



Cyber Friday
Blockchain

June 11, 2021



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- **SMALL GROUP TRAINING** – Workshops and webinars
- **CONFERENCES** to include one on one or roundtable sessions

Last year WPI provided training at over 100 events and provided service to over 1,200 companies



WPI is a Procurement Technical Assistance Center (PTAC) funded in part by the Defense Logistics Agency (DLA), WEDC and other funding sources.



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UPCOMING EVENTS

- WED 21** Acquisition Hour: Government Property Management for Federal Contractors and Subcontractors
August 21 @ 12:00 pm - 1:00 pm
- THU 22** Advancing Cybersecurity in the Industry, Energy, Water Nexus – Oshkosh, WI
August 22 @ 9:00 am - 3:00 pm
Oshkosh WI
- THU 22** NDIA Great Lakes Chapter 10th Anniversary – Milwaukee, WI
August 22 @ 12:30 pm - 7:30 pm
Brookfield Wisconsin
- SEP 11** Acquisition Hour: The End of the Fiscal Year is Here – What is Hot and What is Not
September 11 @ 12:00 pm - 1:00 pm

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CURRENT OPPORTUNITIES (1)

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Cyber Friday

Blockchain

Marc N. Violante

June 11, 2021

Webinar Description

- This webinar will provide an overview of Blockchain technology, common terminology and prospective uses of this technology in government contracts and by government contractors. What once was thought to be bogus technology has continued to grow in use and to an extent become an accepted tool in today's business world.

Blockchain – fad or the future?

6/11/2021

Blockchain – potential impact

- “Expectations for blockchain are well founded. With our colleagues at Gartner, we have estimated that blockchain could generate as much as \$3.1 trillion in new business value by 2030, half of it by 2025 with applications designed for operational improvements.”

* The real Business of Blockchain, Preface, Gartner Ince; Harvard Business School Publishing Co, Chapter 1

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Blockchain – varied uses

- Blockchain startups use this open-source technology to
 - register ownership of land,
 - combat digital piracy of content,
 - authenticate and register the origin of works of art,
 - register voters,
 - securely store files, and
 - digitally record identification and verification, and
 - these are just a few examples.
- It is worth saying that high-tech startups and financial institutions are not the only players in the field of blockchain, Defense ministries in countries such as the United States, Russia, China, and even NATO have shown great interest in blockchain technology during the past few years and are beginning to study how to take advantage of the advantages of this new technology and the goal is to enhance military strength.

<https://www.fintechnews.org/military-applications-of-blockchain-technology/>

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Blockchain – Marketing Benefits

- Distribution of specific goods can be managed and tracked by smart contracts to provide companies with better control of IPR and distribution channels.
- Companies can use smart contracts to track ownership of the good, to provide better recall, warranty, and maintenance information to owners.
- Blockchain also enables customers to transparently see the digital record for a specific product from raw materials to final purchase.

Blockchain & DLT in Trade: Where Do We Stand? This white paper was jointly produced by Deepesh Patel and Emmanuelle Ganne. November 2020.

Blockchain in Real Estate

- A blockchain-based ledger system could also potentially be used to register land records, such as:
 - Deeds
 - Mortgages
 - Mechanics liens
 - Other recordable instruments.
- Downside
 - Possible – greater volatility
 - Smart contracts are not smart enough for unique T & C's (locality)

Blockchain in Real Estate, Shearman & Sterling LLP; via Lexology daily feed

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Blockchain in Education

<https://www.gettingsmart.com> > Topics > EdTech

[How Blockchain Could Impact Education in 2020 and Beyond](#)

Feb 23, 2020 — Upon first registration in the school system, at the kindergarten level, an account on the blockchain is created for each student. The account would ...

<https://tech.ed.gov> > blockchain

[Blockchain in Education - Office of Educational Technology](#)

Education Blockchain Initiative. Launched in partnership with the American Council on Education in February 2020, the Education Blockchain Initiative (EBI) ...

<https://www.acenet.edu> > Research-Insights > Pages > E...

[Education Blockchain Initiative - American Council on Education](#)

Blockchain in particular has the potential to center all transactions around the learner, empowering them to control their identity and leverage the skills they have ...

<https://www.nuwireinvestor.com> > News

[The Role of Blockchain Technology in the Education Sector ...](#)

Jan 18, 2021 — Blockchain technology transforms record-keeping of certificates and student credentials in learning institutions. There is no need for an ...

Blockchain – Department of Education



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Blockchain in Education

The recent and rapid evolution of distributed computing and blockchain technology has pushed us to rethink and reimagine many of the foundational aspects of our traditional systems of education. Concepts like trust, value, privacy, and identity are all coming into question as we usher in a new suite of technologies. Through this transition, the Office of Education Technology (OET) is convening stakeholders across the learning continuum to ensure we equitably shape the ever-evolving technological landscape of the American education system.

Education Blockchain Initiative

Launched in partnership with the American Council on Education in February 2020, the Education Blockchain Initiative (EBI) explores novel applications of distributed ledger technologies like blockchain to address complex challenges in education. EBI focuses particular attention on understanding how blockchain technology can facilitate the secure, traceable, and verifiable exchange of educational data among institutions in the learning and employment ecosystem.

Education Blockchain Action Network

The Office of Educational Technology (OET) invites you to explore and contribute to the Education Blockchain Action Network: a shared, community-driven, action-oriented space for conversation, community curation, and open source project development. Educators, administrators, parents, students, and technology developers are invited to work collectively to learn, influence, and equitably shape the ways in which these new technologies affect our shared future.

<https://tech.ed.gov/blockchain/>

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Education Blockchain Initiative

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Looking to learn more about how blockchain can unlock workforce and educational opportunity? Check out this comprehensive report, **Connected Impact**.

<https://tech.ed.gov/blockchain/>

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American Council on Education

Additional Publications and Resources

ACE Selects Four Blockchain Innovation Challenge Winners to Expand Economic Opportunity to Underserved Learners

ACE | February 11, 2021

Borland: How My Oklahoma District Uses Blockchain to Store Students' Transcripts and Make It Easier to Share What They've Learned

The 74 | November 29, 2020

Connecting the Pieces: The Benefits of Blockchain for Higher Education

ACE | October 15, 2020

Learner Records: If You Build It, Will They Use It?

Higher Education Today | September 29, 2020

Introduction to Blockchains for Educators

Medium | May 4, 2020

Video: Introduction to Blockchains for Educators

U.S. Department of Education | April 30, 2020

We Need to Talk About Learning Continuity

Higher Education Today | April 22, 2020

ACE Education Blockchain Initiative Steering Committee Meeting (PDF)

ACE | Jan. 31, 2020

ACE Initiative Will Explore the Potential for Blockchain to Close Equity Gaps

Across the Education Landscape

Oklahoma District Uses Blockchain to Store Students' Transcripts

renters who frequently move across school boundaries. To make enrolling in a new school less arduous for both administrators and parents, the district turned to blockchain, a technology known for its role in powering digital currencies, such as Bitcoin, to overcome these logistical hurdles.

