

## **Atelier B5**

Comment l'assurance évolue t'elle avec le Big Data?



#### Atelier B5

#### **Intervenants**

**Béatrice AUMONT** 

Luca COMPARINI

Léopold LARIOS

Hélène N'DIAYE

avis budget group

**Risk Manager** 

IBM

**Blockchain Leader - Industry Solutions Sales Team** 

**E** Edenred

**Risk Manager** 

GENERALI

Directrice en charge de la technique assurance

Modérateur

**Fabien RAVETTO** 

**MBDA** 

**Head of Corporate Social Network** 



## **B5 BIG DATA**

**LUCA COMPARINI** 



#### Relationship between Bitcoin and Blockchain

IBM





Retailer

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Blockchain = transactional platform



Digital asset (crypto-currency) is registered on a distributed ledger and value is transferred via a P2P network; transactions are grouped into blocks and processed only if consensus is reached









Retailers accept bitcoin (Amazon, Expedia, Dell, ..)

Blockchain technology is re-usable:

Risk / Opportunity of Disintermediation

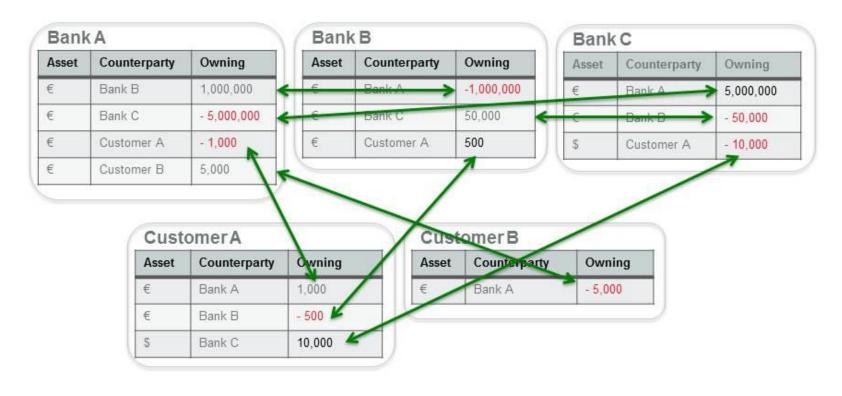
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Pseudo-anonimity, decentralised, censorship resistant Law and regulation; KYC / AML?

Reputation: for geek, volatile, risky (MtGox scandal)

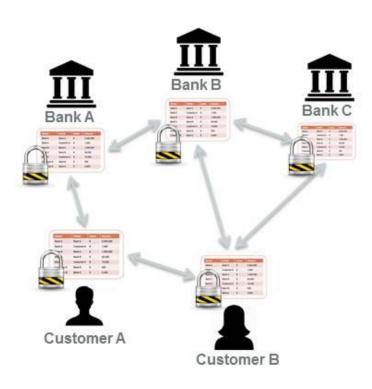
#### Ledgers and reconciliation





#### Blockchain: distributed, shared and replicated ledger





Owner	Holder	Asset	Amount
Bank A	Bank C	€	5,000,000
Bank A	Customer A	€	1,000
Bank B	Bank A	€	1,000,000
Bank C	Bank B	€	50,000
Bank C	Customer A	\$	10,000
Customer A	Bank B	€	500
Customer B	Bank A	€	5,000

#### Ledgeris shared and replicated:

- Single source of truth
- Ledgeris public
- Ledgeris immutable

Blockchain defined as "Trust Machine"

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#### Blockchain Use Cases





« Tractatus XI particularis de computibus et scripturis » Luca Pacioli (1494)

#### Transfer of Assets

- Suitable for recording transactions in a business network
- Assets could be tangible or intangible

#### Ledger & Traceability

- Proof of existence
- Audit and compliance
- Shared decentralised reference.
- Suitable for keeping track a set of information, shared across a business network
- Supply chain
- Reduce costs for certifications

