

JUNE 2021- JULY 2022



UNIVERSITY OF
ARKANSAS

Sam M. Walton
College of Business
Blockchain Center of Excellence

FY22 Annual Report

Blockchain Center of Excellence at the Sam
M. Walton College of Business

PRESENTED TO

BCoE Executive
Advisory Board

PRESENTED BY

Dr. Mary Lacity
Kathryn Carlisle
Dr. Daniel Conway

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Overview

Executive Advisory Board Members

BCoE Staff

Academic Advisory Board Members

ABOUT THE CENTER OF EXCELLENCE

We believe that future professionals with skills and knowledge in blockchain-enabled technologies and digital ecosystems will transform businesses and society into more efficient, sustainable and profitable networks.

The mission of the Blockchain Center of Excellence is to make the Sam M. Walton College of Business a premier academic leader in research and education of blockchain-enabled technologies and digital ecosystems.

The Blockchain Center of Excellence (BCoE) was established in May of 2018 within the Department of Information Systems in the Sam M. Walton College of Business at the University of Arkansas.



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Sam M. Walton College of Business
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Executive Advisory Board Members

accenture

FedEx

IBM

Microsoft

ArcBest
More Than Logistics

FIS
ADVANCING THE WAY THE WORLD
PAYS. BANKS AND INVESTS™

J.B. HUNT

Tyson

EY
Building a better
working world

gsf
golden state foods

MCKESSON

Walmart

BCoE Faculty and Staff



Dr. Mary Lacity, Walton
Professor of Information
Systems, Director of BCoE

Kathryn Carlisle, Walton
Instructor and Senior
Managing Director of the
BCoE

Dr. Daniel Conway, Clinical
Professor and Associate
Director of BCoE

Tchetahan Natogoma
'Nato' Silue
Graduate Asistant

Venkata Sai Srividya
Yellepeddi
Graduate Asistant

Academic Advisory Board Members



Professor Paul Cronan

Professor Remko Van Hoek

Professor Rajiv Sabherwal

Professor Carol Goforth

Dr. Zach Steelman



Events

Blockchain for Business Conference

RZRblock Hackathon

Executive Workshops

Blockchain for Business Conference

497 unique views on
Youtube and Brella



34 speakers

Topics such as:



- Tech Ethics
- Sustainable Supply Chains
- Empathy and Inclusion for Scaling Blockchains
- Economics and Tokenization
- Blockchain Security and Risk Mitigation
- SmartResume
- Food Safety and Traceability using Blockchain
- Pharmaceutical Asset Tracking
- IBM Digital Passes
- Blockchain management and Blockchain in the Supply Chain process



Over 259
organizations were
represented in the
live stream

The October 8, 2021
Conference was our fourth
annual event, and the
second fully virtual
conference



2021 Speakers: Alexey Shlykov, Archana Mehta Sristy and Sergei Beliaev



BCoE Board Support of the Conference



The Conference YouTube
playlist can be viewed
by clicking here.

RZRblock Hackathon



50 live attendees at the Brewer Family Entrepreneurship Hub



653 unique views for the Kick-off event



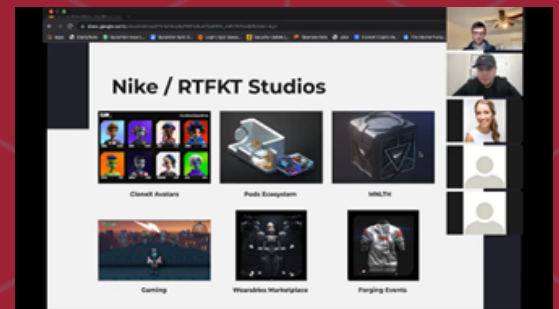
In total, **27 teams (125 individuals)** competed over **12** company use cases to win over **\$25,000** in prizes

Prior to the kick-off event, the BCoE hosted 7 technical workshops, led by blockchain leaders at GoKey Networks and the NWA Blockchain Meetup Group, Simba Chain, Byzantian NFT Marketplace, Paramount, Stellar Development Foundation, ConsenSys, Mycelium Networks, and Foundation Devices



There were over 50 mentors and 11 judges who participated as volunteers

First place teams over three separate tracks Bass Chain (open track), Blazing Blockchain (student track), and Diamond Digital (student track)



Hybrid event



Dr. Lacity onstage at the Final Pitch event



The Hackathon YouTube playlist can be viewed by clicking here.

