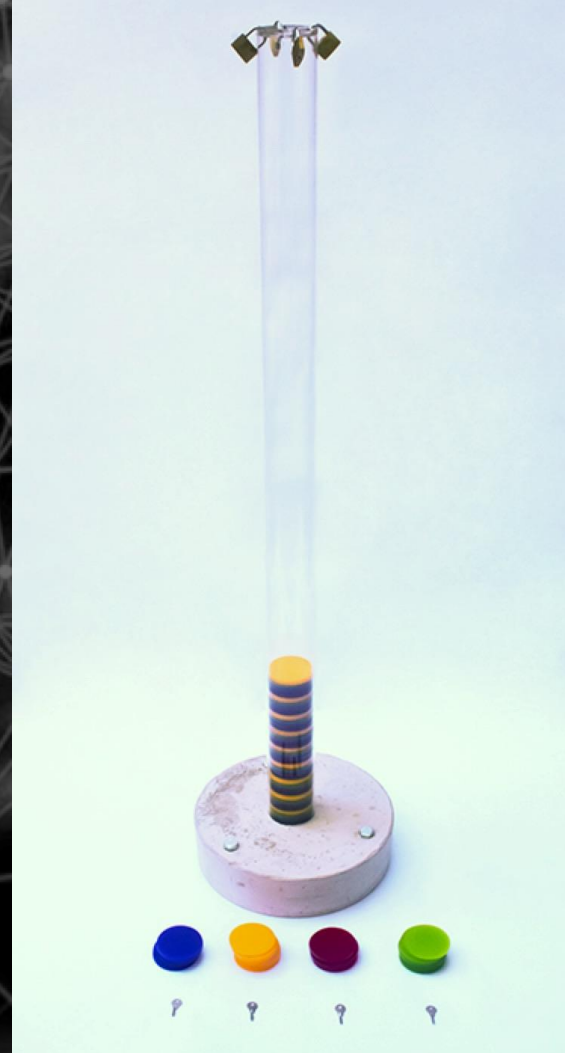




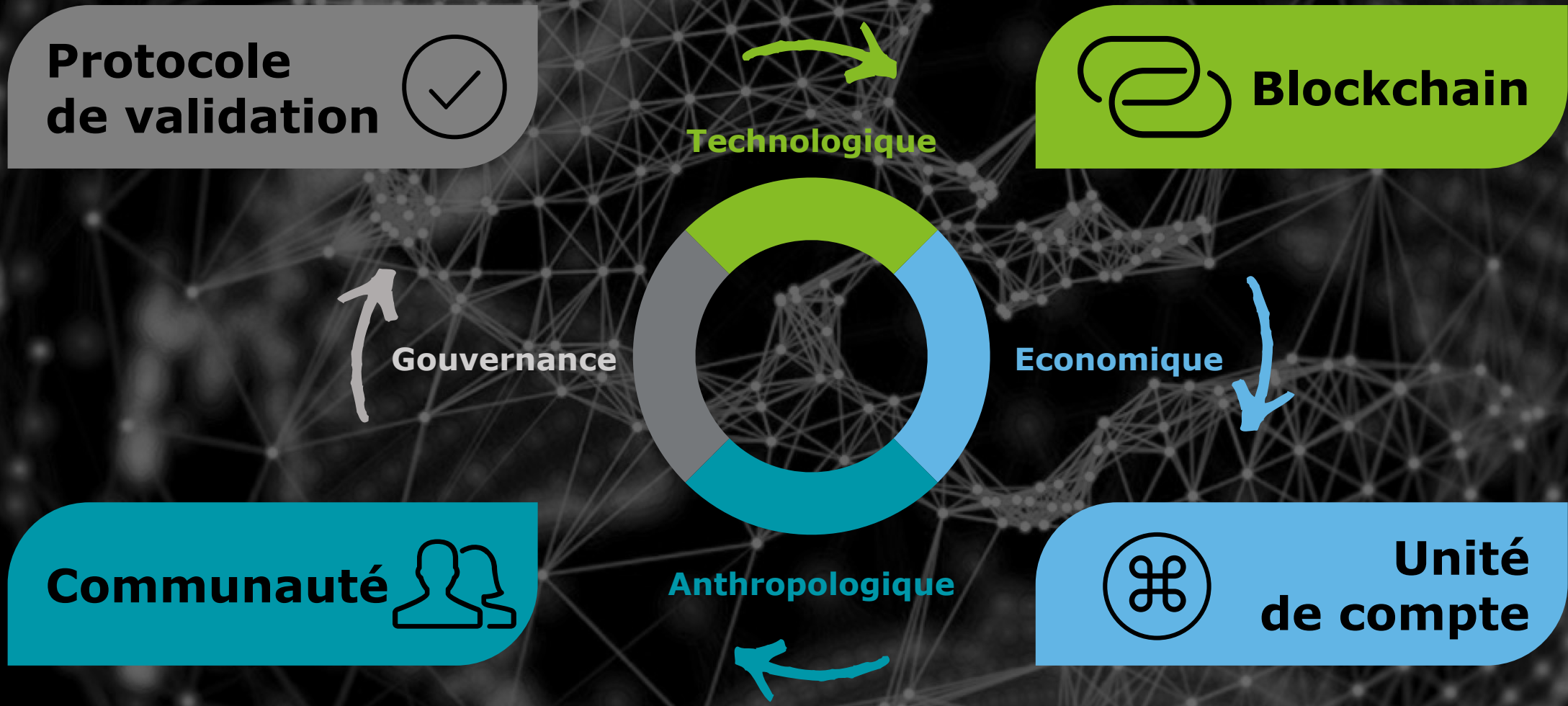
## **Institut des Actuaire**

GT Blockchain : cas d'usage en assurance

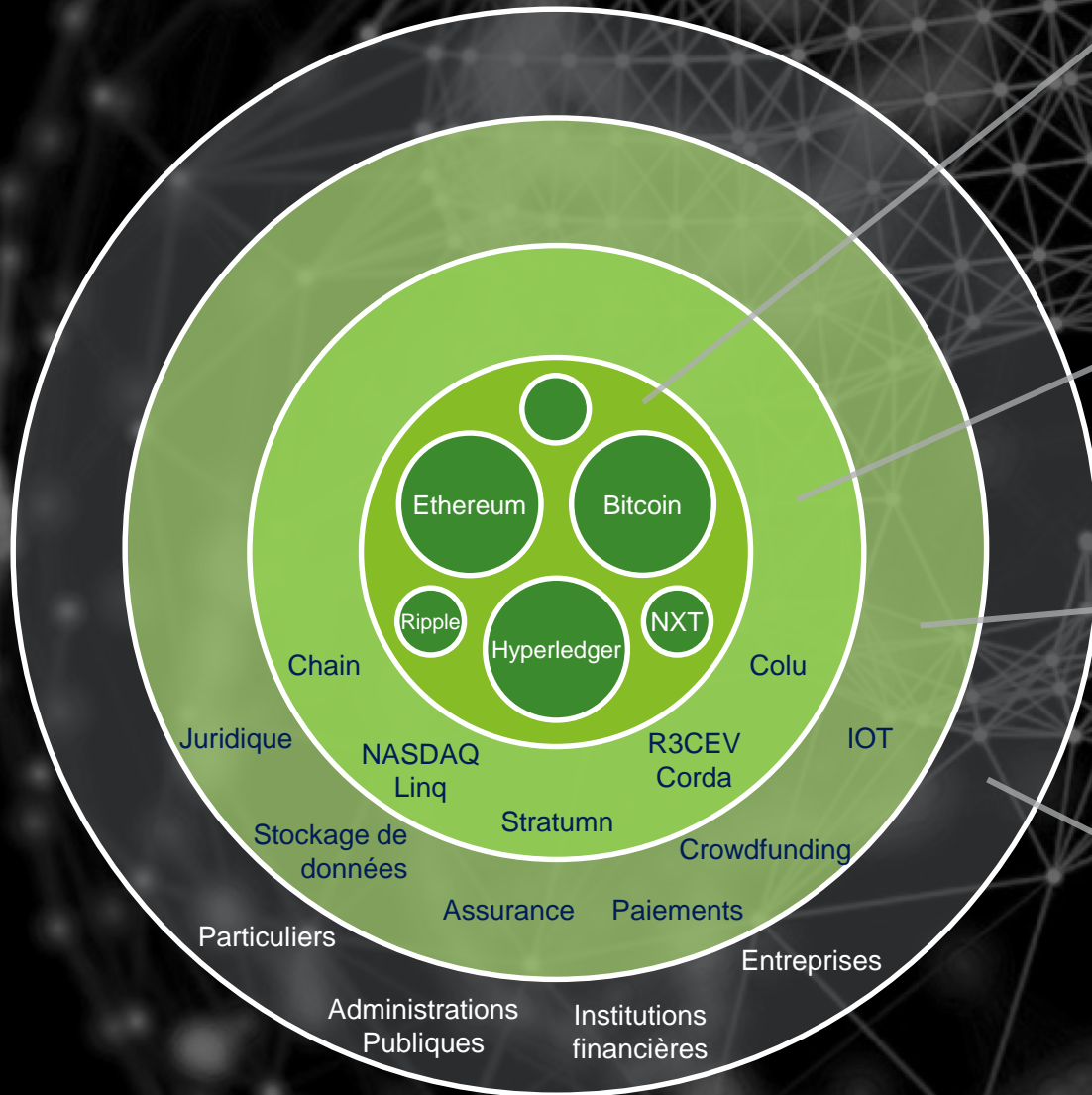
# Une évolution de l'autorité centrale



# Technologie, économie, anthropologie et gouvernance



# Acteurs de l'écosystème



## Blockchains



## Interfaces techniques



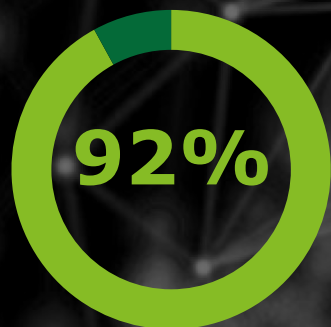
## Services et Applications



## Utilisateurs

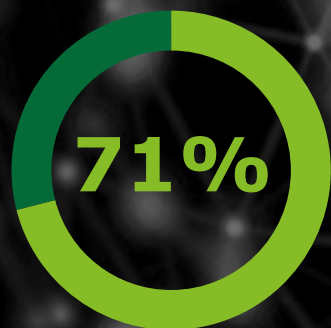
# Expérimentations dans l'industrie Assurance

**Une forte prise de conscience des institutions financières...**



des institutions financières ont conscience qu'elles seront impactées par la Blockchain<sup>1</sup>

**... Cependant un passage à l'acte limité**



n'ont pas encore commencé à travailler sur la Blockchain ou en sont encore en phase d'apprentissage<sup>1</sup>