Union entered into a unique partnership with Tulsa's 3Dream Studios to have student transcripts written into blockchain at the end of each semester. They are digitally stored there in a secure, portable and permanent way for students to access and share at any time. Students have ownership over their records and can take those with them if they transfer schools.

<https://www.the74million.org/article/borland-how-my-oklahoma-district-uses-blockchain-to-store-students-transcripts-and-make-it-easier-to-share-what-theyve-learned/>

Blockchain - GSA



Making it Easier for Our Customers Through Improved Contracting Initiatives

Increasing Visibility and Speed of Contract Awards Using Blockchain Technology

GSA's Information Technology Category (ITC) team has completed its proof of concept to incorporate a distributed ledger technology (blockchain) in the [FAST Lane](#) proposal review process. Blockchain allows GSA to automate many of the manual review processes, such as financial reviews and development of the pre-negotiation memorandum required to award a new [IT Schedule 70](#) contract.

As a distributed ledger, blockchain allows all members of the network to have increased visibility into the proposal evaluation process. With blockchain, offerors will have access to information on where their proposal is in the review process at all times.

Blockchain also allows for smart contracts and self-executing software code. Through smart contracts, much of the manual efforts of proposal reviews can be automated, allowing our contract personnel to focus more time on the more complex steps in the process. Blockchain also allows GSA to leverage existing databases without requiring the complete replacement of older technology.

https://www.gsa.gov/cdnstatic/making_it_september_17_final_508.pdf

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Medical uses

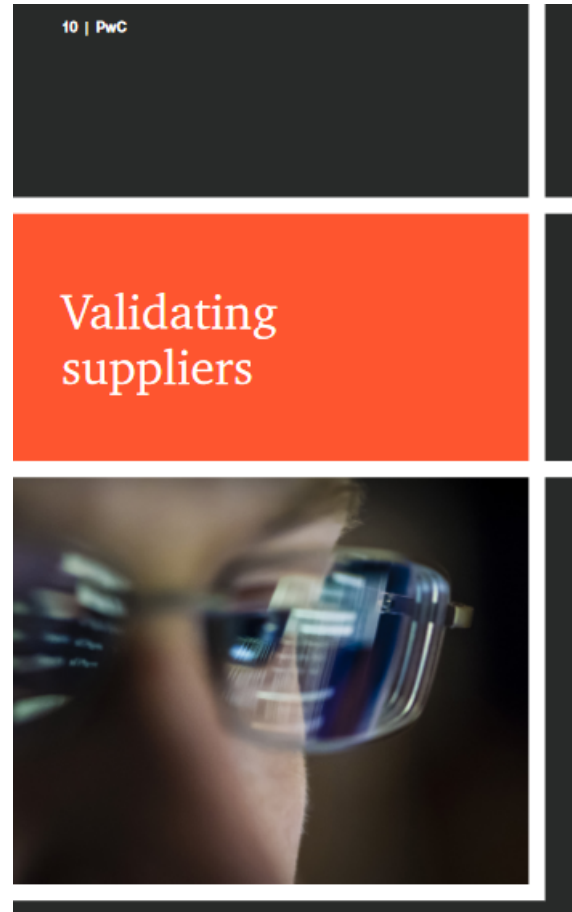
“You can understand the whole technology evolves, and I think the phase it’s in currently remains one to be deliberately evaluated, before rolling out a pilot within the Military Health System,” Doll said.

The Department of Health and Human Services has pioneered the use of blockchain in government. HHS in 2018 gained the first authority to operate an a [blockchain and AI-powered tool called HHS Accelerate.](#)

Meanwhile, the [Food and Drug Administration](#) has looked at using distributed ledger technology to monitor the global food supply chain and pinpoint the source of food safety concerns.

<https://federalnewsnetwork.com/big-data/2020/12/dod-taking-renewed-interest-in-blockchain-amid-covid-19-pandemic/>

Supply Chain



The second major application is validating suppliers. In the past, DoD suppliers essentially had to self-certify that their cyber practices were secure, and the Defense Contract Management Agency would conduct spot audits to ensure compliance. As the battlefield has become digitised, that approach is no longer stringent enough to protect all the data that defence contractors provide and can access.

According to some estimates, up to 70% or more of all defence data resides on contractor networks. Moreover, security breaches cost the US hundreds of billions of dollars a year, nearly equalling the DoD's annual budget. The transition to 5G will increase potential vulnerabilities, and there are indications that many contractors have work to do in order to improve their cybersecurity practices. The National Institute of Standards and Technology (NIST) sets out more than 100 cybersecurity controls, and according to the DoD, only 1% of contractors have implemented them all. In addition, perceived security risks increase with smaller suppliers upstream.

But in late 2020, a new set of security standards will take effect. Called the Cybersecurity Maturity Model Certification (CMMC), the system gives each supplier a rating across five levels, based on a mandatory third-party audit, and that level determines whether a supplier is eligible to win DoD contracts. (For example, if a contract is designated as Level 3, suppliers must have a Level 3 certification or higher by the time the contract is awarded.) The levels are based on NIST frameworks for cybersecurity.

The new standards, though necessary, pose an additional administrative burden on OEMs and Tier 1 suppliers, which must vouch for the certifications of all their sub-suppliers on a given contract. However, this is the type of process — involving certifications across a network of companies collaborating on a project — that blockchain can manage. By linking all suppliers for a given contract on a blockchain, a large supplier or OEM can easily keep track of certification levels and validate those to the DoD when bidding. There are potential benefits for governments as well, in terms of reduced administrative costs and time spent on audits, and — critically — increased security.

Smart Contracts

Some of our collaborations with MITRE include:

- Smart Contracts ([link 1](#), [link 2](#))
 - Utilizing blockchain (digital ledger) technology with built in business logic enabling automatic execution when certain terms and conditions are met
 - MITRE's research is focusing on 3 high-level areas of acquisition to demonstrate and evaluate the potential capabilities of blockchain and smart contracts
 - Agreements among parties
 - Tracking or a system of record
 - Payment employing digital currency
 - Since the beginning of FY19, MITRE has been able to demonstrate early success with these areas, with all steps recorded on the blockchain in an immutable, auditable ledger and available for all parties to the process to examine
 - Next up: We are supporting usability sessions focused on vendor invoicing and payment process, scheduled for September
- Game Theoretic Framework for Agile Acquisition
 - Supporting the bidding process using buyer and seller utility/cost functions
 - Government's utility function is parameterized by the key attributes affecting the acquisition decision

Areas of Federal interest

Federal agencies are eager to better evaluate and adopt distributed ledger technologies (like blockchain) that use encryption and coding to improve transparency, efficiency and trust in information sharing. Blockchain use cases that agencies submit for exploration touch many parts and processes of an organization, including:

- Financial management
- Procurement
- IT asset and supply chain management
- Smart contracts
- Patents, Trademarks Copyrights, Royalties
- Government-issued credentials like visas, passports, SSN and birth certificates
- Federal personnel workforce data
- Appropriated funds
- Federal assistance and foreign aid delivery

<https://digital.gov/communities/blockchain/>

6/11/2021

Blockchain for military logistics

- Data sharing through a blockchain can increase
 - trust in detailed accounts,
 - improve seamless communication,
 - reduce data variation and
 - mitigate friction points when information transfer needs to be timely and actionable.
- Further study and development of blockchain technology for use by the U.S. military has significant potential value for developing digital tools to advance advantages in logistics planning within tactical, operational, and strategic environments.

