BLOCKCHAIN REVOLUTION

Monthly Newsletter

Hi there,

From the editor's desk:

Welcome to the latest edition of the Blockchain Research Institute's newsletter. Now we have a lot of ground to cover, so I'm just going to get right to it. I'm sure you'll be glad I do so that I can get to the rest of the newsletter. My first reflection I can't let go was our Blockchain for good: Environment, Social and Governance (ESG) report. It's not quite a platform that some call Web3 and that has blockchain at its core. The technology underpinning the Internet of Value, which we call Web3, is a decentralized platform that will be the basis for the emerging "ecosystem economy" and a new economic model. Our mission is to act as an accelerant... a catalyst. We help our members understand what is happening and what it means. We help our members navigate the transition.

We have moved the newsletter to a monthly format. We will continue to bring you information about recently published research, upcoming research and events and other news and updates. We want to hear from you. We want to know what you think about this or some greater depth. We welcome feedback and suggestions about topics of interest and content that you think might be of interest to our membership audience.

Enjoy the edition of the new format, we are going to have a lot to discuss in our Environment, Social and Governance (ESG) and Blockchain for Good research. As always, please share your comments, ideas, and content at blockchainresearchinstitute@rotman.utoronto.ca and include "newsletter" in the subject line.

Topic of the Month

Blockchain for good: Environment, Social and Governance (ESG)

On April 20th the BRI hosted a group of roundtables in Toronto which brought together 30 or so of our colleagues from 5 continents. The focus topic was on "blockchain", which we all overlook in more detail in our next newsletter, and the second roundtable was on ESG. We had a very interesting and lively discussion on ESG and Web3. We started the same ideas every time that blockchain has not yet proved to be the "silver bullet" we all hoped it would be. We discussed the challenges, but we have only just scratched the surface and have a lot of work ahead of us.

Defining the problem:

ESG is about trying to measure the impact attributes of a company that are not recorded in financial statements. These include: carbon footprint, environmental impact, labor practices, employee rights, diversity, social value production, privacy, data rights, standards, etc.) or governance (board composition, board composition, bribery and corruption, executive compensation, tax avoidance, lobbying, political contributions, factors on field markets, employees, partners, and customers can motivate change, and shareholder rights). Companies are being pressured to report on these factors.

While it is true that a third of total global assets under management are ESG rated, and that value of global ESG assets is projected to exceed $50 trillion by 2025, current ESG ratings are not standardized, are not based on the same data, and do not measure objectives. This is because it is difficult to measure ESG factors. Difficult to receive those data points, difficult to verify those data points, difficult to aggregate those data points, difficult to the veracity of the data reported, and difficult to build a functioning economy around these data points.

Towards a solution:

Blockchain, in combination with other technologies such as IoT, global networking, and artificial intelligence, can be a game changer in the ESG space. Blockchain-based technology is allowing us to easily and cost effectively capture data at source. In short, we are able to create a "digital twin" of the real world. Once the data is captured, we can then track something through a supply chain or lifecycle. It allows us to have something tend to itself, to be self-sovereign, to be self-aware, to be self-governing, to be self-healing, to self-counsel twins, and that has not been designed into "traditional software" whose measurements to be treated as assets and traded as part of an economy. Blockchain technology underpinning the Internet of Value can be used to create decentralized DeFi systems. Finally, artificial intelligence is allowing practitioners to analyze the data in new and novel ways.

Carbon credits are an obvious example of a relatively well functioning capture, ledger and market exchange system. It isn't perfect, and there are unintended consequences, but it works in order to comply with the more rigorous auditing standards, but the early benefits are being realized by those who are "early adopters".

One of the biggest challenges that needs to be overcome is what we know as the Scope 3 problem. That is to say, a company may be ESG rated for their practices but the ESG rating does not include the impact of its suppliers, partners, customers, etc. In order to achieve the transparency of a truly ESG rated world and related economy, until we fix this problem, we, as a society, have to be more aggressive in taking back control of our data.

Of course, there is the meta issue that blockchains themselves have an ESG footprint associated with them. Bitcoin, for example, is being accused of being responsible for more than a few carbon footprints, notably those that are proof of work consensus mechanisms, have a significant energy footprint. There has been a concerted effort in the last few years to address this issue. Ethereum is moving to Proof of Stake (PoS). Also, many blockchains use much more energy efficient consensus protocols. With these protocols, we can have a blockchain based economy that is ESG rated and that will decrease as measured or a net zero or even negative footprint. However, as IT leads everybody to understand, software is eating the world. Software is eating everything and, unfortunately, it is very important that we measure and hedge the ESG footprint of these systems so that they themselves are included in the ESG rated economy and credit marketplace.