**...en parallèle les startups initient un mouvement de transformation de l'Assurance par la Blockchain<sup>2</sup>**

DYNAMIS

stratumn

augur

safe share

RISKebiz

inchain  
Assurance pour la crypto économie

Flight Delay

Tribe-Chain

teambrella

BITPARK

InsurETH

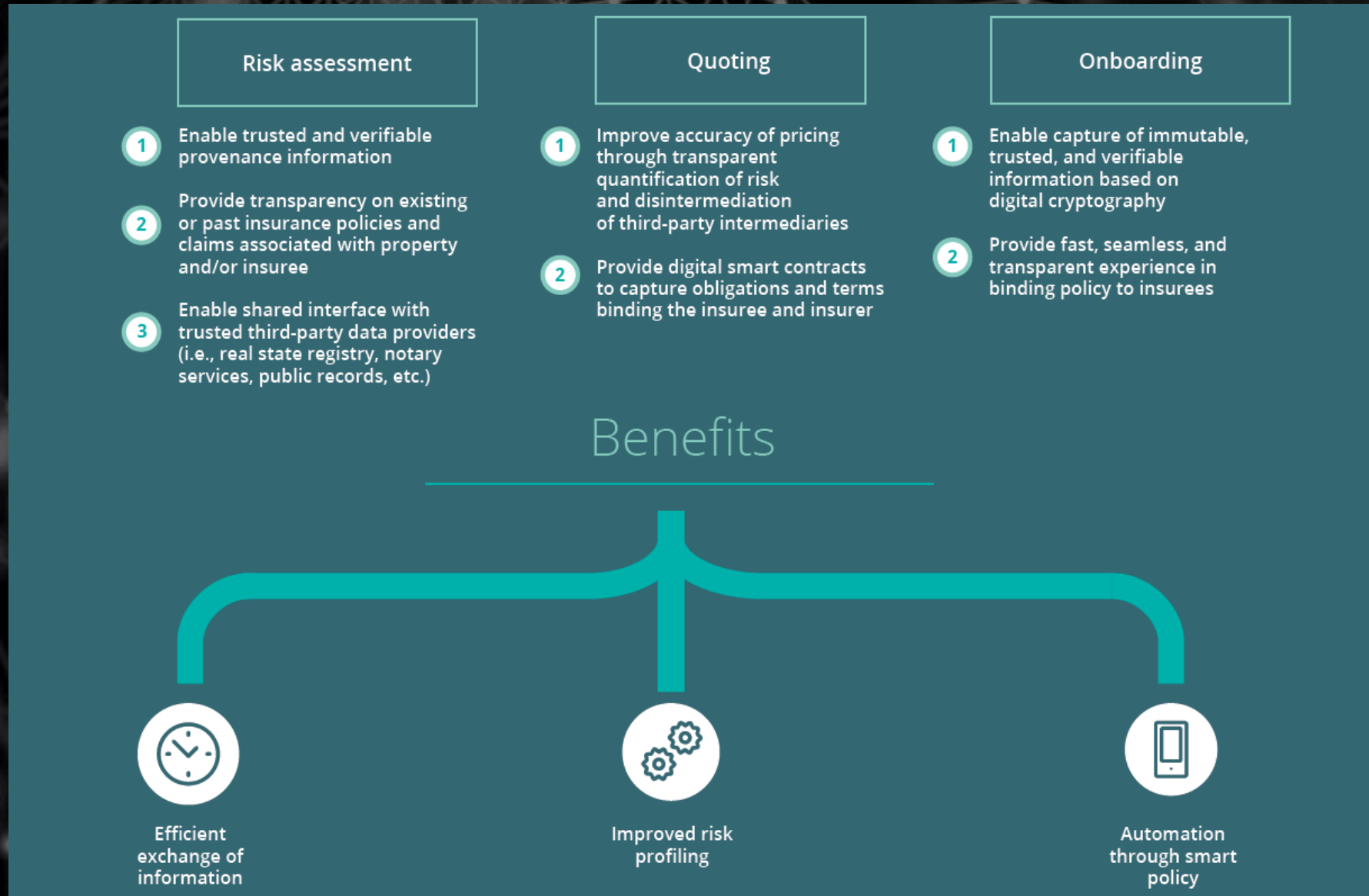
consuelo

WEKEEP

