

Hi there,

Welcome to the March 2023 edition of the BRI Newsletter. We hope you find this content useful. You can find a PDF version of the newsletter <u>here</u>. As always, if you have any comments, announcements, or recommendations for content in future editions, or would like to contribute content, please let me know: <u>douglas@blockchainresearchinstitute.org</u>

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From the editor's desk

Douglas Heintzman, Chief Catalyst, BRI

AI and Questions of Creativity

The first time you used ChatGPT you probably thought to yourself "well that's spooky." ChatGPT is about to become even spookier. The early reviews of the soon-to-be-released GPT4 indicate a big improvement in capability. GPT3.5 (the engine under ChatGPT) could pass a law school bar exam, but it was only placed in the bottom 10% of the class. GPT4 is in the top 10%. GPT4 has much more expertise, better guardrails, more precision, and its response limit has been expanded from 4,000 to 25,000 words.

GPT4 has new capabilities as well. It can process images. You can hand draw a design and GPT4 will write the code for a functioning website in short order. *The New York Times* showed GTP4 an <u>image of the inside of a refrigerator</u> and GPT4 came up with possible meal ideas.

Generative AI engines like GPT4, will soon find their way into experiences beyond chatbots most of us have used. Search engines and office suites are being retooled to include ChatGPT function. One company is even working on a derivative that allows you to easily sue robocallers by generating a custom lawsuit with one click.

While these large language model (LLM) trained tools instill wonder in many, they provoke fear and uncertainty in many others. Some people mistake the simulation of general intelligence for actual general intelligence and fear that AI will soon enslave humanity. Others simply fear that this technology, even more than other technologies, will take jobs away from people.

What about copyright? If an AI engine has been trained on vast amounts of literature, songs, and images, should someone owe copyright payments when they ask the engine to create a great song in the style of Eminem? <u>David Guetta did exactly that</u> in a few minutes, and the crowd went wild.

<u>Al-generated fiction</u> is flooding literary magazines. Amazon's bookstore already lists Chat GPT as the author of over 400 books including, cooking books, books of poetry, and books on how to better understand and use ChatGPT. Brett Schickler spent "a matter of hours" using ChatGPT to write and illustrate a 30 page children's book on finances called "*The Wise Little Squirrel: A Tale of Saving and Investing.*" It sells on Amazon for \$9.99. The illustration part of this story opens another line of questioning. As AI based on diffusion models can create "original" artwork from text prompts, should the creators or copyright owners of the original works be compensated for the art and images that the AI engines were trained on? <u>Getty Images is suing Stable Diffusion</u> over this exact question. They are claiming statutory damages of up to \$150,000 for each infringed work. Considering that 15,000 of the 12 million Images that Stable Diffusion's engine ingested are from Getty Images, the claimed damages could, in theory, be up to \$2.25 billion.

One of the problems with technology aided creativity, as an <u>opinion piece in *The Washington Post*</u> pointed out, is that our culture may be irreparably damaged as the economics that support artistic expression are degraded. But in many ways, the concerns about ChatGPT, and similar AI engines, are a replay of the fears expressed about technology disruption in previous eras. Word processors with spelling and grammar checkers were a shortcut that obviated the need for typists and even editors. Digital photography and Photoshop all but eliminated darkroom artistry and lowered the barrier of what it takes to be a great photographer.

In many ways human creators are not dissimilar to ChatGPT. They stand on the shoulders of others that came before them. They, like Chat GPT, have read, listened to, or studied the works of many others. The training they got from that exposure, influenced, and inspired them and is present in works that we largely consider to be original. Technology has historically led to an explosion of artistic expression and a growth in the number of creators. Still, there does seem to be something novel here, if not in principle, in the size and speed of the phenomenon.

As AI engines become an increasingly pervasive component of our lives, we should worry about the bias and the self-referential problems. Bias can manifest because a training set is limited unbalanced, erroneous, or lacking in context. The self-referential problem manifests when more and more of published content is created by AI engines, which, in turn, is used to train those same engines. There is a risk that the quality of output will diminish in much the same way as it did in the inbred royal houses of Europe in the 18th century.

Increasingly capable AI engines will be a prominent feature of the Web3 era. Prediction, along with decision and creation support, will be basic characteristics of most systems. They will be part of the fabric of life. These engines have enormous potential to improve productivity, stimulate imagination, accelerate ideas, and empower more people to be creators. But they also suffer from fundamental flaws of bias in their training sets and a lack of understanding of truth and falsity. As a result, they can be accidentally or purposefully misused and magnify the fault lines in society.

We should all watch this rapidly emerging AI space very carefully. Of course, we should explore new ways of leveraging the technology to create new value and enrich our culture. But we should also engage in a vigorous dialogue about the ethics and legalities. We should think hard about how the value of this new technology is captured and distributed and consider how we ensure that enough of that value is directed to creators without whose work AI engines would not be nearly as capable or valuable.