How can the Coast Guard use blockchain?

- The Coast Guard is turning to members of its workforce to discover blockchain use cases where the Service can best implement this technology. Submit your ideas to the new [Blockchain Use Cases Challenge](#).

NIST Dedicated URL & whitepapers

Overview



Blockchain represents a new paradigm for digital interactions and serves as the underlying technology for most cryptocurrencies.

A blockchain is a collaborative, tamper-resistant ledger that maintains transactional records. The transactional records (data) are grouped into blocks. A block is connected to the previous one by including a unique identifier that is based on the previous block's data. As a result, if the data is changed in one block, its unique identifier changes, which can be seen in every subsequent block (providing tamper evidence). This domino effect allows all users within the blockchain to know if a previous block's data has been tampered with. Since a blockchain network is difficult to alter or destroy, it provides a resilient method of collaborative record keeping.

NIST researchers have been investigating blockchain technologies at multiple levels: from use cases, applications and existing services, to protocols, security guarantees, and cryptographic mechanisms. Research outcomes include scientific papers and the production of software for experimentation as well as providing direction for other NIST endeavors in this space. Blockchain has the potential to be implemented in many different systems, to include manufacturing supply chains, data registries, digital identification, and records management.

DoD interest

US Department of Defense to use blockchain to secure sensitive data

May 13, 2020 • by Ledger Insights



<https://www.ledgerinsights.com/us-department-of-defense-blockchain-secure-sensitive-data/>

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Current opportunities

SIMBA Chain wins another \$1.5m blockchain project from U.S. Navy

January 13, 2021 • by Ledger Insights



<https://www.ledgerinsights.com/simba-chain-wins-another-1-5m-blockchain-project-from-u-s-navy/>
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Federal Interest

Row Labels	Count of Contracting Agency	Sum of Action Obligation (\$)
DEFENSE THREAT REDUCTION AGENCY (DTRA)	2	\$ 324,999.25
DEPT OF THE AIR FORCE	10	\$ 3,056,812.45
DEPT OF THE NAVY	1	\$ 500,000.00
FOOD AND DRUG ADMINISTRATION	2	\$ 150,000.00
FOOD SAFETY AND INSPECTION SERVICE	1	\$ 269,450.22
GAO, EXCEPT COMPTROLLER GENERAL	1	\$ 57,398.00
INTERNAL REVENUE SERVICE	3	\$ 259,700.00
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	14	\$ 1,388,154.46
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY	5	\$ 680,709.00
NATIONAL INSTITUTES OF HEALTH	8	\$ 4,500,000.00
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	1	\$ 30,000.00
OFFICE OF PROCUREMENT OPERATIONS	5	\$ 1,492,013.71
SECURITIES AND EXCHANGE COMMISSION	2	\$ 790,876.47
U.S. IMMIGRATION AND CUSTOMS ENFORCEMENT	2	\$ 15,750.00
Grand Total	57	\$ 13,515,863.56

Federal Activity

Row Labels		Sum of Action Obligation (\$)
+ 2016	\$	199,980.00
+ 2017	\$	1,189,555.71
+ 2018	\$	4,874,386.00
+ 2019	\$	1,408,158.47
+ 2020	\$	4,752,924.38
+ 2021	\$	1,090,859.00
Grand Total	\$	13,515,863.56

National Defense Transportation Association-U.S. Transportation Command Virtual Fall Meeting 2020

- Titles of the four new Blockchain Technology courses are
 - “Blockchain 101 – What It Is and Why It’s Important to Your Business Processes;”
 - “Blockchain – A Technical Deep Dive;”
 - “Blockchain Interactive Training;” and
 - “Blockchain and the Express Industry.”
 - The initial three will be instructed by Hudson Sutherland, director, and Venkat Kodumudi, director, Blockchain and robotic process automation practices, CGI United States, Washington, D.C. Dale Chrystie, business fellow and Blockchain specialist, FedEx, Memphis, Tennessee, will teach the remaining class.

<https://www.ustranscom.mil/cmd/panewsreader.cfm?ID=4E36F021-0C71-AD93-960CC0CC37CEF70F&yr=2020>

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Blockchain



Bitcoin



Bitcoin applies – utilizes blockchain fundamental.

What Blockchain is not

**Blockchain is not
a database!**

* The real Business of Blockchain, Preface, Gartner Ince; Harvard Business School Publishing Co, Chapter 1

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Blockchain - overview

- A blockchain is a collaborative, tamper-resistant ledger that maintains transactional records.
- The transactional records (data) are grouped into blocks.
- A block is connected to the previous one by including a unique identifier that is based on the previous block's data.
- As a result, if the data is changed in one block, it's unique identifier changes, which can be seen in every subsequent block (providing tamper evidence).

Database – general characteristics

- Centralized
- One owner
- Specific software
- Multiple users
- Constant changes
- No consensus required – [user > changes > save > done]

Blockchain – general characteristics

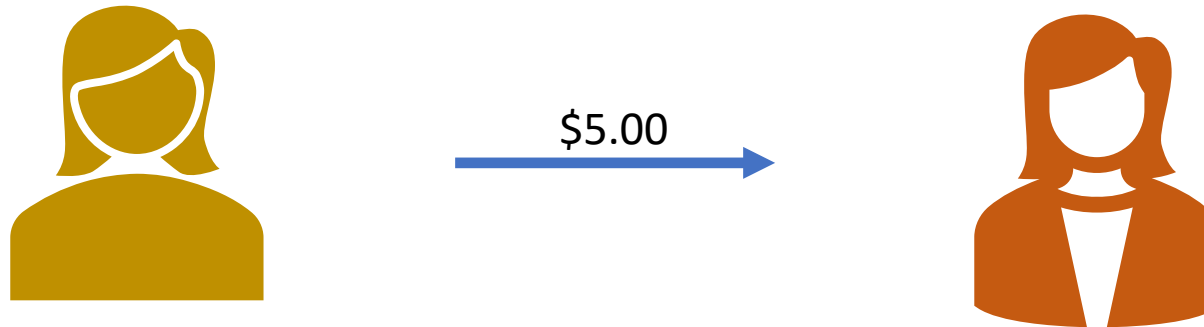
- Decentralized
- No owner
- No specific software
 - there are frameworks/software
 - - <https://ethereum.org/en/>
 - Solidity
- Multiple users
- New information – appended
 - All transactions viewable
 - Transaction history maintained and utilized to prove the validity of latest Block
- Consensus required