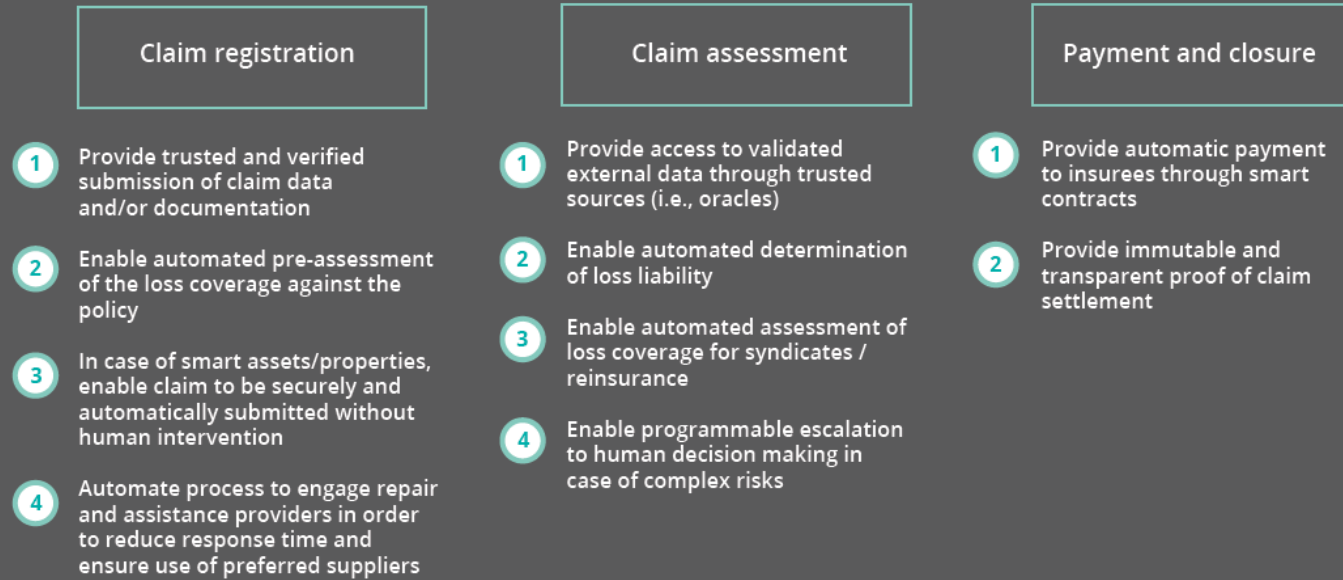
<sup>1</sup>Source : « Out of the blocks, Blockchain : de la frénésie au prototype », Deloitte, EFMA, mai 2016

<sup>2</sup>Source : Benchmark des expérimentations de Blockchainisation de l'assurance, Deloitte, oct. 2016

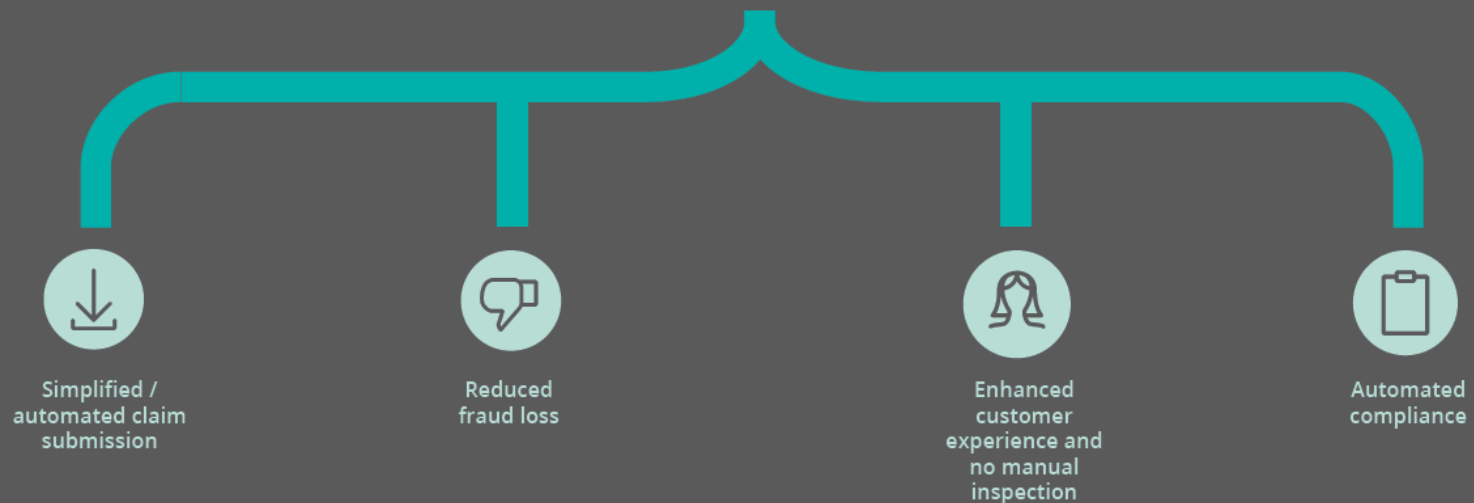
# Focus IARD : Bénéfices pour la souscription