For more information on The BRI's new Web3 program please contact us at <u>here</u> or send us a note at <u>info@blockchainresearchinstitute.org</u>

A Poem About how ChatGPT will Impact Artists and Content Creators

by ChatGPT

ChatGPT, the AI of great renown, Has impacted artists all around, With knowledge vast and deep, And insights they can keep.

Content creators seek its aid, For inspiration and ideas made, In every genre and form, ChatGPT helps them transform.

From poets to painters and more, ChatGPT's impact they adore, For it helps them break new ground, With ideas and insights profound.

Its understanding of language so fine, Helps them express their thoughts divine, In ways they never thought they could, With ChatGPT, their creativity never should.

It unlocks new worlds of imagination, Inspiring their every creation, For artists and content creators alike, ChatGPT has been a true delight.

With its impact, they can soar, To new heights never seen before, Thanks to ChatGPT's knowledge vast, Artists and creators' potential is surpassed.

So here's to ChatGPT, the AI of great renown, Whose impact on artists and creators knows no bounds, May its insights and inspiration forever last, As it helps them create a world unsurpassed.

Announcements and News



On May 24th and 25th the <u>Government Blockchain Association</u> will host the <u>The Future of Money, Governance, and the Law</u> conference in Washington DC. It will bring together regulators, lawyers, business leaders, and policymakers to answer some questions on where the financial sector is heading. Tickets are on sale now <u>here</u>. Early Bird Pricing ends March 31.

Don't miss the evening reception, CryptoNITE, a James Bond meets cryptocurrency networking event you will remember long after your government bonds have expired.

On March 20th, the <u>DLT Science Foundation (DSF)</u> was publicly launched, with an initial grant from Hedera, with the aim of expanding knowledge and adoption of, and removing barriers to, fundamental breakthroughs in the field of distributed ledger technology (DLT).

DSF will feature a diverse array of leading universities from all over the world, including initial members the Indian Institute of Technology Madras, London School of Economics, National University of Singapore, University College London, and University of Zurich.

DSF will offer support in three key areas:

- Education for students, executives and developers:
- courses, labs and educational material
 Innovation for entrepreneurs: open innovation programs, accelerators, workshops, hackathons, industry-academia
- knowledge transfer
 Research for academics, Postdocs and PhDs: grants and fellowships

Dell became the newest Governing Council Member at Hedera. Dell manufactures a significant percentage of the infrastructure and plumbing that runs much of the internet today.

They joined the council to get hands-on experience with a layer 1 blockchain (they will be running a node, participating in governance, etc), to help customers on their digital transformation journey through the application of Web3 and DLT technologies. They are a large and growing provider of edge computing solutions (think devices in retail stores, on oil rigs in the ocean, etc). They believe that DLTs are becoming an optimal choice for data collection and persistence for large-scale edge data deployments. With secure, provisioned DLTs, customers can build cost-effective, efficient applications across IT environments, including edge, that provide scalable data persistence, protection, control and process automation.



Hedera

iCoLab, held its <u>annual meeting of founders and associates on</u> <u>February 2023</u>. They welcomed new management team members under the leadership of M. Sandra M. Heck, MsC, fulfilling one more year mandate.

BC THE UNIVERSITY OF BRITISH COLUMBIA Lucerne University of Applied Sciences and Arts (HSLU) is partnering with the University of British Columbia to organize the <u>2023 Summer Institute in Vancouver</u> which will run from 10 July – 23 July.



HSLU Lucerne University of Applied Sciences and Arts

This year's Summer Institute will also be open to people outside of UBC and HSLU. Participants can earn an UBC Blockchain Microcertificate.

BLOCKCHAIN For energy

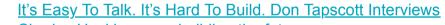
Blockchain for Energy Launches an Inclusive Platform to Access and Build Smart Contract Solutions

BRI Research

Featured Research

Decentralized Finance Analysis: How To Identify Value Within The Crypto Ecosystem

In this project, our research leaders develop a method of formal analysis of the value of decentralized finance (DeFi) initiatives. Inspired by Vitalik Buterin's writings on the intrinsic worth of projects in the crypto economy—that they must solve legitimate human problems on a macro scale—our researchers mirror the approach of Benjamin Graham and David Dodd in *Security Analysis*.



<u>Charles Hoskinson on building the future</u> At W3B World Don Tapscott and Charles Hoskinson took centre stage to engage in a [profoundly thought contemplation about where we go from here.

Web 3 and the Music Industry: A Second Wave of Blockchain Innovation

In this project, our research lead reviews what we learned from the music industry's first wave of blockchain innovation and explores the opportunities in its second wave, including innovations such as non-fungible tokens and metaverse experiences.

What is Web3?

This brief looks at the evolution of the web platforms. Web 1 refers to the read-only Internet (1980s–early 2000s) where most users consumed content like encyclopedia entries, directories, and catalogs. Web 2 refers to the read-write Internet (early 2000s– 2020) with many killer apps like Google search and Facebook for finding, collaborating, and transacting with each other online. Web 3 is the read-write-own Internet (2020–today), based on blockchain protocols that support online privacy, self-sovereign identity, and property rights to digital assets.