Database v. Blockchain

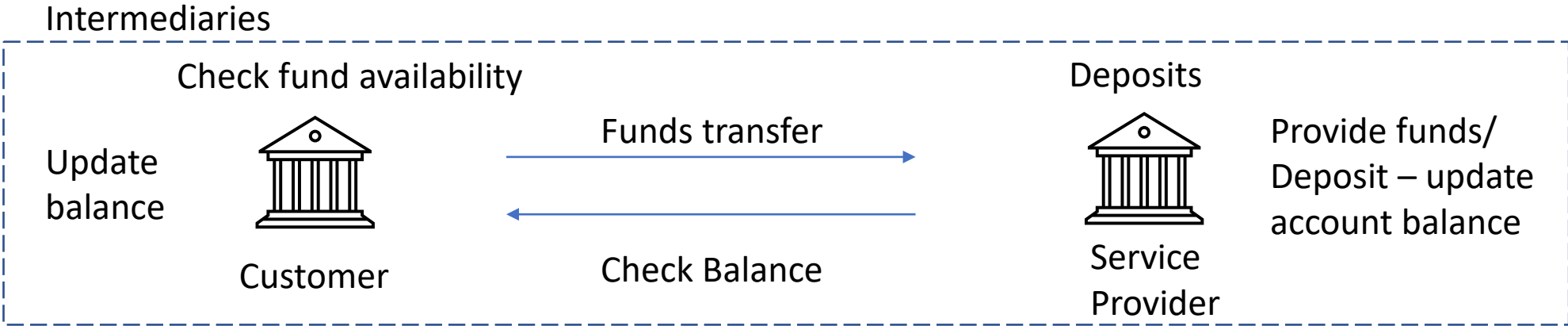
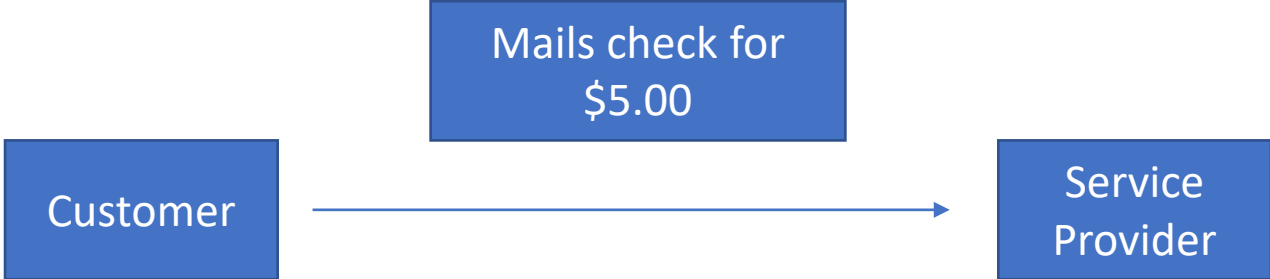
- Initial state – zero entries
- New entries can be made
- Database reflects only current state
- Blockchain reflect current state and total history
- Database – changes (corrections/edits) can be made
- Blockchain – immutable (changes – corrections/edits) not allowed

Basic Personal Transaction

- A pays B



Basic Business Transaction



The Issue

- Currently, all stakeholders in international transactions (manufacturers and producers, banks, buyers, sellers, shipping companies, customs brokers and freighter forwarders, truckers, customs administrations, and insurance providers) **must have their own separate files and databases with all the documents related to a specific transaction.**
- Typical documents filed multiple times by multiple players include the purchase order or contract, letter of credit, bill of lading, warehouse receipts, commercial invoices, payment documents, and proof of receipt.

Blockchain & DLT in Trade: Where Do We Stand? This white paper was jointly produced by Deepesh Patel and Emmanuelle Ganne. November 2020.

<https://www.tradefinanceglobal.com/posts/tfg-partner-up-with-icc-and-wto-and-the-global-blockchain-forum/>

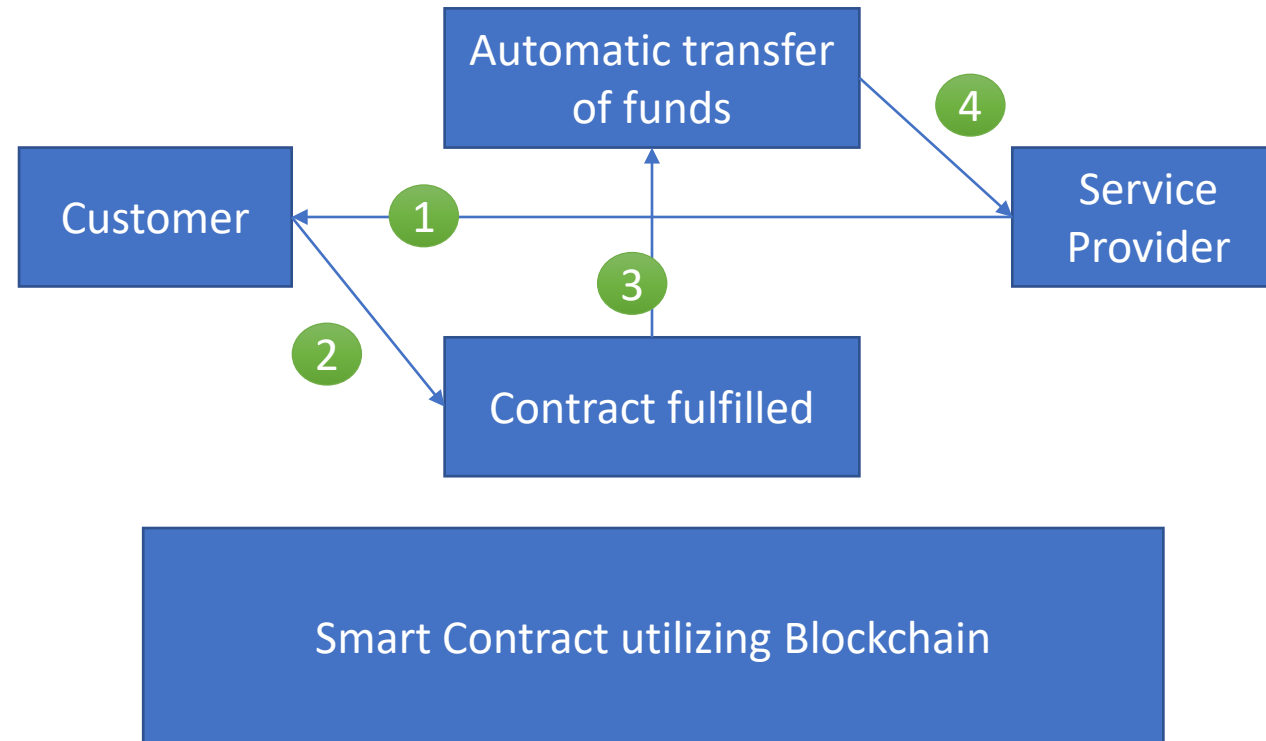
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The result

