in Nigeria yet. It's

they don't have a chance. And so it's pretty cool property that Bitcoin and Lightning has. Someone like Jack well understands that. So yeah. So interesting that you said that. It kind of completes a circle for me. We are analysts, fintech analysts, did research on digital wallets and versus cash app. And what's the proposition here? It's because of this creditworthiness argument that we do have seven toll takers in the middle of a transaction collecting two and a half to four percent. It is because of that. And you take that risk away, poof.

Yeah. And the investment case over that technological trend is that there's a dematerialization of this stack. And I hold the thesis. And one of the reasons I founded the company I did is because I think that the value bleeds to the edges is that who owns and serves the relationship with the customer itself, which is why it'd be very bullish, Jack's ability to serve both the acquiring and the issuing side. But the further entrenched you find yourself in the flow of funds is a matter of time before you get disrupted, in my opinion, because we don't need intermediaries to broker promises anymore. It doesn't just eliminate that two and a half to four percent bull taking, but also on the customer acquisition cost side too. You see a massive collapse for the barriers to entry just from a cost structure standpoint are so much lower for a cash app that integrates with the Bitcoin or even just using a Bitcoin, we were getting a private key.

More like the JP Morgan to the world are paying hundreds, if not, I think it's like thousands of dollars to acquire a customer on average. And a cash app is in the tens of dollars.

Yeah. So it really is just eliminating the rent seeking model entirely helps both sides of the market. Yeah. The numbers on the customer acquisition depends on what the services are somewhere between 1,000 and 3,000. This is an imperfect analogy, but I spend my time thinking about this a lot. A business like Robinhood is fascinating to me because they didn't necessarily, at least in the beginning, take customers away from TD Ameritrade. They unlocked a new investor. And so what's been fascinating for me to think about is we see customers that are remitting \$2 to Nigeria, but they're doing it very often. And that's unlocking a new payment and a new customer and a new experience. So it also is not only about just kicking legacy card processors to the curb. And it's also unlocks new opportunity. And so I've tried to look at businesses that have done that. Robinhood, for me, is what comes to mind is a lot of their early success was widening

the investor base in an innovative way. And I think you'll see a lot of that. And I do think, I mean, we're talking about Jack a lot. I love the guys, not this cool, but

that I do think that's reflective in the way he's thinking about products and why he gets really excited about something like Noster is because card networks can't support internet tipping.

And so I think a lot of the Bitcoin industry does have this predetermined bias that maybe you focus on an experience and unlocking a customer base that previously couldn't exist before you try and challenge the moat that someone like Ibiza has is an interesting model.

I'm a big early career Rockefeller head. And this was the thesis around getting kerosene in households. We think that this was a digitally native business playbook. And we just have short memories. But you used to burn blubber to keep the lights on. And that was a very narrow, very expensive use case. And the act of digging in the backwoods of Pennsylvania and Ohio got to oil, got to kerosene. And it just gave human beings more useful hours in the day at very low cost. And so the area under the curve just fundamentally changes when you empower people with tooling that it looks nothing like the previous regime. And so just being able to have your house lit up from 8 30 p.m. to midnight at a very low cost, the economic value that