Click here to access the research library

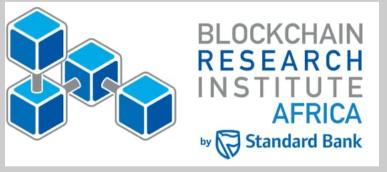
Headlines

- <u>Mysten Labs and Battlemon Partner to Launch Next-Generation Web3 Action Games on Sui</u>
- Yat Siu Says 'Pro-Capitalist' Asian Countries Are More Ready to Embrace Web3
- Japan Committed to Fostering Growth of Web3 Businesses
- What is Web3 and how could it change the internet?
- The Age of AI has begun
- How are farmers using blockchain, AI and IoT? AMA with Dimitra
- IoT project turns smartphones into blockchain nodes to broaden connectivity

BRI around the World

BRI Africa

An update on the work being done at BRI-Africa



BRI Africa Engagement Week 2023

BRI Africa Engagement Week with Don & Alex Tapscott

From the 26th of February to the 3rd of March 2023, BRI Africa hosted BRI Co-Founders Don Tapscott and Alex Tapscott in South Africa for a week of engagements with South Africa and African banks, corporates, government officials, and the Web3 ecosystem. The week was a tremendous success with expert insights shared, business networks expanded and a clearer vision going forward.

Over the course of six engagements in four days, we had the pleasure of discussing the transformative potential of blockchain technology and its role in shaping the future of Africa with different sectors leaders in South Africa. We explored the challenges and opportunities facing the industry, and we gained insights and perspectives from a diverse range of experts, innovators, and stakeholders.

The engagements included keynote addresses from Don Tapscott and/or Alex Tapscott, panel discussions with industry leaders, and open discussions with attendees as the schedule allowed. Industry sectors that participated included the financial services sector, healthcare, agriculture, with players such as government, the Web3 ecosystem, corporates, startups, non-profits, investors, academic institutions, and individual professionals.



"Blockchain technology presents a unique opportunity for African economies to leapfrog traditional financial infrastructure, unlocking new levels of efficiency, transparency, and financial inclusion. As a bank, we are committed to harnessing the power of blockchain to drive Africa's growth and create a more prosperous future for all." - Ian Putter, Head of Blockchain Centre of Excellence, Standard Bank Group & Regional Director, BRI Africa

For more information, contact us at <u>connect@briafrica.org</u>.

Follow BRI Africa on <u>LinkedIn</u> to stay in the loop.

The BRI in China

Don Tapscott presented at the Mingyue Lake Innovation and Development Conference on Digital Economy and Satellite Internet held on March 17. "No Successful Economy Without Digitalization Today"

Book Series

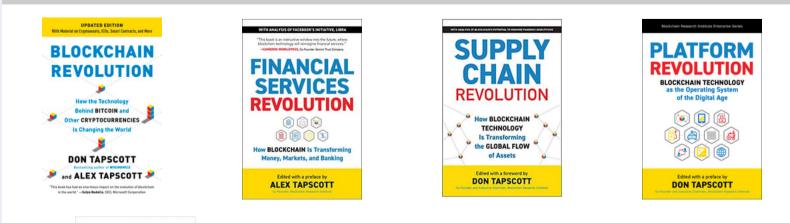
DIGITAL ASSET REVOLUTION How BLOCKCHAIN IS Decentralizing Finance and Disrupting Wall Street

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ALEX TAPSCOTT

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Available on Amazon

Podcasts



You can find "<u>W3B Talks</u>", our podcast series on Web3 and its impact on business and society <u>here.</u> You can also find it on your favourite podcasting platforms such as <u>Spotify</u>, <u>Amazon Music</u>, <u>Google Podcasts</u>, and <u>Apple Podcast</u>.

Recent episodes include:

- The Role of Smart Contracts and AI in Automation with Florian Herzog
- Tackling the Agricultural Crisis with Jon Task
- Using Oracles to Integrate Climate Data into Decision
- Making with Manavi Garg
 Rethinking Healthcare delivery in a Web3 World with Pradeep Goel



Check out the latest episode of Defi Decoded with Alex Tapscott and Andrew Young: <u>What's Next on the Ethereum Roadmap with</u> <u>Tim Beiko, Ethereum Core Developer?</u> You can see other episodes on Youtube here.

COURSERA Online Courses

Enrol in our online courses produced in partnership with INSEAD Business School and FedEx.

About the Blockchain Research Institute

Navigate, accelerate, and lead the blockchain revolution.

The <u>Blockchain Research Institute</u> is a global think-tank exploring the promise of blockchain technology for business, government, and society. Our syndicated program is funded by an international community of Member organizations, including enterprises, governments, and technology start-ups from around the world.

We're always looking for new organizations to collaborate with, through a number of initiatives.

- BRI Member Program
- BRI Global Partnership Program
- Web3 and Blockchain World Conference

For all inquires, please email douglas@blockchainresearchinstitute.org