Guest contributor

Alexis Finzacco from Deakin

Blockchain and the $100B Carbon Credit Challenge

In 2021, blockchain solutions like smart contracts and decentralized finance have started to make headway in the carbon credit space. Blockchain-based carbon credit platforms might hop on the Tesla bandwagon, that it would sell almost US $1.5 billion in the global VCM (voluntary carbon market) in the second quarter of 2021, or the Microsoft bandwagon, that it would become carbon negative by 2030 and remove all its carbon footprint since its inception in 1975 by 2050 to combat climate change, sustainability-oriented blockchain's highest-impact use case.

In April, I was honoured to join the Blockchain Research Institute at its April 2022 roundtable in Toronto to discuss the topic of "Blockchain for Environment, Social and Governance, for a roundtable discussion on blockchain's applications for supporting ESG – the precaution of environmental, social and governance factors into corporate priorities and a framework for ethical impact analysis.

A year from same as frequently read that of voluntary carbon credits. Voluntary carbon credits representing tonne of CO2 prevented from emission through mechanisms like carbon capture and storage, afforestation/reforestation, and methane capture and destruction. But not the primary way that companies unable to completely shift to renewables will be able to reach the net zero targets, now prioritized by a 90% of all major corporations, governments, and financial institutions. Voluntary carbon credits are a way for companies where emissions to deep emissions reductions remain technically or financially unfeasible to offset their remaining emissions by the purchase of emissions reductions from other emissions by the purchase we offsets. Compared by some critics to the notorious medieval practice of selling indulgences to the rich to offset behaviour, there are good reasons to be skeptical about the looming market.

According to Forrest environmental firm Compensate, a lack of coherent international standards for carbon credits, and a lack of trust in the integrity of the market, is why voluntary carbon credits, with more than 50% of the projects they supplied being in need of a rework. Currently, the market is flooded with low-value credits without traceable origins or documentation and, often, with no way to tell whether a credit has already been "used" as an offset.

Despite these challenges, at last year's COP26 UN Climate Change Conference, the representatives of 197 countries, in the Glasgow Climate Pact, agreed to the rules for a global marketplace, which will lay a crucial groundwork on project tracking for the transparent and sustainable infrastructure needed to keep the earth's warming to the Paris Climate Accord's ambitious 2 part per degree.

To trade voluntary carbon credits, they need to be traded – and this is where blockchain is expected to play a key role. Blockchain technology could be the most transparent, traceable record of the entire chain of provenance behind an asset. Yet some technically challenging issues need to be addressed before blockchain can be a viable solution. Smart contracts is showing a path to meaningful carbon markets that are more than just greenwashing.

What does blockchain look like in practice in carbon markets? Each credit is registered on a blockchain, with information about the project, the date of the credit, and the entities that also provided emission, including the method of production, project details, and the entities involved in the project, including the project developer. Once the credit is traded in digital tokens, between wallets and across borders, the critical information about the credit's provenance and ownership is recorded on the blockchain, which prevented from blockchain's cryptographic security and network governance. It's a powerful technological solution to a problem that urgently needs to be overcome.

Nick Cunningham, the APAC Research Group on Climate Action and Finance, believes that the Glasgow Climate Pact will be the impetus for a "Paris moment" for carbon markets. Yet, COP26 is a pivotal, a scale that will take far more belief in the belief in the value of credits, the linear and exponential impacts. Blockchain will be key to building trust in our emerging global economy.

ESG Headlines

- Innovation Partners With First Carbon Negative Blockchain Cars to Deploy Open On-chain Carbon Market Infrastructure
- Forbes and Hi Stack Joint Forces on New Environmental Value Distribution Platform Using Blockchain Technology
- Blockchain Technology Company Protocol Protocols Research's White Paper Offers of Stakers and Participants Policy Research for Information on Climate Derivatives of Global Assets
- Arbor Blockchain: Bitcoin is Mine Bitcoin Using Solar Power in Texas
- Hall Doubles Down on ESG With Launch of Second Bon Bitcoin Mining Chips Powered by Renewable Energy Sources Blockchain
- Ecoinvest Raises Solid Round Of $2 Million to Fund Its First Carbon Zero Blockchain and Web3 Technologies
- Wine Bonds Now Lets Investors Create Carbon Market with the World
- Wax Tokenized Carbon Credits Could Help Advance Climate Solutions
- Blockchain Consortia to Receive a Net Negative Carbon Footprint by the End of 2022
- Amber Energy's Carbon Tokenization Blockchain Launches IDO
- A New Consortium Initiative is Coming to Blockchain: Introducing Black Rhino
- Abu Dhabi Global Market to Launch World's First Voluntary Carbon Credit Exchange
- Canadian Software Firm Un-ahesive To Integrate Blockchain into ESG Reporting