Executive Advisory Board Workshops

[You may click here to go to appendix section for detailed information](#)

1

"A blockchain-enabled supply chain for Coca-Cola's bottlers"

August 17, 2021

Guest Speakers:

Andrei Semenov (CONA)
Robert Gaffney (Coca Cola Bottling)
John Wolpert (ConsenSys)

Guest Speakers:

Tracy Kurht (Accenture)
Rosa Shores (Blockspaces.io)
Gena Morgan (GS1)

"Another look at interoperability"

September 21, 2021

2

3

"Enterprise use of NFTS"

November 9, 2021

Guest Speakers:

Alex Tapscott (BRI)
Yorke Rhodes III (Microsoft)

Guest Speakers:

Klitos Christodoulou (BRI)
Marinos Themistocleous (IFF)
Josh Cartellone (Accenture)
Andrew Schwartz (Nike)

"Metaverse: Opportunities and challenges for enterprises"

February 15, 2022

4

5

"Supply chain sustainability, blockchains, and other technologies"

April 19, 2022

Guest Speakers:

Craig Harper (JB Hunt)
Archana Mehta Sristy (Walmart)
Zach Freeze (Walmart)

Guest Speakers:

Curtis Goldsby (IBM)
Marvin Hanisch (University of Groningen)
Vasileios Yhoedosiadis (IBM)
Saurabh Gupta (HFS)
Clemens Wan (ConsenSys)

"The State of Enterprise Blockchains"

May 24, 2022

6

7

Annual board member social event

June 21, 2022

Ribbon Cutting at the new Bentonville U of A Campus



Board and Partners

Engagement with working groups

Partnerships

Knowledge sharing

Engagement with working groups

[You may click here to go to appendix section for detailed information](#)



Dr. Dan Conway and Dr. Mary Lacity engage with the Global Blockchain Business Council on student internships and education.

Dr. Mary Lacity joined the Trust Over IP Foundation as a contributing member.



Dr. Dan Conway is leading the effort to develop the pro-competitive, open source and royalty-free blockchain/web3 Standards for implementation.

Dr. Mary Lacity has joined as a contributing editor of the BBA's journal and is a frequent speaker at events.



Dr. Dan Conway is an active contributor to the special interest group Blockchain Interoperability as well as the newly formed group for Data Identifiers.

The BCoE team works with the BRI on speaker events, women in blockchain, and research publications.



Dr. Dan Conway is a member of the editorial board of the journal.

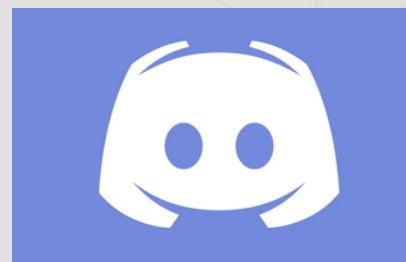
Partnerships

[You may click here to go to appendix section for detailed information](#)



Kathryn Carlisle has been an invited speaker and frequently attends, along with Dr. Dan Conway and Dr. Mary Lacity to the Northwest Arkansas Blockchain Meet-up local group.

BCoE faculty support a CryptoClub. Dr. Dan Conway is the faculty advisor for the student crypto club on campus.



The BCoE has partnered up to create an incubator program to empower crypto-native entrepreneurs. Kathryn Carlisle led the proposal creation and negotiation.

BCoE faculty teach and contribute content to 7 blockchain courses at the Walton College:

- Blockchain Fundamentals
- Introduction to Blockchain Applications
- Blockchain Enterprise Systems Development
- Blockchain Fundamentals
- Blockchain and E Business Development
- Blockchain and Enterprise Data
- Introduction to Cryptocurrency



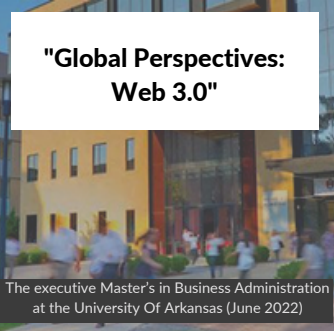








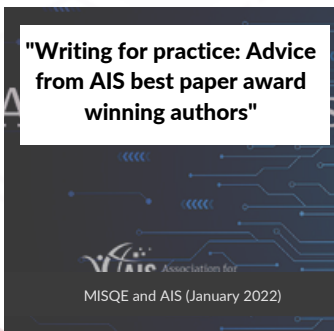
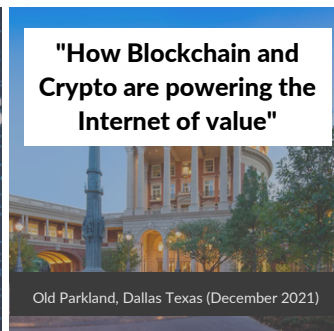
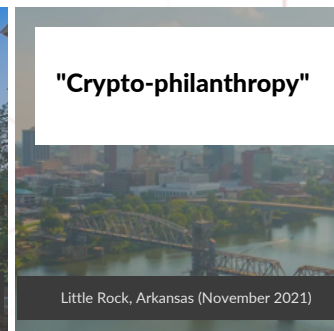





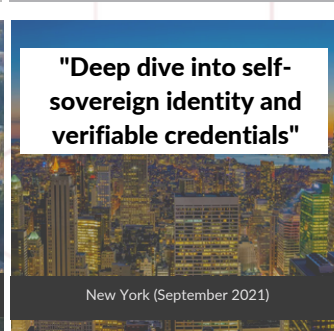
Sam M. Walton
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[View Course Details in the appendix by clicking here.](#)

Knowledge Sharing

[You may click here to go to appendix section for detailed information](#)

The BCoE Staff supported education and knowledge dissemination by speaking at the following local, national, and international events

 <p>"Global Perspectives: Web 3.0"</p> <p>The executive Master's in Business Administration at the University Of Arkansas (June 2022)</p>	 <p>"Introduction to Cryptocurrency"</p> <p>Rogers Library (May 2022)</p>	 <p>"Crypto, Blockchain and NFTs"</p> <p>Sam's Club Auditorium (April 2022)</p>	 <p>"iTi Webinar Series: Blockchain stories and classroom adventures"</p> <p>Florida Gulf Coast University (April 2022)</p>
 <p>"Goodbye Accounts and Passwords, Hello Decentralized Identifiers"</p> <p>Walton College of Business (April 2022)</p>	 <p>"What is Blockchain"</p> <p>Pleasant Valley High School, Bettendorf, IA (April 2022)</p>	 <p>"Let's talk about DAOs"</p> <p>Blockchain NWA Meet-up group (May 2022)</p>	 <p>"What's in your SSI digital wallet?"</p> <p>Center for the Management of Information Technology, University of Virginia (March 2022)</p>
 <p>"Blockchains for a better world"</p> <p>Center for Blockchain and Digital Innovation, University of Wyoming (February 2022)</p>	 <p>"Writing for practice: Advice from AIS best paper award winning authors"</p> <p>MISQE and AIS (January 2022)</p>	 <p>"How Blockchain and Crypto are powering the Internet of value"</p> <p>Old Parkland, Dallas Texas (December 2021)</p>	 <p>"Crypto-philanthropy"</p> <p>Little Rock, Arkansas (November 2021)</p>
 <p>"Crypto fireside chat: Community Commerce and into the Metaverse"</p> <p>Blake Street House Community Programming, Bentonville, Arkansas (November 2021)</p>	 <p>"Tech ethics in a changing world"</p> <p>NWA Technology Summit (October 2021)</p>	 <p>"Tech ethics is the key to building a better world with blockchain"</p> <p>2021 Blockchain for Business Conference (October 2021)</p>	 <p>"Wyoming round table- Future forward"</p> <p>Laramie, Wy (September 2021)</p>
 <p>"Blockchain and cryptocurrencies"</p> <p>Hot Springs, Arkansas (September 2021)</p>	 <p>"Deep dive into self-sovereign identity and verifiable credentials"</p> <p>New York (September 2021)</p>		



Projects and Research

Women in Blockchain

Newsletters

Publications

Chinese Pork and Poultry Supply Chain
Research Grants

Women in Blockchain Initiative

The BCoE is continuing the Women in Blockchain Initiative launched in 2021.

The goal of this initiative is to:

1. Increase visibility for female leadership in blockchain to inspire the next generation through a video spotlight series on the Women in Blockchain webpage, and leading conversations at the college's Women in IT Conference.
2. Use technology to uplift women through sharing blockchain-enable solutions and use case in workshops and on the website.
3. Present an award to a significant leader or group in this space and offering a Conference speaker position.
4. Foster partnerships and education by influencing high school age girls before entering higher education by hosting events and participating in the Aspirations in Computing Awards



Current list of individual and use-case spotlights



Denelle Dixon
Chief Executive Officer,
Executive Director at
Stellar Development
Foundation



Dr. Denise McCurdy
VP of Blockchain
Governance at DFM
Data Corp.



Genevieve Leveille
Innovative
Entrepreneur, Global
Speaker, Founder and
CEO of AgriLedger



Dr. Cindy Vestergaard
Director, Nuclear
Safeguards Program,
& Blockchain at the
Stimson Center



Carol Goforth
University Professor
at University of
Arkansas School of
Law



Use Case: BanQu
Ashish Gadnis, Co-Founder
& CEO at BanQu



Kirsten Sandberg
Writer, Chief Editor, and
Director of Research at
the Blockchain Research
Institute



Women in IT Panel:
Enterprise Blockchains
Dr. Mary Lacity, Guilda
Javaheri and Archana
Sristy



Andrea Tinianow
Legal Advisor to the
CEO and COO at IOV
Labs



Dr. Soulla Louca
Professor, Director -
Institute For the
Future, University of
Nicosia, Cyprus



**Use Case: The Grameen
Foundation**
Gigi Gatti, Director of
Technology for Development at
Grameen Foundation



Jyoti Ponnappalli
Director of Blockchain/DLT
Security at the Depository
Trust & Clearing Corporation



**Blockchain Conference: Empathy
& Inclusion for Scaling
Blockchains**
Kathryn Carlisle, Elizabeth
Kabaghe and Sandra Ro

Blockchain Center of Excellence Newsletter



Blockchain Conference Merges with NWA Tech Summit Fall 2022

Each Fall, the Blockchain Center of Excellence (BCoE) traditionally hosts the Blockchain for Business Conference for local university students and industry professionals. We are excited to announce this annual conference will be merging with the Northwest Arkansas Tech Summit as a brand new Web 3.0 track hosted by the BCoE. Save the date to come and learn from world-class leaders that can build the bridge to understanding concepts like Metaverse, NFT, Crypto and Blockchain the 16th-18th of October.