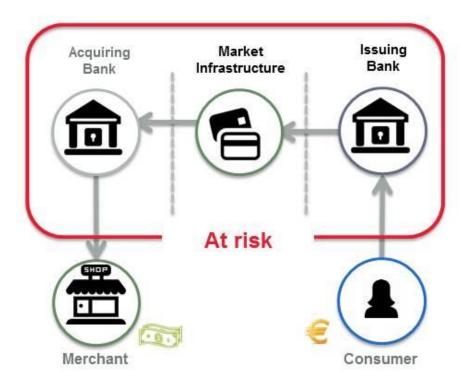
#### Self-executable contract

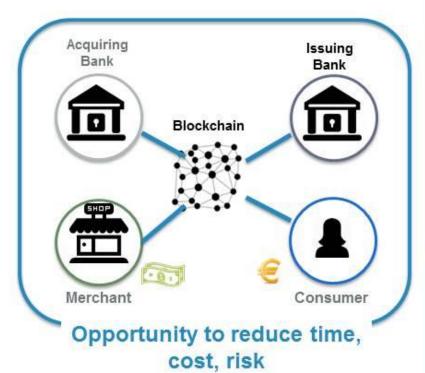
- Process optimization and costs reduction (operational excellence)
- Services automation for simplification and acceleration of time-tomarket (new services)



#### Blockchain disruption...





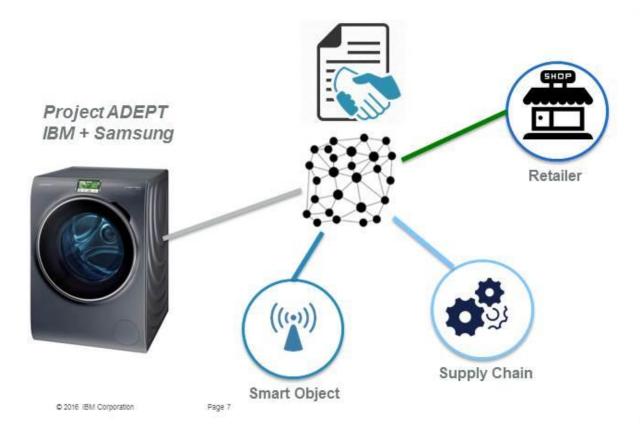


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#### ... could go beyond payment





#### **Smart Contract**

Digitalized self-executable contract with embedded business logic

Transfer ownership of the "thing of value"

Improve discoverability No mediation, no fraud

Self-Execute Contracts Reduce process time Reduce risk exposure

Reduce transaction cost

#### IBM vision on Blockchain

TEM

IBM's code was developed through the collaboration of more than 35 global IBM Researchers and software developers dedicated to the **Linux Foundation** project, and more than 100 technical architects focused on making blockchain ready for business. IBM offered its code to the **open source Hyperledger Project**.



Shared Ledger single source of truth



Consensus Modular protocol



Secure (Cryptography) tamper proof



Smart Contracts business logic



Permissioned Participants Identity



Digital assets Record depository



Private un-linkable identity



Confidential permission control



Audit-able prove identity & ownership



Scalable 100+ year architecture

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Black: « standard » properties of Blockchain Blu: added properties / uniqueness of IBM

#### Retail Banking: KYC

Client: Crédit Mutuel Arkéa

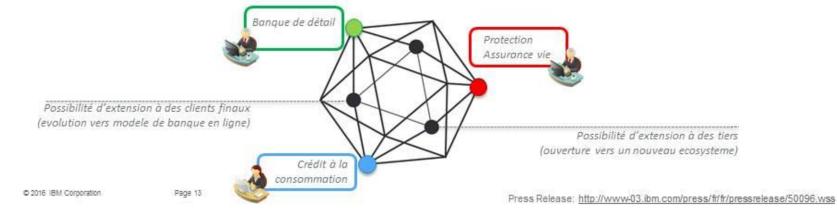


Avec 3,6 millions de clients et une gamme complète de services bancaires, financiers et d'assurance pour les particuliers, les entreprises ou les clients institutionnels, le Crédit Mutuel Arkéa veut améliorer, à l'aide de la Blockchain, l'expérience des clients et des conseillers.



Besoin: une plateforme KYC unique pour l'ensemble des domaines d'activité fournissant aux employés de CMA une vue consolidée des documents, justificatifs et autres certificats client collectés par les différentes entités du Groupe CMA, de sorte à réduire la duplication inutile des informations et des demandes.