that unlocked across America in the late 1860s, 70s, like, these are the things that I think Bitcoin are really sort of the natural descendant of. And we don't spend enough time talking about the historical cases for innovation and what that unlocked. Because I think we're trapped in the miasma of the internet. But these foundational human flourishing tools, and especially the ability to climb the productivity curve to the upside and climb the cost curve to the downside, we've done that a lot. And we're good at that. Human beings are great at that. So continuing to call back to those examples for me is a big unlock. Yeah, I think the ability to focus on markets that other people aren't able to focus on is a core thesis for many people in the space. I think like an example here, that's where I refocus on communities, because we can amortize costs so that they can get down to the point of hardware wallets are 2030, hopefully with the stuff that Jack is working on, we can get the cost to well below \$50 for a hardware wallet. But right now, even at \$20, you're excluding billions of people at the bottom. But if you can have a few hardware wallets in a multi-sig, that's amortized across the village, you can bring it down to pennies, but still having hardware wallet like custody and service and experience. And therefore, you can go from spending \$2 a day and making it making sense to even 20 or 30 cents a day, and it still starts to make sense for people opening up that last element. But on the other side, you've got organizations like, and I think that's one of the reasons why Block and TBD invested, or one of the investors in FEDI as well, amongst many others like EgoDeaf, et cetera. But on the other side, you've got people like Gridless, which is also another organization that Block has invested in, and I've invested in as well. Gridless Mining in Kenya. And that exact example is happening right now. We've seen, I remember the interviewing, which is why I decided to invest in it, talking to a guy who like changed the health of these parents changed the full results of these children changed because he went from kerosene and paraffin, which is polluting to the environment, polluting to humans, and expensive and difficult to get electricity powered by hydropower from a hydropower microgrid power plant, which was only possible because of having a bit, we might not have some anchor tenant in the same way as in an anchor tenant for a shopping mall, make the shopping mall more viable. You have someone who's able to buy in the middle of the jungle. We couldn't even take these sort of stripped out trucks to this place. You have to walk the last X hundred feet on foot to get to this thing. There's no way a car is going to get there. But there's a Bitcoin mining rig able to buy energy. It's not that it uses energy, it's able to buy energy when there's no one else willing or able or capable of buying that 24 seven. So it's the buyer of last resort. And therefore, they were able to go back to the banks who were wanting to provide loans but weren't willing to because they couldn't do credit checks on the potential users of this electricity. But now they've got this thing that's from a credible company who is a mining this resource that's been mined for one and a half decades. It became a viable business plan. They could underwrite it, provide the loan, they get the electricity and people go from polluting, dirty, expensive, dangerous to inexpensive, cheap, healthy. He's parents who had issues with breathing, et cetera, cleared up. And we saw that across the village, the children had to walk to get kerosene for several other days after school and back, which took time out of their studies. So their study results went up and also they could work now into the night, as you said, because at lower costs. Yet people measured the wealth there at this point in cows. So they were able to have mechanical muscles. He was able to get this

thing that would cut up grass using electricity. And therefore, they provide far more feed. So the cows would use more milk, which made them generate more revenue. And I asked them final question. It's really bad. I'm not a videographer. So the sound was terrible. It was my mobile phone. I still have it. I'll show you the video. But I asked him like, and we had a translator, would you go back? What would happen if someone came along to the village and asked you to turn off the microgrid, which meant I sought the commanding, which would mean you'd have to turn off the microgrid because it would not be viable. And basically, they wouldn't allow it to happen. I had this sort of a vision of apocalypso. It's like, try to come to my brother jungle, no way, over my dead body, because this is like zero to one in terms of life changing. So in both cases, but in both cases, gridlers or something, we're approaching markets where there's zero competition. You're not going to get a steel melting plant in the middle of the jungle. You're going to sip in yourself, like miles from the nearest village. You're not going to get an accounting firm move there. There's no other buyer. So it's really, really, really interesting what's happening. Throughout history, you've always had a chicken and egg problem with these large capital outlays for energy production, putting that infrastructure in place. Because anytime you're going to do that, it's like, well, how much demand is there for this larger power plant that we want to put here, even though we have abundant natural resources that we can, let's say there's a stream going by or whatever that we can collect this energy from. Now, for the first time in human history, you have something, Bitcoin, that solves the chicken and egg problem for this exact problem. Here we can step in and we can say we have a buyer of last resort that can soak up any excess energy. Let's say your numbers are off. And let's say you're only able to, you know, you're building for 100, but your demand is only going to be 50. Whatever the math is, it doesn't matter, because now you can step in with Bitcoin miners and you can literally soak up any excess energy that's not being used. And it makes the project immediately successful, assuming you're getting at some type of decent, you know, energy price per kilowatt hour. And in a lot of these locations, you're getting extremely good energy prices per kilowatt hour. So it's really, I think it's something that's not talked about enough. And, you know, in biology, I like to use this example, it's almost like when you look at your body, and how does every one of your cells deal with energy? It produces ATP with mitochondria in every single one of your cells, right? It shouldn't come as a surprise that Bitcoin is basically offering up to become the mitochondria of the planet in a cellular kind of way, where it's able to allow these cellular regions and communities to have access to power, which is going to make them more productive and more efficient and just a better community over time. So I think it's so important what Obi just said. And it's very, very exciting to say the least. First of all, thank you so much to each of you. And I'm going to pass it along for closing thoughts here in a second, just to sum up, you know, where we are currently as well as where we're going. But for this inaugural brainstorm, if you will, I thought it was fantastic. I love that y'all were open and sharing your ideas, asking each other questions, and really having this as a conversation. Sometimes I just sat back and was listening as an audience member when I'm like, oh, I've started participating. But so thank you so much. Let me go around the horn from my end, and I'll start with Harry for just some closing thoughts. Yeah, I think, you know, I feel endlessly fortunate to get to have the opportunity to work on Bitcoin and work with Bitcoiners, you know, getting to work in mining and in the energy sector.