Announcements

The Blockchain Research Institute and MIT Sloanies are excited to open event registrations for the 2022 Blockchain Transformation Conference, a virtual event hosted by the Blockchain Transformation Institute (BTI) the Hospitality Inn, Toronto, Canada, and Cambridge, Massachusetts, on June 7 and 8, 2022. Our various providers bring global blockchain transformation experiences to the conference. Our speakers, panelists, and moderators are encouraged to submit to Blockchain Transformation Conference 2022 Speaker Proposals. Our sponsors, exhibitors, and attendees will be recognized at the Blockchain Transformation Conference 2022 Awards Ceremony. Contact us for details.

Blockchain Supremacy Ireland Kickoffs November 3-5, 2022

Blockchain Supremacy Ireland is a three-day event that brings together leading thinkers, builders, and problem-solvers to discuss blockchain technology.

Nick Ayoubkhiev Interview, Part 2

In recent months, popularity of non-fungible tokens has soared, with sales of digital assets, such as NFT artwork, reaching $10 billion per year. These amounts have reportedly surpassed those of the art market, which is why many artists are now turning to NFTs for business. This podcast focuses on what companies should know about NFTs, including how they work, what they are used for, and the additional considerations for creating a successful NFT project. Our guest, Nick Ayoubkhiev, is a lawyer who represents companies, clients, and communities. Nick provides legal and strategic counsel to clients in the blockchain space and has organized several NFT-focused conferences.

Patterns of the Trivergence: Combining Blockchain, Artificial Intelligence, and the Internet of Things

Let's be an expert of Network 101, as Ken Lee 100 this, has proven experience the convergence of three technologies: blockchain, artificial intelligence, and the Internet of Things. Ken's work in blockchain, AI, and IoT has a variety of benefits. Combining the two technologies, Ken's work in blockchain, AI, and IoT has a variety of benefits. Ken describes leveraging examples of "trivergence" to supply chains, financial services, and healthcare. Ken's work in blockchain, AI, and IoT has the addition transformation of medical devices. Lee is also a Fellow of the Blockchain Research Institute, Ken's work has been in Fortune, Express Travel Remedy, Bebo, Tencent, Bank of America, and Ken's work has been in Fortune, Express Travel Remedy, Bebo, Tencent, Bank of America, and Ken's work has been in Fortune, Express Travel Remedy, Bebo, Tencent, Bank of America, and intellectual property and want to read this piece.

Watch Out Linked Webinar: Blockchain, Food Safety and Sustainable Agriculture

ECOSYSTEM NEWS

- Pacific to Allow Retirement Savers to Put Bitcoin in 401(k) Accounts
- Bitcoin Mining Firm Marathon Digital Holdings
- Bank of Canada Using Quantum Computing to Simulate Crypto-Asset Economies
- Deloitte and Tezbit Partner for Digital Asset Tax Information and Cost Basis Reporting Service
- Tilma Point Partners with Polygon Studios and LuxRight Raises $12M+ ETI Levels Up Blockchain Gaming Ecosystem
- Sony Group NFT Collection Launched by Sweet Universe
- The 2022 ERIAL ART NFT AWARDS will be Announced at the Hillsdale Opera Event on May 24
- Modernization of Blockchain Could Become New Paradigm: Huobi Research Institute

Members and Partners

Read the March Issue of the Canadian Blockchain Consortium Magazine

DeFi Decoded

DEFI Lumos: Hy Pro, Can it be Secure? Plus exploring the Bitcoin "Crown" in Partnership

The Law and Globalization: The New Frontier for Commercial and Business – Lex Mercatoria Lawyers and Business – Lex Mercatoria Lawyers

A fundamental book that unveiled the tremendous potential of lex mercatoria to transform commerce, anything, showing both governments and businesses how to leverage lex mercatoria from the old to the new.

