IOT + Blockchain Reform Logistics Tracking and Financing

Honggang Chen
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IOT connects physical world and Blockchain
IOT + BlockChain

IOT, BlockChain and AI are three-in-one integration relations. They are combined to solve the whole process of collecting, transmitting, mining and processing financial means of production (information and data) so as to create value and transform them into productive forces.

The IOT realizes the interconnection and deep perception of all things, It is the antenna of data, and connects the physical world and digital space.

Blockchain is an algorithm to ensure that information and data can not be tampered in digital space, thus establishing a trust mechanism in a multi-party weak trust environment, It is a low-cost solution for the large investment credit cost in the financial industry, and make it possible to do value transfer.

With these two technological cornerstones, AI can come on the scene. It deal with the processing of credible means of production, thus transforming them into productivity measured by usable value.
What can blockchain do for the Internet of Things?

Reducing Operational Management Cost

Reduce pre-transaction verification costs

Protecting Data Security and Privacy
The golden combination of the IOT+blockchain is applied in the financial field, which will truly connect the online and offline transaction forms and build a new trust system. Chattel financing is the financial field which will be subversively impacted by the IOT and blockchain technology. Technology will perfectly show how to transmit the value of real world things to the network financial environment. With this change, the chattel financing business will inevitably change from mode to process, from structure to contents.

1. Reconstructing business boundaries
2. Reconstructing business processes
3. Reconstructing Risk Control System
IOT+ BlockChain Financial Ecology Chain

Data content
- Basic Information of Goods
- On-the-way information of goods
- Goods in Warehouse Information
- Goods Trading Information
- Customer Information

Data on Chain
- Factory of Origin
- Warehouse WMS
- Logistics data
- Industry data
- Sales data

Blockchain
- Customer ERP
- IOT
- Business data

Value
- Traceability of commodities
- Information matching
- Decentralization
- Brand Guarantee
- Fine operation
- Cooperative partner
- Communication Strategy
- Incentive mechanism

IOT Financial Eco-Chain
## IOT+Blockchain system architecture

### Business Application Interaction Layer
- Mobile APP
- WEB Page
- PAD application
- SDK tool
- WEB Service Data interface

### Business Platform and Intelligent Risk Control Layer
- Cloud service platform
- Public DB
- Big Data analysis engine
- Rule engine
- Service analysis engine
- Smart dynamic control
- Smart network management
- Smart Warranty Management

### BlockChain Service Engine Layer
- Blockchain data service platform
- Multi-channel collection
- Data encrypt
- Data desensitization
- Source record
- Privilege control
- Data Verification

### Internet of Things Perception Layer
- Mobile station
- Fix station
- Car Monitor
- Electronic lock
- Transportation Terminal
- RFID
- Electronic fence
- Electronic scale
- Intelligent Container
- Location
- Monitor
- Temperature
- Humidity
- Collision
- Illumination

- Chase Supply Chain Information Flow
- Real-time tracking supply chain inventory
- Adapt to the complexity of the region
- Managing Supply Chain Risks
Fusion IOT + blockchain logistics tracking

- The IOT + blockchain ensures the truth and non tampering of logistics information.
- Cross-validation of IOT system and logistics system data ensures that information can be self-evident in business chain.
- The real-time and non-real-time data of IOT devices are mutually verified by the unchangable data stored in blockchains to ensure data integrity.
- Reconstructing credit system, changing from subject credit to technology credit.
Cargo owners publish transport information
Drivers pick up orders on APP

Establish matching relationships among drivers, vehicles and transport bills
Start transport and Push delivery notice

Depot Bill, Loading Bill, Freight Bill

On-the-way Abnormal Event Warning

Driver enters delivery confirmation code to complete order

Freight order issuance
Freight order acceptance

Start executing the order

Navigate to warehouse and Ex-warehouse

Path Planning Management

Navigate to the place of delivery

Scanning Terminal QR Code and Execute Order

Vehicle Recording and Binding Before First Operations

Vehicle binding and information filing
QR Code of Driver Scanned by Storage manager
Delivery of goods Ex-warehouse, entrucking confirmation

Managing All Vehicles with Intelligent Terminal
Fusion IOT + blockchain warehouse control

- **IOT+Blockchain**, realizes the mapping between physical assets and digital assets, ensuring the truly and unchangeable information on the chain.
- **Smart contract**: Pre-set the collateral value, Use IOT equipment to collect goods changes information, automatic control of goods, automatic risk warning.
- **Blockchain and IOT information** verify each other to ensure that the goods control is reliable and effective.
- **Reconstructing credit system** from subject credit to transaction credit.
IOT + blockchain warehouse scene
PeerSafe introduction

• PeerSafe company was founded in July 2014 in Beijing China

• World leading enterprise Focus on Blockchain basal protocol and application

• It has branches in Singapore, Shanghai, NanJing, ChangSha, Shenzhen, HeFei & SuZhou etc

Qualification:

• the member of Chinese Association of cryptography

• China National High-tech enterprise

• Hyperledger member since 2016.6

• 2018 Forbes China Innovation top 50

Product:

the blockchain database application platform

the smart blockchain deployment and maintenance platform

"Build a distributed network platform to lead the financial and regulatory technologies."
What can you talk to me about during the breaks?