You know, I believe that money and electricity are tools of human flourishing and the ability for them to work hand in hand within a system like Bitcoin, it's just beyond a dream come true. So it's so fun to get surrounded by brains, you know, like the folks who are here today and just, you know, walking away from this with more fire in the belly to go win.

How about you, Preston?

I don't have much, man. Just it was a real honor to be on this panel with these folks who are true builders. And yeah, I'm just really honored to be in this space. And I think Bitcoin is so important for people that are looking at these other altcoins and all these other projects that are very centralizing and self serving to the people that are standing them up. I highly encourage you to do your research on why Bitcoin is very different. And I think that that's going to become abundantly clear to the world here in the coming five years that Bitcoin is very different than altcoins through and through. So do your homework.

Amazing. Obi, how about yourself?

Yeah, it's the same. I mean, it's been 10 years now for me, from the exchange and now to trying to find ways to get people who don't have access to exchanges and to get access. And the people around

here around this screen, this virtual table, the people that we're having to and working with every day and the understanding that we are activists and the activists who we're dealing with as well is just a blessing and an honor to be able to work in this space. And it just gives me energy every day.

Amazing. Yasin, any thoughts?

Yeah, I mean, listening to this conversation just helped really reinforce how unique Bitcoin is as this free market experiment. I really think one of the things that Jack you hit on was, you know, there's really no need to rush things. And I think people oftentimes when they see something like Bitcoin, it's very like anti VC, because there is no real founding team that you can hold accountable. There is no way to actually acquire customers artificially. And I think as a result of that, you see such a natural development around the network that is from true problems that are being solved. And you're seeing it from multiple layers of the stack. You're seeing it, you know, at the top with scalability, but then at the bottom as this, how do we mine this digital natural resource? So it just, it's just like, it kind of gives me just goosebumps thinking about how unique of the dynamics this this open network is and really grateful to be a part of it in whatever way possible, even if just a fan of Bitcoin. That's that's enough for me.

Very well said. And Jack, how about yourself? Oh, man, I, I view money as a technology that supports a functioning and flourishing human society. And I think Bitcoin is the latest innovation in that technology. So what an exciting time to be alive and always humbled and just fired up to be a part of it. And really lucky, my parents did the deed when they did so that I'd be right here. And I'm sitting with one of the biggest Bitcoin bulls in Kathy, and we didn't talk about price at all. I'm also just immensely bullish, the thought that someone was able to engineer scarcity, finite scarcity to the, to the tune of like, the scarcity of life itself.

That's the only two things I know I can guarantee is how many Bitcoins will be and the fact that I'll never live forever. Right. And so would I, you know, it's it that so I'm just very bullish.

I'm very excited for where this asset is going to take our species and take my portfolio.

We didn't mention price. And we didn't mention the other three letter word, which was ETF, which is pretty amazing right now. Testament to you, buddy.

Thank you so much. And Kathy, thank you. And I love your closing thoughts as well. Sure. You know, we do a brainstorm every Friday and it's around innovation generally at ARC and Yassine's and your idea together to pull together a brainstorm, especially for Bitcoin. Now I understand how valuable this is going to be. It's after sitting through it and, and just ping, ping, ping, ping, all these thoughts going, I could see everybody, everybody was going through the same thing. Wow. And I really think having the rest of the world, not US, but the rest of the world represented has been critical to this. So yeah, to the extent that continue can continue as well. I think this is going to become extremely valuable for the Bitcoin community. So thank you. Thank you. And we will be doing this again in about a month. We're targeting in the last week of every month. And then it typically takes about three or four days or so to produce and get out there to all y'all. So thank you again for listening. And we will be in touch. ARC believes that the information presented is accurate and was obtained from sources that ARC believes to be reliable. However, ARC does not guarantee the accuracy or completeness of any information. And such information may be subject to change without notice from ARC. Historical results are not indications of future results. Certain of the statements contained in this podcast may be statements of future expectations and other forward looking statements that are based on ARC's current views and assumptions and involve known unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements.