PA Blockchain Coalition

PA Blockchain Coalition (PBC)

The PA Blockchain Coalition is a nonprofit organization comprised of blockchain allies, users, and providers in a variety of industries working together to create a wider acceptance of this important technology.





PBC Pillars (ACE)



Α

ADVOCACY They say if you are not at the table, you are on the menu. PBC strives to advocate for our members regarding regulation and legislation affecting this important industry.

CONNECTION PBC's network is its greatest asset. We have a national reach with a rapidly growing

with a rapidly growing member base. We will help connect you with other members and help you grow your network. EDUCATION Educational

Educational programming, keeping you informed of various developments that include the regulatory landscape. Our educational platform will feature expert guest speakers in a wide array of subjects related to blockchain technology.



Blockchain 101

What is Blockchain? It is NOT Bitcoin

Why is it called Blockchain? **Transactions are processed in blocks.** Blockchain is a **value exchange protocol** that allows the **value** and **ownership of an asset** to be freely exchanged amongst anything that shares the same protocol. Blockchain accomplishes this through a set of technologies, with the most common references being a **distributed ledger**, **smart contracts**, **and cryptography**. It uses a digital, secure fingerprint called a **"hash"**, which uses cryptography. Each block contains a reference to the previous block, forming a chain of blocks. Once created, it **can not be changed** without other participants knowing, and the term **"immutable ledger**" is often used to describe this concept.



Representation of a Blockchain



Each block is connected to the ones before and after it.

These blocks form a chain of data as an asset moves from place to place or ownership changes hands. Each additional block strengthens the verification of the previous block and hence the entire blockchain.



Blockchain Use Cases

Supply Chain Use Case

Nestlé, is expanding its use of blockchain technology, through its membership with the IBM Food Trust Blockchain Initiative, to the company's luxury coffee brand Zoégas. Through blockchain-recorded data, buyers of the coffee will now be able to trace their coffee back to the different origins. By scanning the QR code on the packaging, consumers can follow the coffee journey from the growing locations.







Banking Use Case

Goldman Sachs is already trading some bonds and other debt securities for clients on blockchain-based networks such as Ethereum, and the bank is building its own blockchain-based trading platform. This means in practice that money that might otherwise be tied up for days between counterparties will be freed up.







Insurance Use Case

RiskStream Collaborative is a consortium of insurance companies exploring blockchain applications that includes State Farm, Chubb, Aon, and Nationwide among others. In 2020, RiskStream successfully tested a contact-free proof of insurance application. The Corda-based product allows policyholders to share proof of insurance through an access key or QR code instead of a physical insurance card.







Nationwide®

Student Transcripts

North Dakota launched a program last August allowing all high school graduates to keep their credentials — transcripts, diplomas and more — in a blockchain-powered digital wallet. If students opt to use this digital wallet, they'll be able to provide verified credentials to anyone who requests them —a college or prospective employer — with the help of a blockchain. Other states include New Hampshire, Connecticut, Virginia, Indiana, Kentucky, Alabama, Arkansas, Oklahoma, Colorado, Wyoming, and Washington.

Name: Jane Smith	Gender: F Birtidate		
Academic Achievements	Qrade	Credita	Junior Year
Freshman Year.	96	1.00	English III Trigonometry Chemistry American Histor Latin III World Raligion Salling
Erglahl	92	1.00	
Geanvelty	95	1.00	
Physical Science	92	1.00	
World Geography	100	1.00	
Leini	98	1.00	
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Cryptocurrency

Crypto Use Case

Starbucks recently teamed up with the digital assets platform, Bakkt, to allow customers to use their cryptocurrency as payment. In a matter of seconds, their system converts the crypto to U.S. dollars as customers make payments.







Crypto Use Case

Sheetz accepts digital currency payments through the platform Flexa. To provide customers with the ability to pay for items inside the store or fill up their cars, trucks, and RVs at the pump using digital currencies like bitcoin, ether, litecoin, dogecoin, and more.









NFTs

NFTs (Non-Fungible Tokens)

An NFT, Non-Fungible Token, records proof of ownership on an immutable blockchain

•Unique•Not interchangeable•Non-divisible

<u>Creators</u> can sell directly to fans and get recurring royalties.

<u>Buyers</u> have confidence that what they are buying is authentic, scarce and therefore has value.





NFT Use Case

Non-fungible tokens are digital assets protected by a blockchain. More people have become aware of it and its market has grown in demand. Now, companies have started to think of new ways to use blockchain. Both the NBA and the NFL have begun offering NFTs relating to players and special moments in sports.











Questions?



Addendum Legislation

Proposed PA Legislation

<u>HB 901</u>--An Act amending the act of December 5, 1972 (P.L.1280, No.284), known as the Pennsylvania Securities Act of 1972, providing for digital assets and blockchain technology registration; and imposing penalties.

<u>HB 1402</u>--An Act amending the act of December 5, 1972 (P.L.1280, No.284), known as the Pennsylvania Securities Act of 1972, providing for digital assets and blockchain technology business advertisements; and imposing penalties.

<u>HB 1282</u>--An Act amending the act of March 4, 1971 (P.L.6, No.2), known as the Tax Reform Code of 1971, in Computer Data Center Equipment Incentive Program, further providing for definitions and for sales and use tax exemption. Excluding Cryptocurrency from the Data Center Sales Tax Exemption

<u>HB 1476</u>--An Act providing for a moratorium on electric generating facility that provides, in whole or in part, behind-the-meter electric energy consumed or utilized by a qualifying crypto-asset mining operation and for an impact study; and imposing duties on the Department of Environmental Protection. Cryptocurrency Energy Conservation Act



Proposed PA Legislation (cont)

<u>HB 407</u>--An Act establishing a task force on digital currency and the impact on widespread use of cryptocurrency and other forms of digital currencies in this Commonwealth.

<u>HB 414</u>--An Act amending the act of December 22, 2005 (P.L.474, No.94), known as the Breach of Personal Information Notification Act, further providing for definitions. Digital Wallet Notification Act.

<u>SB 633</u>--An Act establishing the Regulatory Sandbox Program, the Regulatory Relief Office and an advisory committee; and providing for their powers and duties. Regulatory Sandbox: Making PA the home of Dynamic Innovation