[Read the Full Article](#)



Freakonomics Hosts BCoE Director

Dr. Lacity participated in the episode podcast 508 for the radio network Freakonomics released on June 22, 2022. The podcast, hosted by Stephen J. Dubner and produced by Ryan Kelley, tried to teach to its audience what a Crypto Crash means and what it will do to Blockchains.

[Read the Full Article](#)



EPIC Blockstar: Nato Silué

At the Blockchain Center of Excellence, we promote research and education in blockchain technologies, and while we support learning, we are constantly cheering for the success of our students. This is why we are delighted to inspire our readers with Nato Silué's journey. Nato graduated from the University of Arkansas with a Masters of Information Systems, and she served as a Graduate Assistant to the Center last semester. Nato recently became employed as the regional director of Canza Finance, a DeFi application for the unbanked in Africa.

[Read the Full Article](#)

BCoE News & Announcements

SAVE THE DATE: Startup Weekend Hosted by Startup Junkie will include a Web 3.0 Track during August 26-28! Open Call for Mentors (please email kcarlisle@walton.uark.edu)

[NEW book preview: Blockchains and the Token Economy by Dr. Mary Lacity and Horst Treiblmaier](#)

[Professor Carol Goforth contributes to a recent Coin Republic article on Crypto Regulation featured on NBC News](#)

[NEW Academic Journal Article: Blockchain: From Bitcoin to the Internet of Value and beyond by Dr. Mary Lacity, featured in the Journal of Information Technology](#)

[Duke University FinReg Blog Features BCoE Academic Faculty Member, Professor Carol Goforth: A Critical Analysis of the SEC's Reaction to Crypto Lending](#)

[Blockchain Center Board Member News: EY announces general availability of EY Blockchain Analyzer Reconciler](#)

Note: The BCoE Team will take off from Newsletters for the remainder of Summer 2022 - we will be switching to a new Avios-style newsletter platform in the Fall! Same great content, new email format.

[Follow the Blockchain Center of Excellence LinkedIn Page here](#)

Thank you for reading BCoE Newsletter! Please email blockchain@uark.edu to contact us about content questions or requests.

Newsletters

5
Newsletter issues

13
Original blog articles

216
Subscribing recipients

107
New subscribers last year

+4,000
Recipients from Dr. Lacity's followers on LinkedIn

Research Studies



These case studies examine how a single blockchain application was conceived, designed, and deployed under complex circumstances



Implementing Self-Sovereign Identity (SSI) for a digital staff passport at UK National Health Service (NHS)

By Mary Lacity and Erran Carmel
BCoE Whitepaper | 2022-01

[Access to the research](#)



The Emergence of Web 3.0: Tokenization and the Internet of Value

By Chen Zur and Mary Lacity
Whitepaper | BCoE 2021-02

[Access to the research](#)

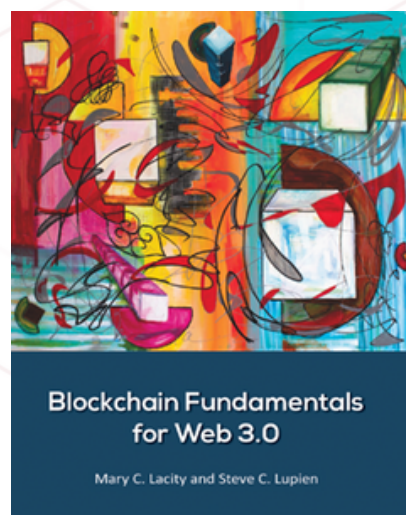
Books

[You may click here to go to appendix section for detailed information](#)



1. Lacity, M. and Treiblmaier, H. (editors) (2022). Blockchains and the Token Economy: Theory and Practice, Palgrave Macmillan, London, in press.

[Get Book](#)



- Lacity, M., and Lupien, S. (2022). Blockchain Fundamentals for Web 3.0. Epic Books/University of Arkansas Press, Fayetteville Arkansas, in press.


[Get Book](#)

Journal Publications


You may click on each title to access the publication

The Blockchain Center of Excellence faculty have written 11 works published in journals and on websites. The list of published research and links is listed below


Blockchain: from Bitcoin to the Internet of Value and beyond

 Lacity, M. (2022).

Intra- and Interorganizational Barriers to Blockchain Adoption: A General Assessment and Coping Strategies in the Agrifood Industry

 Treiblmaier, H., Rejeb, A., Van Hoek, R., and Lacity, M. (2021)..