Bénéfices: simplifier et fiabiliser les processus administratifs; améliorer la satisfaction client.



#### Supply Chain Financing: Gestion des litiges

IBM

Cas d'usage interne: IBM Global Financing

IBM Global Financing propose des solutions de financement à son réseau mondial de 4,000 fournisseurs et partenaires commerciaux. Les partenaires bénéficient de lignes de crédit pour financer leurs achats auprès de nos fournisseurs. En 2014, IBM a financé près de 3 millions de transactions pour un montant de 44 Milliards de Dollars, tout en gérant environ 25,000 litiges.

Besoin: un registre de transactions combinant toutes les informations contenues dans les bases de données des partenaires, fournisseurs, transporteurs, banques et d'IBM. Ces registre fiable et permanent irréfutable et immuable de chaque transaction, nous améliorons de nombreux paramètres opérationnels. La décentralisation facilite cette mise en place et son évolution au fur et à mesure de l'accroissement du nombre d'utilisateurs.

Bénéfices: réduire le délai de règlement, le nombre de conflits et leur temps de résolution. In fine, pouvoir libérer une somme importante de « working capital » bloquée en raison de conflits quotidiens (estimés à 100 Millions de dollars).



Press Release: http://blogs.wsj.com/cio/2016/07/29/ibm-set-to-launch-one-of-the-largest-blockchain-implementations-to-date/
Demo on Youtube: https://www.youtube.com/watch?v=F0P7NM7d-ps

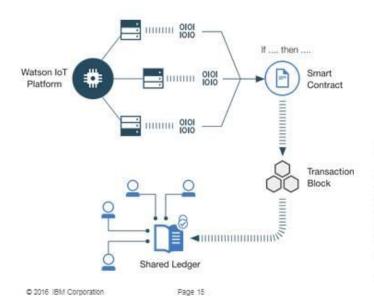
#### Supply Chain & Internet of Things



Freight Transportation / Component Tracking & Compliance / Log operational maintenance data

Démonstration interactive du suivi d'un conteneur et de son contenu au fur et à mesure de ses déplacements d'un bout à l'autre de la chaine logistique, via de nombreux transporteurs. La démonstration montre que la Blockchain peut garantir la traçabilité des événements liés à la chaine du froid tout au long du trajet d'un conteneur.

Demo interactive: https://discover-iot-blockchain.eu-gb.mybluemix.net/iot-blockchain.html





Kouvola, une ville Finlandaise connu pour son industrie de bois, représente le centre logistique ferroviaire le plus important de Finlande. Plus de 500 entreprises de logistique sont utilisées pour assurer l'ensemble des activités de l'industrie. Cette ville veut, à l'aide de la Blockchain, améliorer la gestion de son activité, simplifier les processus logistiques de transport, optimiser les liens entre les différents acteurs de la chaine de valeur.

https://www-03.ibm.com/press/us/en/pressrelease/49029.wss



#### **BIG DATA & RISK MANAGER**

**BÉATRICE AUMONT** 

avis budget group



# La voiture connectée



Accident reconstruction
Speeding Alerts
Journey Tracking
Geo-fencing









## Des données nombreuses et variées......

#### Données fournies lors de la location



















Données concernant le véhicule





#### Données reçues pendant ou après la période de location



Infractions routières





Accidents de la circulation

Géolocalisation en cas de vol du véhicule



# ... Pour une meilleure gestion des risques







Léopold LARIOS Risk Manager

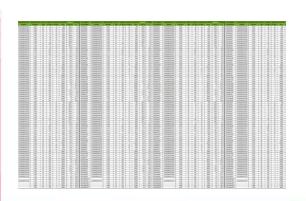
## INITIATIVES WITH BIG DATA TO SUPPORT THE RISK MANAGEMENT

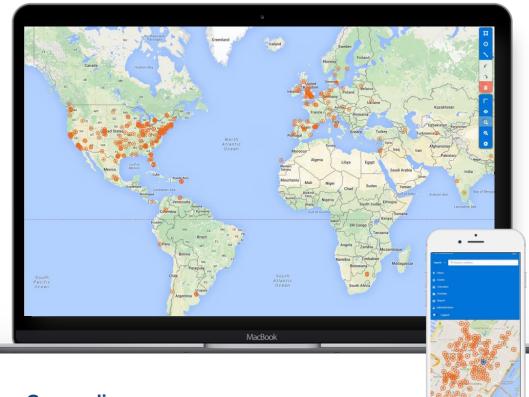


## Identification



Maptycs transforms the traditional data
view and reporting process by
presenting a massive amount of data
from complex spreadsheets in a best of
class user experience that empowers
the end users







