

Java Chain

**Your Coffee Chain... On
the Block**



Meet the Team!



Andrew Smith-Mui



Eric Baran



Andrew Rubi



Bryan Castillo

The background image shows a laptop screen with a line graph and a pie chart. The line graph has a blue line with markers, showing an upward trend with some fluctuations. The pie chart is partially visible, with a green slice. The text is overlaid on a dark, semi-transparent background.

Mission statement:

**To increase the amount of auditability, trust,
and reliability in company accounting records
using a secure blockchain solution.**

The Problem

Managing cash-flow, expenses, payroll, and tax documents are challenging, especially for a small business.

Difficult to maintain transparency and accuracy for small business accounting records



The screenshot shows a news article from the Federal News Network. The header includes the network's logo and navigation links for Technology, Defense, Workforce/Management, Pay & Benefits, and Commentary. The article is part of the 'DOD REPORTER'S NOTEBOOK' series. The title is 'Pentagon reports \$5B in improper payments to civilian workforce'. It is authored by Jared Serbu (@jserbuWFED) and Scott Maucione, dated November 23, 2020, at 10:10 am, with an 11-minute read time. Social media sharing icons for Facebook, Twitter, LinkedIn, YouTube, Email, and Print are present. A descriptive paragraph states that the notebook is a weekly summary of personnel, acquisition, technology, and management stories. Below the text is a video player with the title 'Pentagon reports \$5B in improper payments to civilian workforce' and a 'POWERED BY' logo. The video player shows a progress bar at 00:00:00. Below the video, a sub-headline reads 'Most newly-detected civilian pay discrepancies were due to missing documentation'. The main body text indicates that the Defense Department's latest financial statement shows the Pentagon made nearly \$5 billion worth of improper payments in its civilian payroll accounts last year, a massive increase from previous years in which the department reported almost none.

Source: <https://federalnewsnetwork.com/>

Could a smart contract architecture have prevented this?



Our Solution

Use a secure blockchain and solidity smart contract environment to perform daily transactions on our small business accounting records.

Milestones

Java Chain development process 21 Nov - 8 Dec 2020

Project Day 1

-Developed project idea
& mission statement

Project Day 3

-Used JavaScript for
front-end site & MetaMask
integration



Project Day 5

-Finalized presentation
& Java Chain site

NOV

Project Day 2

-Began smart contract
draft in Remix



Project Day 4

-Integrated Truffle suite
to run multiple smart
contracts



DEC

JavaChain Presentation

How it Works

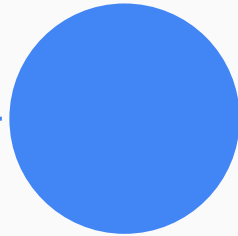
Step 1

**Deploy contract on
secure blockchain**



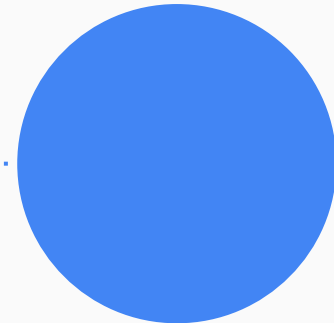
Step 2

**Record accounting
transactions**



Step 3

**Verify activity on
the blockchain**



An aerial photograph of a city skyline, likely New York City, taken at dusk or dawn. The sky is a mix of dark blue and orange, with some clouds. The city is densely packed with skyscrapers, many of which are illuminated with lights. A semi-transparent dark overlay is applied to the image, making the white text stand out.

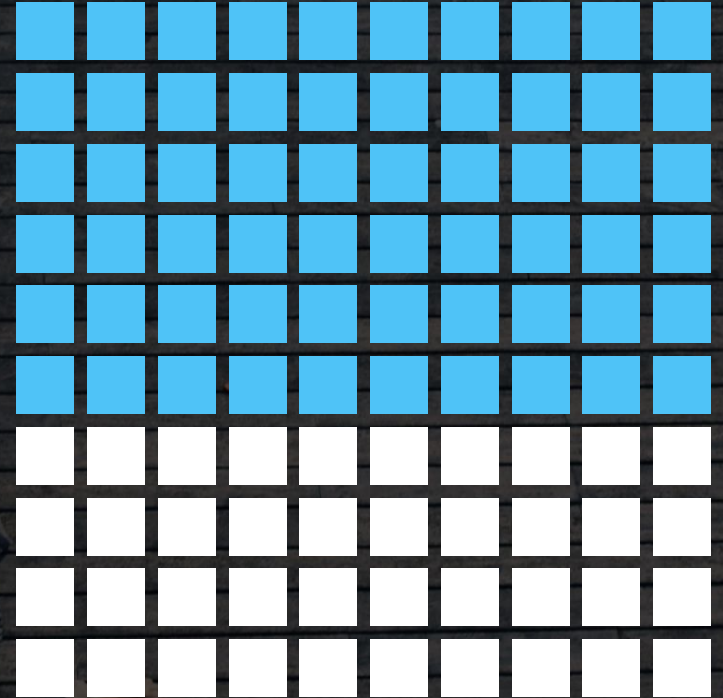
The Technology:

Solidity Smart Contracts on the Blockchain

Why now?

Blockchain technology has the potential to further revolutionize the accounting industry by enhancing **productivity, accuracy, data security, reducing maintenance expenses and reconciling ledgers.**

Organizations can record their transactions right into a decentralized ledger, forming an interlocking arrangement of abiding accounts and records.



Blockchain Accounting Software Benefits

- Built-in Auditing
- Reduced Fraud & Errors
- Enhanced Regulatory Compliance & Efficiency
- Easier Reconciliation
- Manage Ledger
- Superior Transparency
- Reliable Solutions
- Quick Transactions
- More Security
- Wallet Transactions

But Why Stop Here?

- **Truffle Suite:**
 - **Truffle - Smart Contract**
 - **Ganache - Local Server on local port**
 - **Drizzle - Working front-end for your business online with Metamask**
- **Truffle Boxes:**
 - **Out-of-the-box development**
 - **Integration of your smart contract with Ganache & Drizzle - deployed via Metamask**



Future considerations for project expansion:

- Smart contract to interact with applicable tax policy and documentation*
- Expand transaction contract to integrate real time transactions (customer purchases)*
- Expanded transaction contract to accept wide variety of cryptocurrencies*
- Expanded inventory management contract to output resupply notifications & integrated order/shipment tracking*