How the Pandemic Is Pushing Blockchain Forward

 Van Hoek, R., and Lacity, M. (2021)

How Walmart Canada Used Blockchain Technology to Reimagine Freight Invoice Processing

 Lacity, M., and Van Hoek, R. (2021)

RPA in Maersk procurement – applicability of action principles and research opportunities

 Van Hoek, R., Larsen, G., and Lacity, M. (2022)

Publications by Professor Carol Goforth

1. Neither a Borrower nor a Lender Be* – Analyzing the SEC’s Reaction to Crypto Lending, 18 U. Mass L. Rev. (2022).

2. Regulation by Enforcement: Problems with the SEC’s Approach to Cryptoasset Regulation, 82 Maryland L. Rev.(2022).

3. How Nifty! But are NFTs securities, commodities, or something else? 90 U.M.K.C. L. Rev. 775 (2022).

4. What does the decline in the U.S. dollar's global role mean for cryptocurrencies? 66 St. Louis L.J. 249 (2022).

5. SEC v. Telegram: A Global Message, 52 U. Memphis L. Rev



Professor Carol Goforth

Chinese Pork and Poultry Supply Chain Research Grants



The overall goal of the Chinese Poultry and Pork Supply Chain Excellence research projects are to design a blockchain-enabled supply chain traceability solution to improve food safety in China. Grants were awarded by the Walmart Foundation to implement blockchain as a core component of the supply chain process. We are implementing blockchain into the supply chain process through advising designs and testing of a solution with Walmart China, China Agriculture University and other project partners. Applying blockchain-enabled technology to the poultry and pork supply chain will create both a social and commercial benefit for the people of China.

Poultry Supply Chain Excellence in China

This project focuses on integrating innovative biosensing, risk assessment, and database on foodborne pathogens and antibiotics residues in poultry supply chain with blockchain, big data and machine learning technologies. It is being developed into a food safety monitoring and risk analysis system on a cloud platform for industry adoption. The Blockchain Center of Excellence manages a \$150,000 budget (75k/year over 2 years) for the project out of the total \$3.5 million dollar grant from the Walmart Foundation. This grant timeline was extended by 6+ months due to the COVID-19 pandemic. Dr. Daniel Conway assumed lead over this research grant in May 2022.

Pork Supply Chain Excellence in China

The pork project focuses on reducing antimicrobial contamination in the supply chain. The Blockchain Center of Excellence manages a \$109,000 budget for the project out of the total \$3.2 million dollar grant from the Walmart Foundation. Trips planned for implementation testing last year were postponed due to the COVID-19 pandemic, so field tests were conducted in the country by China Agriculture University partners, advised and monitored remotely by Kathryn Carlisle in Fall 2021. Kathryn Carlisle also presented with Dr. John Kent on Blockchain-enabled Food Safety in the Pork Supply Chain Webinar to both project partners and the food safety industry in China on February 22, 2022. Dr. Daniel Conway assumed lead over this research grant in May 2022.

Blockchain Standards

Organizations we actively contribute to include the Trust Over IP Foundation (Linux Foundation) and the National Institute of Standards and Technology. The BCoE is active within global industry consortia groups like the Blockchain in Transportation Alliance (BiTA), The British Blockchain Association (BBA), and the Blockchain Research Institute based in Canada.



The purpose of these consortia is to help define standards and governance for blockchain technologies in industry. We are also working on a blockchain standards report. The goal of this report is to investigate the major standards-making working groups and to provide, to the extent possible, an analysis of the standards-making bodies, the subgroups working on blockchain-related standards, their relationships with individuals or other organizations and their published standards.

Job Market Report

The Blockchain Job Market Research Report is a series of annually research-based reports that aim to highlight the current state of the blockchain job market from global and domestic perspectives, and to examine potential opportunities for blockchain students at the University of Arkansas as well as large enterprises in Northwest Arkansas.

At the end of the year,
the research found

6,956

blockchain job openings
from companies in US

Companies were recruiting from:

The logo for SCRATCH, featuring the word 'SCRATCH' in a stylized, bubbly font with a blue outline and orange fill.

The logo for IBM, featuring the letters 'IBM' in a bold, blue, sans-serif font.

The logo for CHANGE HEALTHCARE, featuring the word 'CHANGE' in a bold, blue, sans-serif font with a red triangle above the 'A', and 'HEALTHCARE' in a smaller, red, sans-serif font below it.

The logo for coinbase, featuring the word 'coinbase' in a blue, lowercase, sans-serif font.

Job titles in demand were:

Software Engineer, Blockchain Engineer, Product Manager, Blockchain Developer, Front End Engineer, Technical Project Manager and Software Architect.

CLOSING STATEMENT FROM THE DIRECTOR OF THE BLOCKCHAIN CENTER OF EXCELLENCE

“The BCoE team, students and faculty greatly appreciate the continued support from BCoE Executive Advisory Board members in helping the University of Arkansas meet our mission to research and educate students and professionals on blockchain-enabled solutions. We look forward to working with members in 2022 and beyond to help enterprises realize the vision for an Internet of Value and Web 3.0.”



Director BCoE



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Sam M. Walton College of Business
Blockchain Center of Excellence

Appendix

Executive Advisory Board Workshops

[You may click here to return to report](#)

“A blockchain-enabled supply chain for Coca-Cola’s bottlers”, August 17, 2021. Workshop objective: Understand the business value and adoption journey of CONA and Coca-Cola’s bottlers. Our latest BCoE workshop featured a Detailed Coca Cola Supply Chain Case Study from Andrei Semenov (CONA), Robert Gaffney (Coca Cola Bottling Company) and John Wolpert (ConsenSys) . This solution is significant not only because of the size and prominence of Coca Cola, but because of the project transition from permissioned blockchains to a version that is public and permissionless.

