



# Praktyczne zastosowania #blockchain

8.06.2017, Politechnika Warszawska

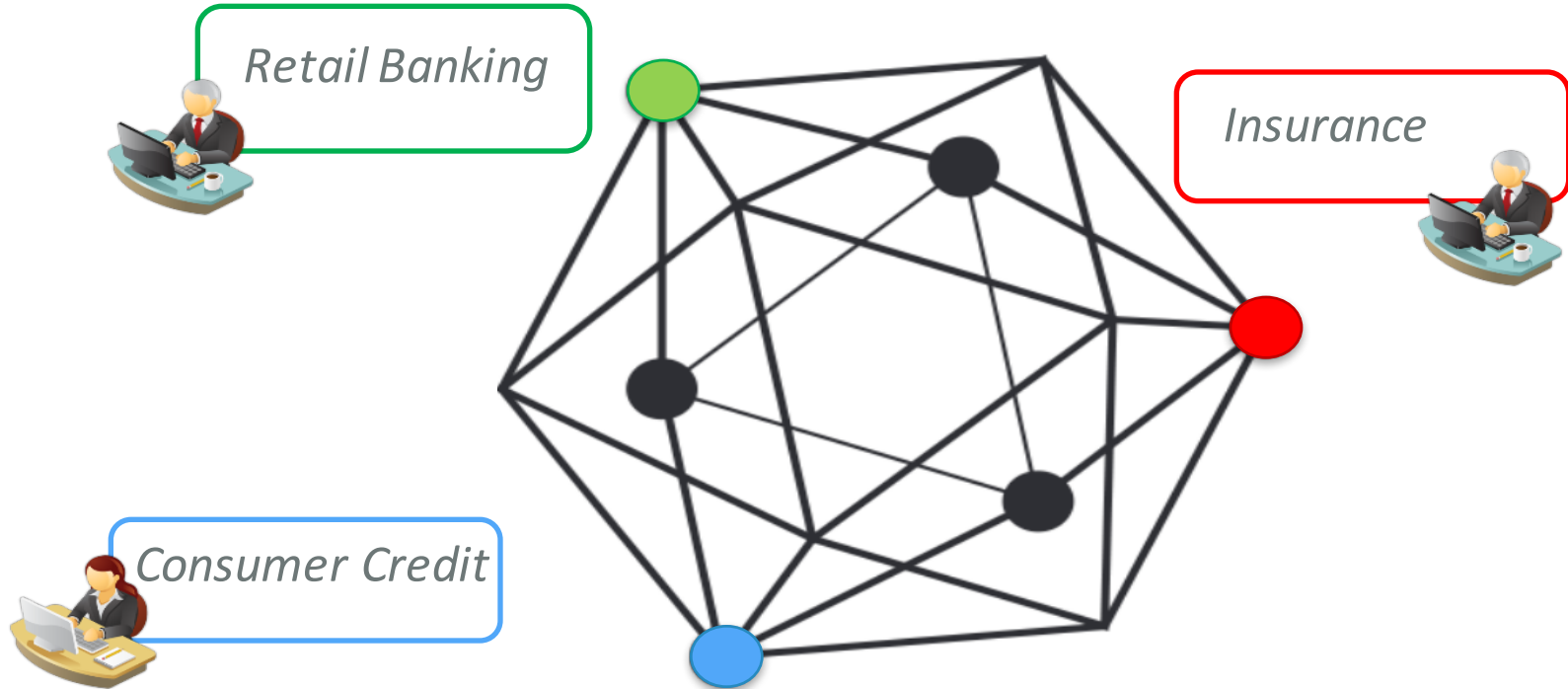
**Karolina Marzantowicz**  
IBM Distinguished Engineer  
FSS & Blockchain  
[@kmarzantowicz](https://twitter.com/kmarzantowicz)



# Financial Industry Use Cases - Overview

1. Know Your Customer (KYC)
2. Audit & Compliance: Financial Restructuring
3. Global Payments
4. Digital Fiat
5. Car Leasing Experience
6. Contract Placement & Signature
7. Credit Card Rewards
8. High Value Item Insurance
9. Claims Processing
10. Freight Transportation
11. Syndicated Loans
12. Commercial Financing
13. Securities Lending
14. Trade Finance
15. Low Liquidity Trading
16. Smart Bonds
17. Automated Compliance
18. Proxy Voting
19. Equity Post-Trade
20. Edge Computing  
Decentralized Networks