#### **Geo-coding**

Automated process to set up massive portfolio on the map



#### **Geospatial awareness**

Spread view of threats for broader risk exposure analysis



#### **Proprietary Cloud GIS**

Drives high performance on mobile devices



## Latest technologies



For high performance and reliability





## Earthquake risk zones



Use of external data



#### Monitor natural disasters exposures

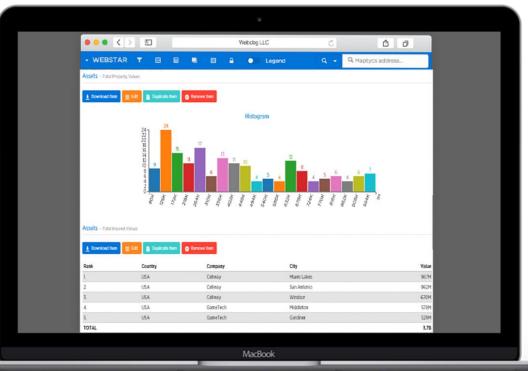
- √Real time monitoring
- ✓ real time alert
- ✓ Risk exposure analysis and what if scenario
- ✓ Earthquake, Weather, Floods, hurricane



## Customized data analytics mortues



Management of the exposures for both insured and insurers



#### Create and download reports in seconds

- √Gain Insight
- ✓ Improve Market Submissions
- ✓ Drive Client Retention
- √ Communicate with Senior

Management & other departments

- ✓ Spot Trends
- ✓ Negotiate Premiums
- ✓ Assess Potential Investments



## Healthy eating



Incentivize healthy shopping to reduce health care costs



#### EMPLOYEE ENROLLS

AND GET ACCESS TO
EDUCATIONAL
CONTENT
INCLUDING PRODUCTS'
SCORING & OFFERS



#### GOES SHOPPING

IN HIS FAVORITE PARTICIPATING GROCERY RETAILER



#### PAYS HIS BASKET

RECOGNIZED WITH HIS LOYALTY CARD



#### GETS REWARDS

BASED ON LAST **PURCHASES SCORING** 

#### **EDUCATION**

- Information & scoring of all food products available in supermarkets
- Very targeted communication (family status, disease state, allergies, shopping habits)

#### **INCENTIVES**

- Cashback according to the basket scoring and offers
- Funded by employers and **insurers** to reduce health costs
- Funded by **food manufacturers** and retailers to promote products

#### **KEY FACTS**

■ 70+ retail chains covering 8,000 national and local stores (incl. Walmart)



>200k+ scored products





## Payment of Loss in B2B

Corporate payment solutions - Leverage the Virtual Card technology

#### **VIRTUAL CARD TECHNOLOGY**



- Payment card without plastic: 16-digit account number with expiry date and CVC
- **Full control:** single or multiple use, amount, filtering by merchant category or merchant ID



#### **ONE CARD: ONE TRANSACTION**

Easy reconciliation, High security



#### ONE CARD: ONE CONFIGURATION

Full control of use (amount, validity, etc.)



#### NO NEED TO KNOW IBAN RECIPIENT

Easy to manager partner network



#### **INSTANT ISSUING & TRANSMISSION**

Direct relationship with the recipient



#### **FX OUTSIDE BANKS**

Optimized exchange rates for foreign currencies



#### **CORPORATE INTERCHANGE**

Revenue from each transaction instead of a cost

#### **KEY FACTS**

- Many use cases already addressed by Edenred leveraging in-house payment capabilities and expertise: Hotel booking platforms, E-commerce marketplaces, etc.
- Very large contract won by Edenred in the travel industry:

70 countries, >10k stakeholders



## **B5 BIG DATA**

**HELENE N'DIAYE** 





## Merci Les slides seront en ligne dès la semaine prochaine sur www.amrae.fr