- One calculation for an export of cut flowers from Africa **required 200 separate communications involving 30 players** such as farmers, freight forwarders, land-based transporters, customs brokers, governments, ports, and carriers to move a shipment to Europe.
- The systems for data tracking have no digital compatibility and use repetitive, manual, costly, inefficient, insecure, and time-consuming means.

Blockchain & DLT in Trade: Where Do We Stand? This white paper was jointly produced by Deepesh Patel and Emmanuelle Ganne. November 2020.
<https://www.tradefinanceglobal.com/posts/tfg-partner-up-with-icc-and-wto-and-the-global-blockchain-forum/>

What if - Basic Business Transaction



Blockchain – the promise

- “that blockchain’s promise of providing a way to do business with anyone or anything in the world at any transaction size and without an intermediary between you is as powerful as ever.”

The Five Core Elements of Blockchain

- Distribution
- Encryption
- Immutability
- Tokenization
- Decentralization

* The real Business of Blockchain, Preface, Gartner Ince; Harvard Business School Publishing Co, Chapter 1

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Blockchain - uses

- Financial transactions
- Supply Chain
- Smart Contract
- Identify Management
- Counterfeiting/fraud – prevention*
- Eliminate inefficiencies caused by opaque or manual processes*
- Issues related to data quality & management*

* The real Business of Blockchain, Preface, Gartner Ince; Harvard Business School Publishing Co, Chapter 1

Python – Sha256 HASH function

- `>>> hashlib.sha256(b"A").hexdigest()`
 - `'559aead08264d5795d3909718cdd05abd49572e84fe55590eef31a88a08fdffd'`
- `>>> a = hashlib.sha256(b"A").hexdigest()`
- `>>> b = hashlib.sha256(b"A").hexdigest()`
- `>>> a == b`

Payment - HASH

- Payment = Action + Amount + Recipient
- Payment 1 = Pay + \$10.00 + Vendor_A
- Payment 2 = Pay + \$100.00 + Vendor_A

- `>>> hashlib.sha256(b"pay$10.00vendor_a").hexdigest()`
- `>>> hashlib.sha256(b"pay$100.00vendor_a").hexdigest()`

- `'cc105911c9f354af4601ec6223a95b5dfa10ed95ba4c015f6c888e7bf141c5cd'`
- `'f4b35305fa385d8abb2219c707102a14edae6fdc80477170f6287c28f77f411e'`

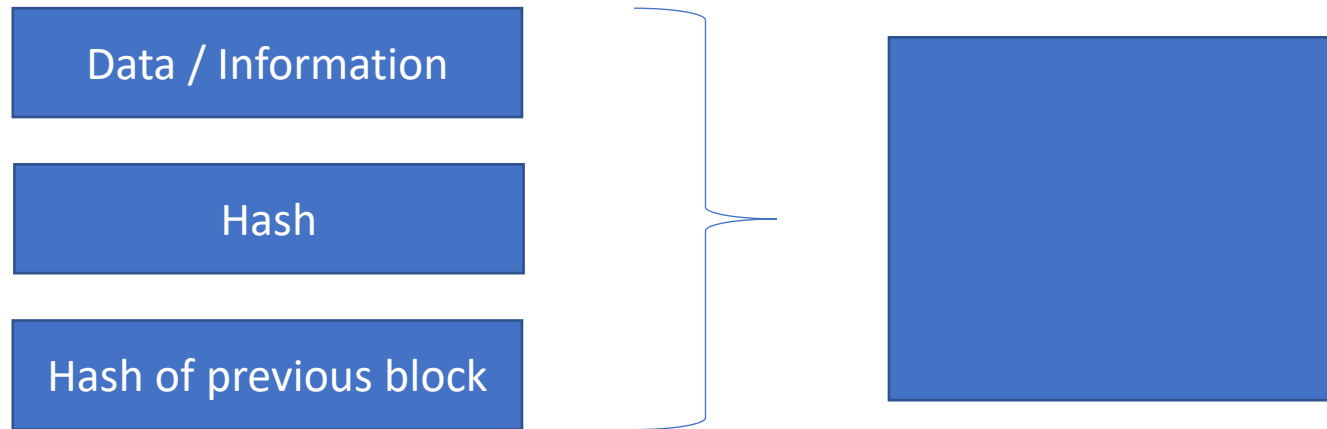
Slightly longer string

- `hashlib.sha256(b"The quick red fox bounded over the log, crossed the road and ran into the woods").hexdigest()`
- `'23aa1d6de880bc61b1e1390a5bcf757ac684ef151c688e25458d1fb87db3d9e6'`

Hash lengths are equal

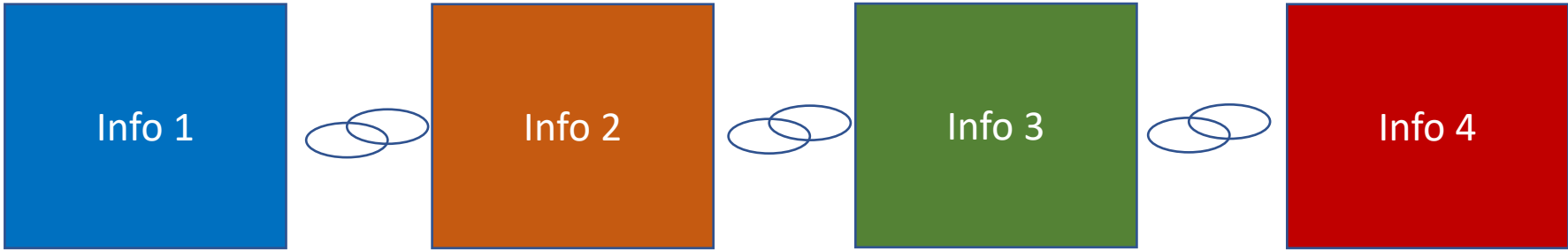
- Length -- `hashlib.sha256(b"pay$10.00vendor_a").hexdigest()` = 64
- Length -- `hashlib.sha256(b"pay$100.00vendor_a").hexdigest()` = 64
- Length -- `hashlib.sha256(b"The quick red fox bounded over the log, crossed the road and ran into the woods").hexdigest()` = 64
- A change to the information > changes the hash value
- A change in the hash value > signals that there has been a change to the information (this is a key idea)