Client: **Credit Mutuel Arkea**  
Domain: **Compliance**  
Use Case:  
**Common KYC Data Sharing**  
Link: <http://ibm.co/29i1dy3>

## What

- Bank was fragmented into multiple business units and had more than 50 branches across France without a unified customer registry
- There was a need to create a client on-boarding process streamlined for all business units and branches

## How

- Blockchain was used as a KYC register holding customer profile
- Client filled-in onboarding documentation once, later re-used by all LoBs

## Benefits

1. Increased ability to verify customer identity
2. Decreasing client onboarding process to a single application
3. Standardisation of customer profile across all LoBs solves siloing, conflict reconciliation & duplication
4. Transparent profile access request process, visible to the client

Customer creates public identity on the blockchain, then puts certain documents to prove identity on the blockchain.

Financial Services Provider A verifies identity and signs the person's identity on the blockchain.

A business network of financial services providers cooperate to cut down KYC costs in the long run. Customers are saved from having to enter thousands of forms in their life.

Customer gives Company A permission to view the documents – the permission is recorded on the blockchain.

Customer applies. Instead of filling out all of the forms required, the customer simply permissions the bank to access the verified identity. The bank trusts Financial Services Provider A and therefore accepts the identity attestation and saves on KYC verification cost.



**TORCH**

Link: <http://abn.com/1NOFYz9>

Client: **ABN Amro**  
Domain: **Compliance**

Use Case:

## ***Asset Audit Trail in Real Estate Rehypotheccation***

Link: <http://abn.com/2h2jOnW>

### **What**

- There was a need to share critical information about property valuation around a network of partners involved in rehypotheccation process (eg. Bank, Property Owner, Valuer)
- Updates to the property owner profile need to be agreed by all parties and an audit trail maintained - a lengthy and bureaucratic process which locks assets & capital over a considerable period of time

### **How**

- Blockchain used as a shared ledger of critical information about the property status and audit trail

### **Benefits**

1. Up to date information about property audit trail shortens the rehypotheccation process
2. Data inconsistencies across partner network is reduced to minimum
3. Enables efficient lower-cost Asset Quality Reviews (AQR)

# IBM

---

## IBM Global Financing





Client: **IBM Global Financing**

Domain: **Corporate Finance**

Use Case:

***Conflict Reconciliation***

Link: <https://youtu.be/0DSNdLDOZ5w>

## What

- IGF finances more than 4000 partners, continuously locking around \$100M
- Circa 25K disputes per annum with a single invoice value of 31K\$ and reconciliation time extended to 44 days
- Circa 2.9M invoices per year

## How

- Blockchain used for a comprehensive view of key operational data: Purchase Order > Transaction Approval > Shipments > Invoices > Remittances

## Benefits

1. Fewer disputes and faster settlement process
2. Reduction in dispute resolution time from 40+ days to under 10 days
3. Improved capital efficiency and freer flow of capital



[https://vimeo.com/183710850?cm\\_mc\\_uid=63805503527414843915938&cm\\_mc\\_sid\\_50200000=](https://vimeo.com/183710850?cm_mc_uid=63805503527414843915938&cm_mc_sid_50200000=)

Client: **China UnionPay**  
Domain: **Corporate Finance**

Use Case:

**Loyalty Points Exchange**

Link: <http://ibm.co/2cX88xH>

## What

- Bonus points cannot be freely exchanged among different banks and go unused because of strict policies and limited selection of goods for exchange
- Bonus points from flight mileage, mobile phone bills, gas cards and food and beverage purchases