- Speakers:

- Andrei Semenov, Director of Innovation – Supply Chain at CONA Services
- Robert Gaffney, Director - Business Process Development and Execution at Coca Cola Bottling.
- John Wolpert, Group Executive, Enterprise Mainnet Products and Technology at ConsenSys

“Another look at interoperability”, September 21, 2021. Workshop Objective: Share information on interoperability standards and strategies. · Based on BCoE Board requests, we are hosting our second BCoE workshop on the topic of blockchain interoperability. Much has happened in the space since our 2019 Interoperability workshop and BCoE white paper, so it’s time to revisit the conversation. To inform our conversation from multiple perspectives, we’ve invited three interoperability experts from three different types of organizations. Prior to our workshop, please reflect on your own definition of “blockchain interoperability”. Do you define it as portability of data across platforms? Integrating blockchains with existing systems? Tracking events across different platforms? Or seamlessly sharing digital assets across platforms?

- Speakers:

- Tracy Kurht, Associate Director, Blockchain and Multiparty Systems Architecture at Accenture
- Rosa Shores, CEO and Co-Founder at Blockspaces.io
- Gena Morgan, Strategic Consultant at GS1

“Enterprise use of NFTS”, November 9, 2021. Workshop Objective: Explore new use cases of non-fungible tokens (NFTs) for enterprises. Non-fungible tokens (NFTs) initially gained traction with CryptoKitties on 2017. Fast forward to 2021, and we are seeing enterprises, like McDonald’s, Coca-cola, Taco Bell, Visa, the NBA, and other enterprises using NFTs. Although it’s early days, it’s time for enterprises to learn more. Alex Tapscott, a thought leader in this space, will lead our discussion. The BRI is about to release a white paper titled, “An Enterprise View of Programmable Digital Assets,” and Alex Tapscott, co-founder, will lead our discussion.

▪ Speakers:

- Alex Tapscott, Co-founder at the Blockchain Research Institute (BRI) and Managing Director of the Digital Assets Group at Ninepoint Partners
- Yorke Rhodes III, Director of Digital Transformation, Blockchain, and Cloud Supply Chain at Microsoft

“Metaverse: Opportunities and challenges for enterprises,” February 15, 2022. Workshop Objective: understand how enterprises might use metaverses for customers, employees, or suppliers. · Metaverses are three-dimension virtual worlds that combine technologies like virtual reality, augmented reality, fungible tokens, NFTs, and blockchains. Metaverses immerse users in experiences that will likely change the way we work, shop, and play. Business opportunities abound: create new customer and employee experiences; meet and collaborate in 3D worlds (instead of on Zoom); train workers and educate students in simulated worlds; interact with digital product twins from birth to death through supply chains. Challenges also abound, particularly at the societal level: Will metaverses damage our humanness? Do laws in the physical world apply? Will a few tech companies centrally control metaverses, leading us to a ‘surveillance capitalism’ on steroids or will the decentralized values of Web 3.0 prevail? Our guest speakers address these issues.

▪ Speakers:

- Klitos Christodoulou, Co-founder at the Blockchain Research Institute (BRI) and Managing Director of the Digital Assets Group at the University of Nicosia
- Marinos Themistocleous, Associate Dean of the School of Business, Director at the Institute For Future (IFF) and the scientific coordinator of the world leading Blockchain and Digital Currency MSc program at University of Nicosia.
- Josh Cartellone, Senior Manager for Tech Strategy and Innovation at Accenture
- Andrew Schwartz, Director of Metaverse Engineering, Nike

“Supply chain sustainability, blockchains, and other technologies,” April 19, 2022.

Workshop objective: share goals and practices for meeting sustainability goals of supply chain partners. • Today’s corporations are receiving tremendous pressure from all stakeholders, including investors, customers, employees, and the community associated with their efforts in Environmental, Social and Governance (ESG). Blockchain can serve as a vital tool in addressing many of the questions relating to sustainability, carbon footprint, provenance of materials, and overall accountability. Investors and customers will soon be voting with their wallets.

▪ **Speakers:**

- Craig Harper, Chief Sustainability Officer, EVP at JB Hunt Transport Services
- Archana Mehta Sristy, Sr. Director of Blockchain Platforms – Supply Chain Tech at Walmart
- Zach Freeze, Sr. Director of Strategic Initiatives – Sustainability at Walmart

“The State of Enterprise Blockchains”, May 2022, Workshop description: This workshop was a deep dive into Financial Services use case evolution and use cases. It shared financial services trends and use cases with goal of understanding target markets and opportunities.

▪ **Speakers:**

- Clemens Wan, Solution Architect at ConsenSys
- Saurabh Gupta. President, research and advisory from HFS
- Vasileios Theodosiadis. Blockchain Business Analyst from IBM.
- Marvin Hanisch. Assistant professor of Digital transformation from the University of Groningen
- Curtis Goldsby. Managing consultant from IBM.