Blockchain – Block - components



Blockchain

Block 0 = Genesis Block



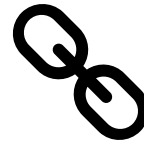
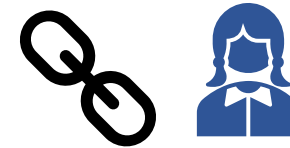
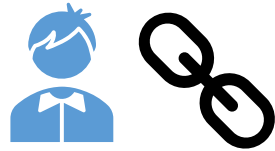
Hash = A13b
Hash p = 0000

Hash = c43b
Hash p = A13b

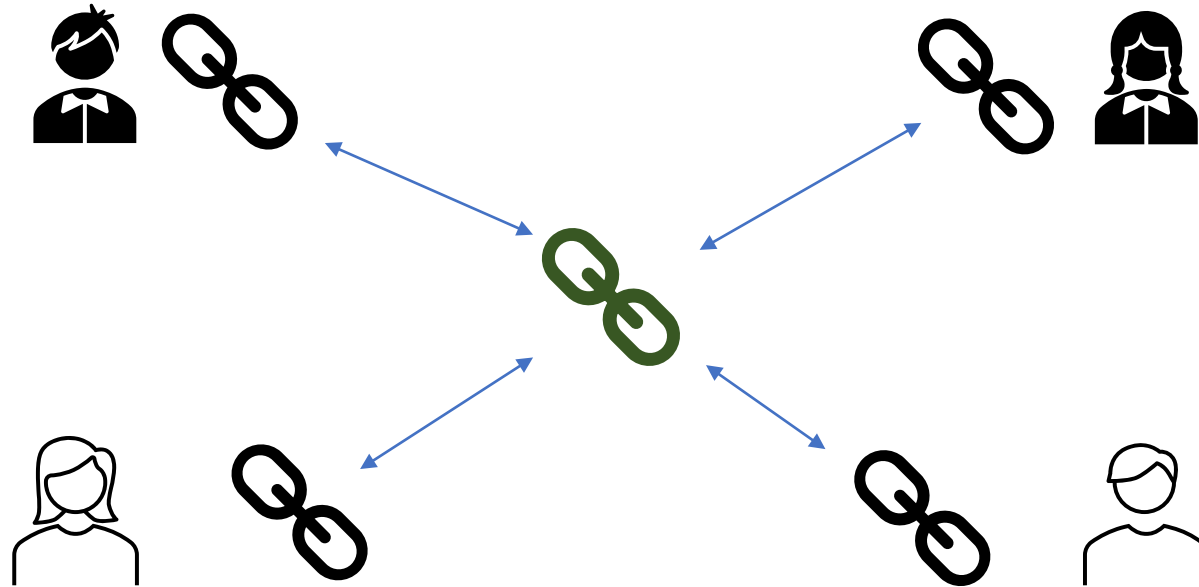
Hash = Z962
Hash p = c43b

Hash = kL9M
Hash p = Z962

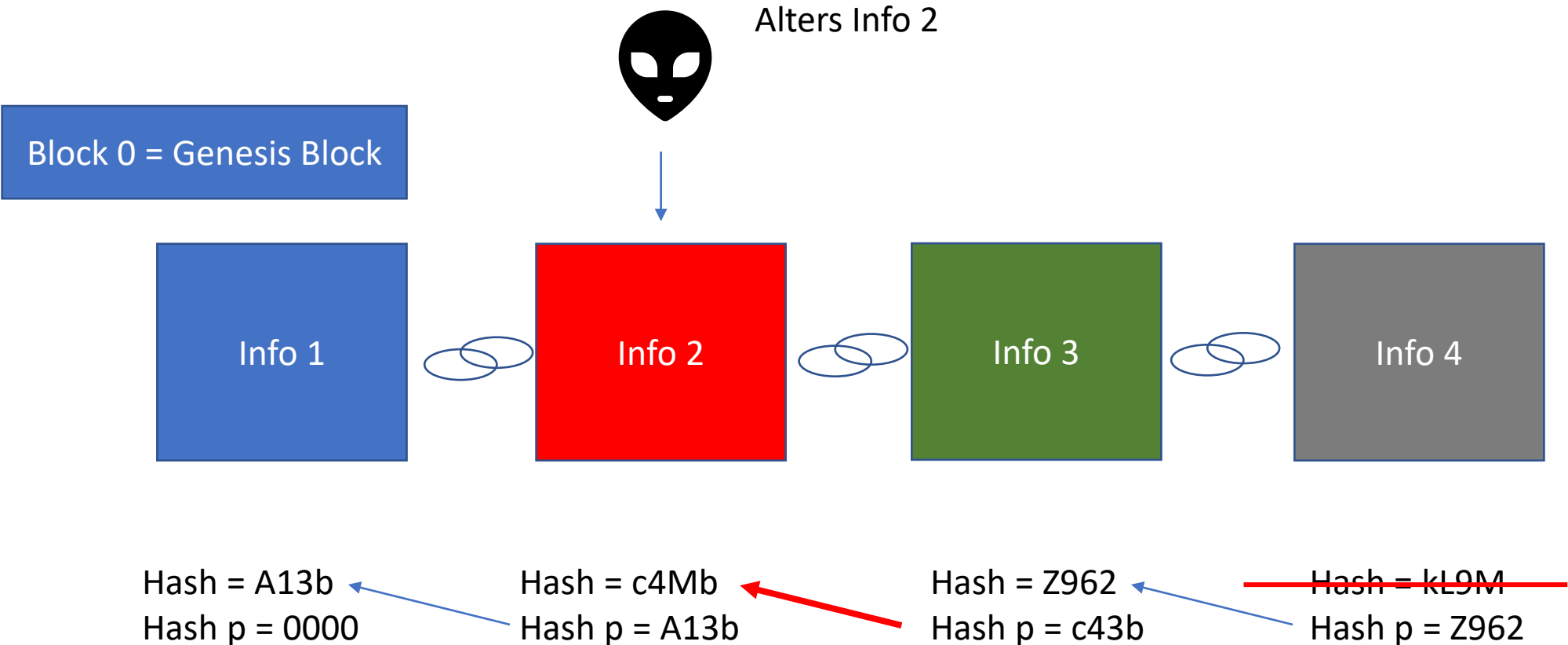
Shared / viewed by participants +