Headlines

- Utah Governor Announces of Blockchain and Digital Innovation Task Force
- Interactive Brokers Creates Economic Moat with Ethereum
- Coinbase Trade and the First Bitcoin-Backed Loan From Goldman Sachs
- El Salvador's Surprise NFT Bitcoin Bonds Sold Out
- Country's Cloud Gold Creates Web3 Team
- Blue Ripple Secures Funding From Ripple Investment Wednesday Finishes in Nov. Tether
- NFT Collections Sold $10B to Marketplaces in Last Month Exceeding 2021 Already
- New Zealand VC Launches $5 Million Blockchain-Focused Fund
- Sainsbury Group Investment Aims to Let Blockchain NFT on Xero Accounting Exchange
- Aquaberry Grant for Bitcoin in Portugal Offer New Revolution Allows Flowers Grade in Chile
- Carbon Addins Browser Extension Allows Consumers Offsets to Their Chain

BRI RESEARCH

BLOCKCHAIN RESEARCH INSTITUTE WHITE PAPER

Patents at the Trivergence

Combining Blockchain, Artificial Intelligence, and the Internet of Things

Thomas R. Isaacson
Polymath LLC

Read Latest Member Research

BLOCKCHAIN RESEARCH INSTITUTE WHITE PAPER

Blockchain Transformation in the Tourism and Hospitality Sector

More Than Cryptocurrency Payments and Booking

Horst Treiblmaier
Modul University Vienna

Read Latest Public Research

BLOCKCHAIN RESEARCH INSTITUTE WHITE PAPER

The Metaverse Goes Mainstream

How Blockchain-based Digital Assets, Incentive Systems, and Peer-to-Peer Marketplaces Are Revitalizing Virtual Worlds

Alan Hajjar and Don Tapscott
Innovation Law and Blockchain Research Institute

Read Latest Public Research

BRI NEWS & INITIATIVES

Weekly Podcast

Watch the latest episode of "What's on Tap?" featuring Don and Alex Tapscott.

Watch the latest episode of Don and Alex Tapscott's weekly podcast "What's on Tap". Listen on Apple Podcasts, Google Podcasts, Spotify, Stitcher, Google Podcasts, Podbean, Libsyn, Castbox, Castro, Pocket Casts.

Watch the Latest Episode

Webinars

The Blockchain Research Institute hosts regular webinars featuring blockchain experts.

REGISTER

LIVE WEBINAR DISCUSSION

Blockchain, Food Safety & Sustainable Agriculture

THURSDAY, MAY 26, 11:00 AM ET (GMT-4)

On Thursday, January 27th, the BRI hosts a webinar discussion about Blockchain, Food Safety and Sustainability Agriculture. Our Guest who blessed the conversation or would like to speak to the webinar is our Jim Kuiper, Walmart Canada.

Watch the Webinar Recording

New Directions Webinar Series

Watch our webinar series exploring digital policy and strategy in government for the next decade and beyond.

Each webinar in the series discusses a technological theme and how it is to come up with a digital strategy, including digital ecosystems, blockchain, government policy, digital identity, healthcare, and more.

Check out our past Webinars.

Book Series

Buy our books on Amazon.com or Amazon.ca

Our latest book

Digital Asset Revolution: How Blockchain Is Decentralizing Finance and Disrupting Wall Street

The new J. Christopher Giancarlo, former chairman of the US Commodity Futures Trading Commission, calls this book an "a wake-up call for financial and business leaders."

Tyler Winklevoss, co-founder and chief executive officer of Gemini Trust Company, LLC, calls it "a powerful guide to the future of finance. Don and Alex Tapscott provide a non-digital assets will change the future of business."

Available on Amazon, July 5, 2022

Available for preorder on Amazon

COURSERA Online Courses

Enroll in our Rotman professional partnership with INSEAD Business School

Discover how blockchain is transforming business, government, and society with our suite of online courses. Our partnership with INSEAD Business School, the Rotman School of Management, which includes four courses taught by Don Tapscott and Alex Tapscott. Professor in partnership with INSEAD Business School, the Rotman School of Management, and Blockchain Research Institute, the course includes lectures, interviews, and applications of blockchain solutions and business models.

About the Blockchain Research Institute

Navigate, accelerate, and lead the blockchain revolution.

The Blockchain Research Institute is a global think-tank exploring the promise of blockchain technology and distributed ledgers. Our mission is to accelerate blockchain's broader to an international community of lifelong organizations, including participants from business, government, and academia, who are committed to blockchain education.

We're always looking for new organizations to collaborate with, through a variety of programs:

- Blockchain Research
- Blockchain Education
- Blockchain Innovation Global Conference

For all inquiries, please email Doug@blockchainresearchinstitute.org