Engagement with working groups

[You may click here to return to report](#)

1. • **Global Blockchain Business Council (GBBC)** - The GBBC is a leading global industry association for the blockchain technology ecosystem with nearly 500 institutional members, and 178 Ambassadors from 95 jurisdictions and disciplines. GBBC is dedicated to furthering adoption of blockchain through engaging regulators, business leaders, and global changemakers on how to harness this ground-breaking technology to create more secure, equitable, and functional societies. Dr. Dan Conway and Dr. Mary Lacity engage with the GBBC on student internships and education.
2. • **Trust Over IP Linux Foundation** - The Trust Over IP Foundation is an independent project to enable trustworthy exchange and verification of data between any two parties on the Internet. Dr. Mary Lacity joined the Trust Over IP Foundation as a contributing member. BCoE Board members include Accenture and IBM.
3. • **Blockchain in Transportation Alliance (BiTA) Standards Council** - BITA Standards Council (BSC) is the collaborative effort in the transport industry where all members of the commerce ecosystem are represented, including carriers, suppliers, shippers, customers and other stakeholders. Backed by a strong Board of committed ecosystem leaders, BITA Standards Council is a collaboration cooperating to develop the pro-competitive, open source and royalty-free blockchain/web3 Standards for implementation that will maximize the efficiency of the global supply chain, for the benefit of all. Dr. Dan Conway is leading this effort. BCoE Board members include FedEx and JB Hunt.
4. • **British Blockchain Association** - The BBA is a non-profit organization that promotes evidence-based adoption of Blockchain and Distributed Ledger Technologies (DLT) across the public and private sectors. Dr. Mary Lacity has joined as a contributing editor of the BBA's journal and is a frequent speaker at events.
5. • **The International Committee for Information Technology Standards (INCITS)**. INCITS is the central U.S. body which represents the US Standards to the international community. Dr. Dan Conway is an active contributor to the special interest group Blockchain Interoperability as well as the newly formed group for Data Identifiers. BCoE Board members include Microsoft.
6. • **Blockchain Research Institute** - The BRI is a global, independent think tank focusing on the strategic implications of blockchain technology on business, government and society. The BCoE Team participates as guest speakers and Don Tapscott wrote the foreword to Mary's Blockchain Fundamentals textbook. The BCoE team works with the BRI on speaker events, women in blockchain, and research publications. BCoE Board members include Accenture, FedEx, Microsoft, and IBM.
7. • **Blockchain in Healthcare Today** - BHTY is the world's first peer reviewed journal that amplifies and disseminates distributed ledger technology research and innovations in the healthcare, information systems, clinical computing, network technologies and biomedical sciences sector. Dr. Dan Conway is a member of the editorial board of the journal.

Parnertships

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- 1. Blockchain NWA Meetup Group:** The BCoE has partnered with a local community organization called the Northwest Arkansas Blockchain Meet-up to increase organic and local community awareness and interest in blockchain topics. The Blockchain NWA Meet-up is held at Start-up Junkie offices in the Pryor Center on Wednesday nights and has 128 members. Kathryn Carlisle has been an invited speaker and frequently attends, along with Dr. Dan Conway and Dr. Mary Lacity.
- 2. Cryptocurrency Club:** BCoE faculty support a CryptoClub on campus, whose mission is to educate and share experiences students have with cryptocurrency. As of the spring of 2022, there were 50 students registered on the club's discord channel.
- 3. Educational Support for Walton College Blockchain Courses:** Over the last 3 years we have supported faculty teaching blockchain classes by integrating the hackathon, blockchain for business conference, and student showcase across the following 7 Blockchain Technology Courses. Blockchain Fundamentals (ISYS 4173), Introduction to Blockchain Applications (ISYS 4453), Blockchain Enterprise Systems Development (ISYS 4463), Blockchain Fundamentals (ISYS 5173), Blockchain and E Business Development (ISYS 5133), Blockchain and Enterprise Data (ISYS 5453), and Introduction to Cryptocurrency (ISYS 4243/FINN 410V). Additionally, Pandemic Solutions in Supply Chains honors forum, Global IT/Analytics Seminar (ISYS 5933), and Blockchain Research Opportunities Ph.D. seminar. BCoE members from Accenture, FedEx, IBM, and Walmart served as guest speakers.
- 4. Fabric Ventures:** Fabric Ventures is a leading Web 3.0 focused Venture Capital fund that has been present in space since 2017. In partnership with Fabric X and the UA Office of Entrepreneurship and Innovation, the BCoE has partnered up to create an incubator program to empower crypto-native entrepreneurs, who will create the next generation of the Web, or "Web 3.0". Kathryn Carlisle led the proposal creation and negotiation. She is now leading the search to find a local seed fund partner to launch the program.