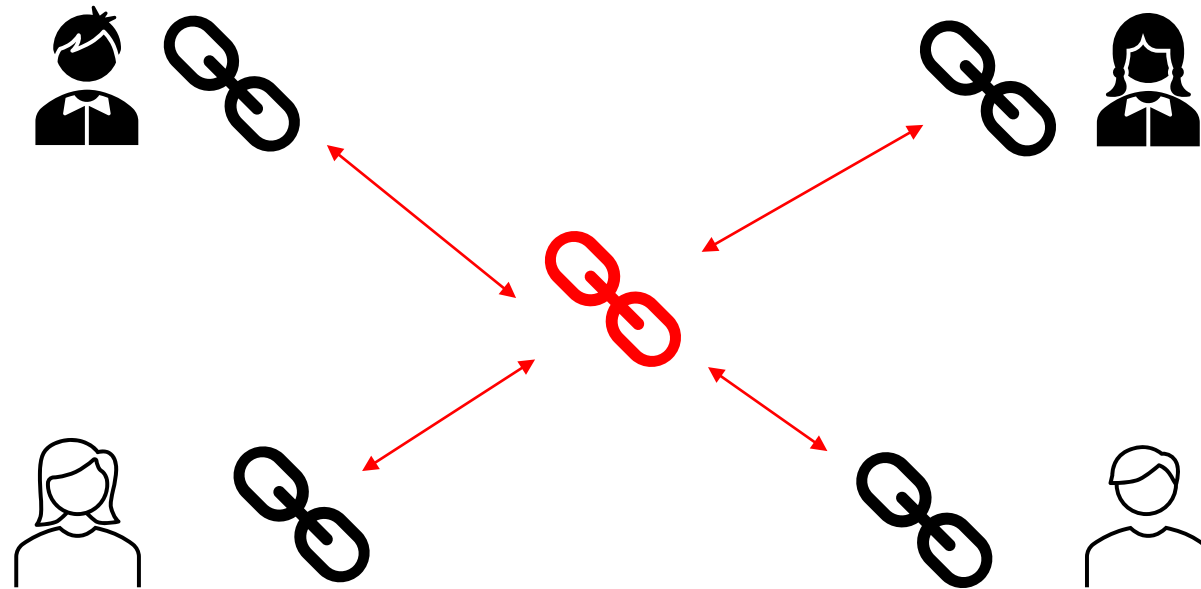
Consensus – looks good



Blockchain – information altered



Consensus Fails



Something doesn't look right

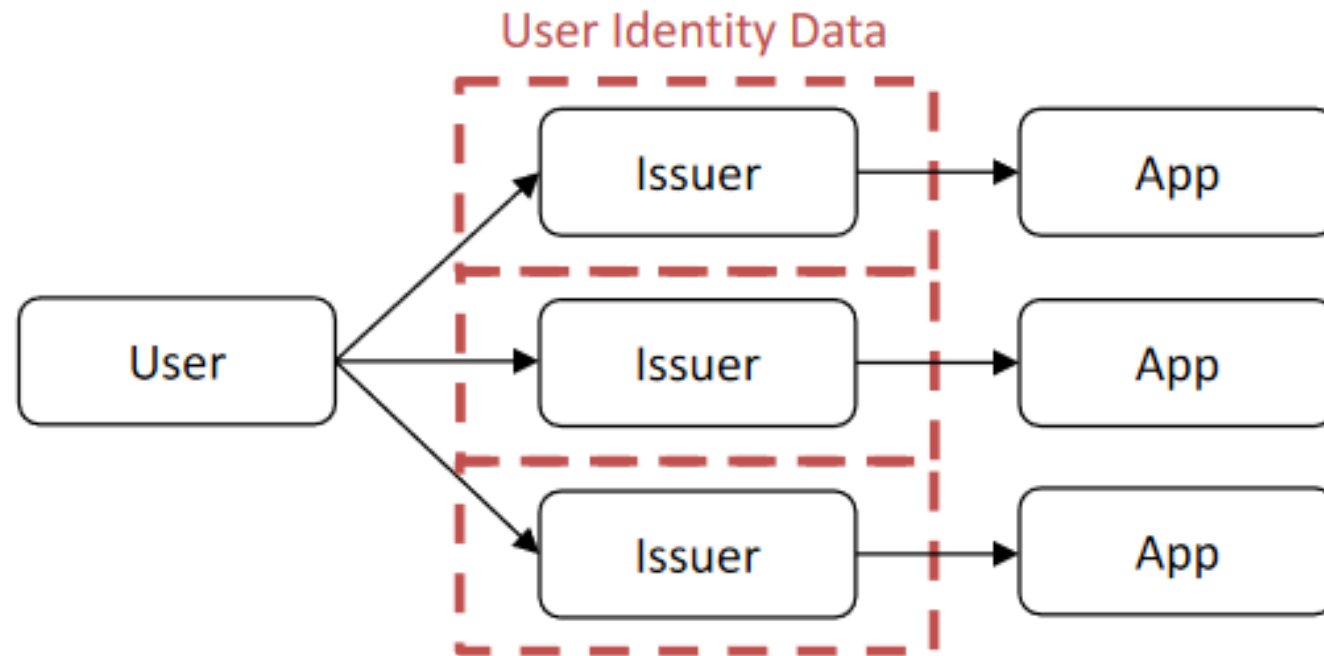


Got caught again! - phooey

Key Blockchain elements

- Hash
 - Uniqueness
 - Comparability
- Distributed Ledger
 - Visibility
 - Consensus
- Nonce
 - Use in determining Proof of Work – correctness of the blockchain