## How

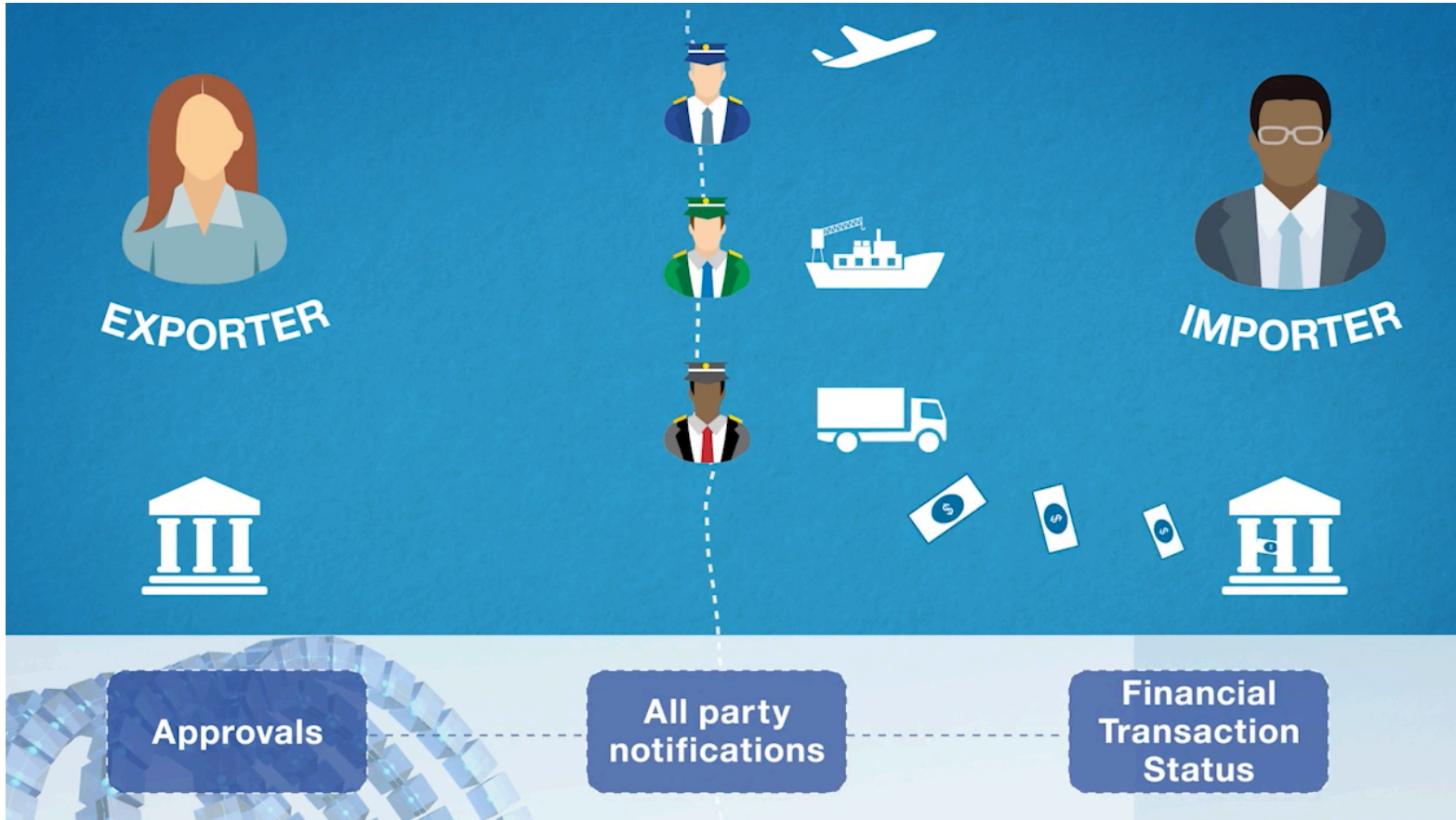
- Blockchain used as loyalty bonus points exchange platform
- Integration of partner institutions into the new platform

## Benefits

1. It is now possible for card holders to go to any offline supermarket equipped with POS devices to exchange bonus points for commodities by direct scanning

# Blockchain for Trade Finance

Link: <https://youtu.be/JEYO8RuS4fM>  
<https://youtu.be/vWnFei-ugT8>



***“Diamonds are a global problem, in terms of document tampering and fraud... in London it’s a \$2 billion problem.”***



# The Kimberley Process:

a joint governments, industry and civil society initiative to stem the flow of conflict diamonds

source: kimberleyprocess.com



everledger

<https://youtu.be/96Rq2iCymQo>

# Additional Materials

Blockchain, smart contracts and DAO : <http://bit.ly/2gzoJse>

Blockchain, DLT, digital money:

<https://innovationthinkers.com/2016/10/07/blockchain-dlt-digital-money/>

Future of Financial Infrastructure <https://www.weforum.org/reports/the-future-of-financial-infrastructure-an-ambitious-look-at-how-blockchain-can-reshape-financial-services>

<https://www.hyperledger.org/>

<http://www.ibm.com/blockchain/>



# Dziękuję

**Karolina Marzantowicz**

[@kmarzantowicz](#)

<https://twitter.com/IBMBlockchain>