Knowledge Sharing

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1. Class Guest Lecturer: Global Perspectives: Web 3.0, Executive master's in business administration, University of Arkansas. June 11, 2022.
2. "Introduction to Cryptocurrency", Rogers Library, Rogers, Arkansas, May 04, 2022
3. Crypto, Blockchain, and NFTs, Sam's Club Auditorium, April 31 2022.
4. Executive Education Workshop: "The Metaverse", University of Arkansas Retail Advisory Board, Collaborative Learning Lab, Bentonville, Arkansas. April 28, 2022.
5. "iTi Webinar Series: Blockchain Stories and Classroom Adventures", Florida Gulf Coast University, April 15, 2022.
6. "Goodbye Accounts and Passwords, Hello Decentralized Identifiers," Women in IT Conference, Walton College of Business, April 13, 2022.
7. "What is Blockchain", Pleasant Valley High School, Bettendorf, IA, April 04, 2022
8. Panelist, "Critical leadership activities in higher education", ENGAGE Leadership Program, University of Arkansas, March 15, 2022.
9. Speaker, "Let's Talk about DAOs", Blockchain NWA Meet-up Group, Fayetteville, Arkansas. May 12, 2022.
10. Keynote: "What's in your SSI digital wallet?" Center for the Management of Information Technology, Knowledge Continuum Conference, University of Virginia, March 11, 2022.
11. "Blockchains for a better world," Center for Blockchain and Digital Innovation, University of Wyoming, February 24, 2022.
12. "Technology is changing what it means to be human" Business Integrity Leadership Initiative, Walton College of Business, February 17, 2022.
13. Panelist, "Writing for practice: Advice from AIS best paper award winning authors", Crisis Driven Digital Transformation Workshop, MISQE and AIS, January 5, 2022.
14. "How blockchain and crypto are powering the Internet of Value," Old Parkland, Dallas Texas, December 7, 2021.

15. Speaker, "Crypto-philanthropy", Heifer Project International Brown Bag Speaker Series, Little Rock, Arkansas. November 19, 2021.
16. Speaker: "Crypto Fireside Chat: Community, Commerce, and into the Metaverse", Blake Street House Community Programming, Bentonville, Arkansas. November 18, 2021.
17. Panelist, "Tech Ethics in a Changing World", NWA Technology Summit, October 18, 2021.
18. "Blockchains: Automation beyond firm boundaries", Fireside chat webinar with Pascal Bornet, coauthor of Intelligent Automation, October 12, 2021.
19. Keynote: "Tech ethics is the key to building a better world with blockchain" and Master of Ceremonies, 2021 Blockchain for Business Conference, University of Arkansas, October 8, 2021.
20. "Blockchain Security and Risk Mitigation", 2021 Blockchain for Business Conference, University of Arkansas, October 8, 2021
21. Wyoming round table - Future Forward, Laramie, WY, September 22, 2021.
22. "Blockchain and Cryptocurrencies", Rotary Club, Hot Springs, AR September 15 2021
23. Spotlight speaker, "Self-Sovereign Identity", EY Blockchain Conference, New York City, September 14, 2021. The conference video: <https://youtu.be/-uvuKe8gmQ4?t=10013>
24. Master class: "Deep dive into Self-Sovereign Identity and Verifiable Credentials", EY Blockchain Conference, New York City, September 14, 2021.

Books

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1. Lacity, M., and Lupien, S. (2022). Blockchain Fundamentals for Web 3.0. Epic Books/University of Arkansas Press, Fayetteville Arkansas, in press.

Our book explains the movement to establish online trust through the decentralization of value, identity, and data ownership. This movement is part of 'Web 3.0', the idea that individuals rather than institutions will control and benefit from online social and economic activities. Blockchain technologies are the digital infrastructure for Web 3.0. While there are many books on blockchains, crypto, and digital assets, we focus on blockchain applications for Web 3.0. Our target audience is students, professionals, and managers who want to learn about the overall Web 3.0 landscape - the investments, the size of markets, major players, and the global reach - as well as the economic and social value of applications. We present applications that used Web 3.0 technologies to unlock value in DeFi, NFTs, supply chains, media, identity, credentials, metaverses, and more. Readers will learn about the underlying technologies, the maturity of Web 3.0 today, and the future of the space from thought-leaders. This textbook is used by undergraduate and graduate Blockchain Fundamentals courses at the University of Arkansas, the University of Wyoming, and other universities around the world. The book features blockchain leaders and projects from many companies, including BCoE board members Accenture, EY, FedEx, Golden State Foods, IBM, McKesson, Microsoft, and Walmart.

2. Lacity, M. and Treiblmaier, H. (editors) (2022). Blockchains and the Token Economy: Theory and Practice, Palgrave Macmillan, London, in press.

In the context of blockchain technologies, tokens present a novel way to transfer value between parties without relying on traditional intermediaries. The so-called 'token economy' has only recently attracted the attention of practitioners and academics, who seek to understand the potential of tokenization, but also its challenges and pitfalls. In this book, leading practitioners and academics provide a comprehensive overview explore theories on the future of the token economy and provide real world case studies from a range of industries. The book features blockchain leaders and projects from many companies, including BCoE board members FedEx and IBM.