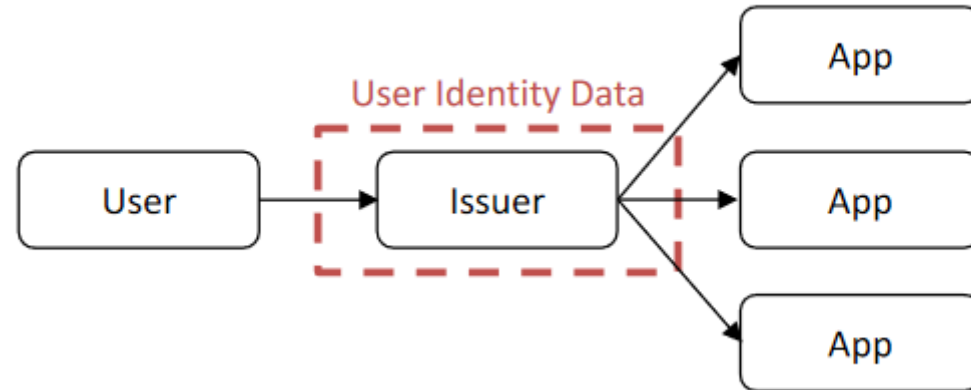
Identity Management - Traditional



<https://nvlpubs.nist.gov/nistpubs/CSWP/NIST.CSWP.01142020.pdf>, page 2

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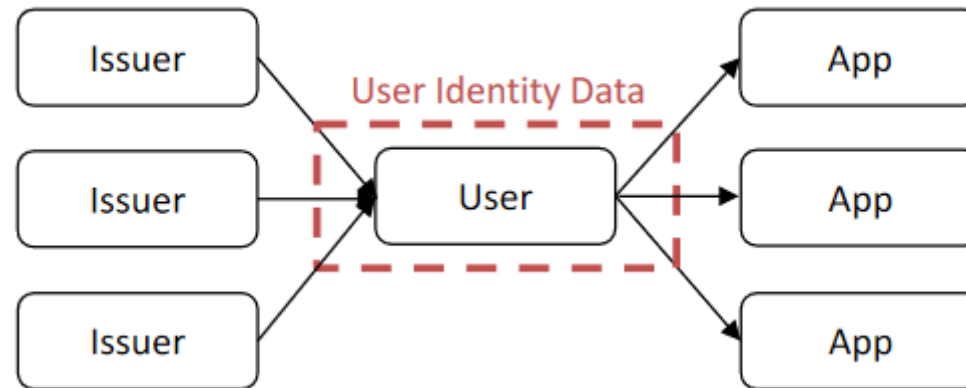
Identity Management - Federated



<https://nvlpubs.nist.gov/nistpubs/CSWP/NIST.CSWP.01142020.pdf>, page 2

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Identify Management – User Centric



<https://nvlpubs.nist.gov/nistpubs/CSWP/NIST.CSWP.01142020.pdf>, page 3

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Blockchain – attributes(1)

- Blockchain as a records system
- Trust and Identity
- Smart contracts and IPR
 - Smart contracts can automate the fulfillment of contractual obligations and prevent fraud (title to goods transfers only upon digitally verified fulfillment of conditions). Producers, manufacturers, shippers, distributors, retailers and customers rely upon the authenticity of products, trusting that a brand on the invoice is in fact that brand, not a cheaper counterfeit knock off. One of the unsung advantages of smart contracts on a blockchain is that it provides protection for intellectual property rights (IPR) by providing a complete record of the product's documents and movements. With blockchain technology, products may be linked with non-fungible tokens at the moment of creation and those tokens serve as digital certificates of title.

Strong and fast competition

- The competition between countries to adopt the capabilities of the blockchain within the military field every day is stronger, as it shows a competitive advantage over the adversary and is seen as a sign of military superiority. At least publicly, the United States is, like its NATO allies, has already begun to explore the possibilities of introducing blockchain into its military machines. In particular, they are interested in the development of IoT (Internet of Things) associated with it. In **section 1646 of the 2018 National Security Doctrine Act, issued by Congress, blockchain is mentioned as a technology that the military should pay special attention to.**

<https://www.fintechnews.org/military-applications-of-blockchain-technology/>

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Military applications of blockchain technology

- Although there was skepticism about the potential of blockchain technology, now it is increasingly dissipating. Financial institutions use distributed ledger technology to increase the effectiveness of the back-office system. But there are many other possibilities for using the blockchain.

Conclusion

- The rest of the world's powers, including emerging ones, are not far behind and are very attentive to the change that this technology is bringing to the world. Undoubtedly, the competition that exists for being at the forefront of military technology, as has already happened with the internet, will accelerate the development of blockchain adoption in all areas.

<https://www.fintechnews.org/military-applications-of-blockchain-technology/>

UPCOMING TRAINING - EVENTS



NDIA MIDWEST REGIONAL CONFERENCE SERIES

- **June 22**
- **June 29**
- **July 17**

The National Defense Industrial Association's (NDIA) Great Lakes, Great Rivers and Iowa-Illinois chapters, partnered with the Wisconsin Procurement Institute (WPI), invites you to attend our three-part virtual series featuring leaders in U.S. Defense. In this series, you will have the opportunity to learn about current issues, programs, and priorities critical to Defense contractors and subcontractors.

[Registration Now Open](#)

...More at wispro.org/events



Partnering With Purpose Series

Session 1

FUNDAMENTALS OF TEAMING AND PARTNERING

June 15 | 10 am – Noon [REGISTER HERE](#)

Session 2

CHALLENGES IN DEVELOPING SUCCESSFUL BUSINESS TEAMS AND PARTNERSHIPS

July 20 | 10 am – Noon [REGISTER HERE](#)

Session 3

A ROADMAP TO DEVELOPING SUCCESSFUL TEAMS AND PARTNERSHIPS

Aug 17 | 10 am – Noon [REGISTER HERE](#)

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CYBER FRIDAY LIVE WEBINAR SERIES

June 11, 2021

Blockchain

June 25, 2021

The Role of Standardization in
Cybersecurity Plans

Register at: <https://www.wispro.org/faqs/what-is-wpis-current-cyber-friday-webinar-schedule/>

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— at RESEARCH PARK



ACQUISITION HOUR LIVE WEBINAR SERIES

- June 16, 2021

Acquisition Hour: The New SAM.gov

[CLICK HERE](#) for additional information

Presented by Kim Garber, Wisconsin Procurement Institute

- July 13, 2021

Acquisition Hour: The Spend to the End

[CLICK HERE](#) for additional information

Presented by Benjamin Blanc, Wisconsin Procurement Institute

- July 21, 2021

Acquisition Hour: Government Property Management for Federal Contractors and Subcontractors

[CLICK HERE](#) for additional information

Presented by Benjamin Blanc, Wisconsin Procurement Institute

CYBERSECURITY – UPDATE – DECEMBER 2020

- CMMC -
 - Implementation continues
 - Pathfinder contracts to be announced soon – article, Dec 1, 2020
 - CMMC requirements will be included
 - Full implementation expected by Oct 2025
- New clauses and requirements –
 - DFARS 252.204-7019
 - DFARS 252.204-7020 – applies to contracts subject to 252.204-7012
 - With few exceptions, these requirements apply to all Primes and Subcontractors
 - Consistent with philosophy shift of self-attest to verifiable
 - Three levels – Base – self-performed , Medium & High - DCMA

252.204-7020 – BASIC ASSESSMENT

- Requires
 - System Security Plan(SSP)
 - Plan of Action – with dates for outstanding items
 - Basic Assessment
- Six elements uploaded to Supplier Performance Risk System (SPRS)
 1. System Security Plan name (if more than one system is involved)
 2. Brief description of Plan Architecture
 3. CAGE code associated with SSP
 4. Date Assessment performed
 5. Summary Score
 6. Date a score of 110 to be achieved

CURRENT CYBER REQUIREMENTS

- FAR 52.204-21 – Federal Contract Information
- DFARS 252.204-7012
- Requirements cited in solicitation/contract

Need assistance – please contact Marc Violante from WPI at marcv@wispro.org or 920-456-9990

CONTINUING PROFESSIONAL EDUCATION



CPE Certificate available, please contact:

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