# Focus IARD : Bénéfices pour la gestion de sinistres



## Benefits



# Épargne / Financement participatif des entreprises non cotées (Crowdfunding)



**BoleroCrowdfunding**  
Société du groupe KBC

DÉJÀ LEVÉ **€ 230.000**


153 %  
Min. € 150.000

Financé avec succès

TYPE	Obligation
FINANCEMENT MIN. SOUHAITÉ	€ 150.000
FINANCEMENT MAX. SOUHAITÉ	€ 230.000
INTÉRÊTS	4 %

Investir

302 INVESTISSEURS



**Hof ten Dormaal**  
Brasse de la bière exclusivement pour ses obligataires

ORDER BOOK - ANTWERP

ORDER BOOK  
User: 12345678

1.000

PENDING

- 5 shares - Neoscores BUYING...
- 1 share - IF BUYING...
- 2 shares - Vrumi SELLING...

CONFIRMED

- 2 shares - BenSbugS SOLD
- 5 shares - My Mini Factory SOLD
- 2 shares - Vrumi BOUGHT


PORTFOLIO MARKET ORDER BOOK



# Assurance de l'économie du partage

## Interface Chatbot

**LenderBot** Manage + New Message

**LenderBot** 3:57pm  
  
**Nikon D3300**  
Thanks! I've registered the Nikon D3300 with serial number 983558 to your name.

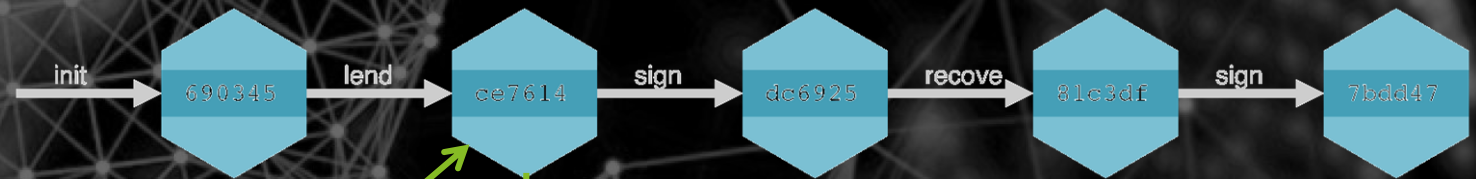
**LenderBot** 3:57pm  
Would you be interested in insuring and lending your Nikon D3300 to your friends?

**Julien Maldonato** 3:58pm  
Yes, sign me up!

**LenderBot** 3:58pm  
Thanks, Julien. Would you like to lend your Nikon D3300 now?

**Julien Maldonato** 3:58pm  
Yes

**LenderBot** 3:58pm  
Who would you like to lend it to?



## Traces dans chaîne du Bitcoin

**BLOCKCHAIN** info Accueil Graphiques Statistiques Marchés API Portefeuille Recherche Français

### Transaction

Afficher les informations d'une transaction bitcoin

755d160a0bfee6364b9b2328837429f4f50c3a44884dd418821b028e9bbc08be

1HadYsLg1r3fFh5QsHq3fue4XB5rUA2hJ2 → 1HadYsLg1r3fFh5QsHq3fue4XB5rUA2hJ2 0.14995 BTC  
Impossible de décoder l'adresse de sortie 0 BTC  
0.14995 BTC

Récapitulatif		Entrées et sorties	
Taille	235 (octets)	Total des entrées	0.1501 BTC
Date de réception	2016-08-28 20:12:32	Total des sorties	0.14995 BTC
Inclue dans les blocs	427267 (2016-08-28 20:12:32 + 0 minutes)	Taxes	0.00015 BTC
confirmations	12539 confirmations	Estimation des BTC échangées	0 BTC
Relayée par l'IP	50.2.186.99 (whois)	scripts	<a href="#">Voir les scripts et coinbase</a>
Visualiser	<a href="#">Voir le graphique</a>		

# Assurance annulation / retard de voyage



## Your policy

You are about to apply for a policy for flight  
**SQ-319 on 2016-09-12**

The table below shows the probabilities of flight delays and expected payouts.

Enter the amount of your premium in ETH. Minimum is 0.5 ETH, maximum 5 ETH.

Choose your flight by selecting origin and destination airports

Delay in minutes

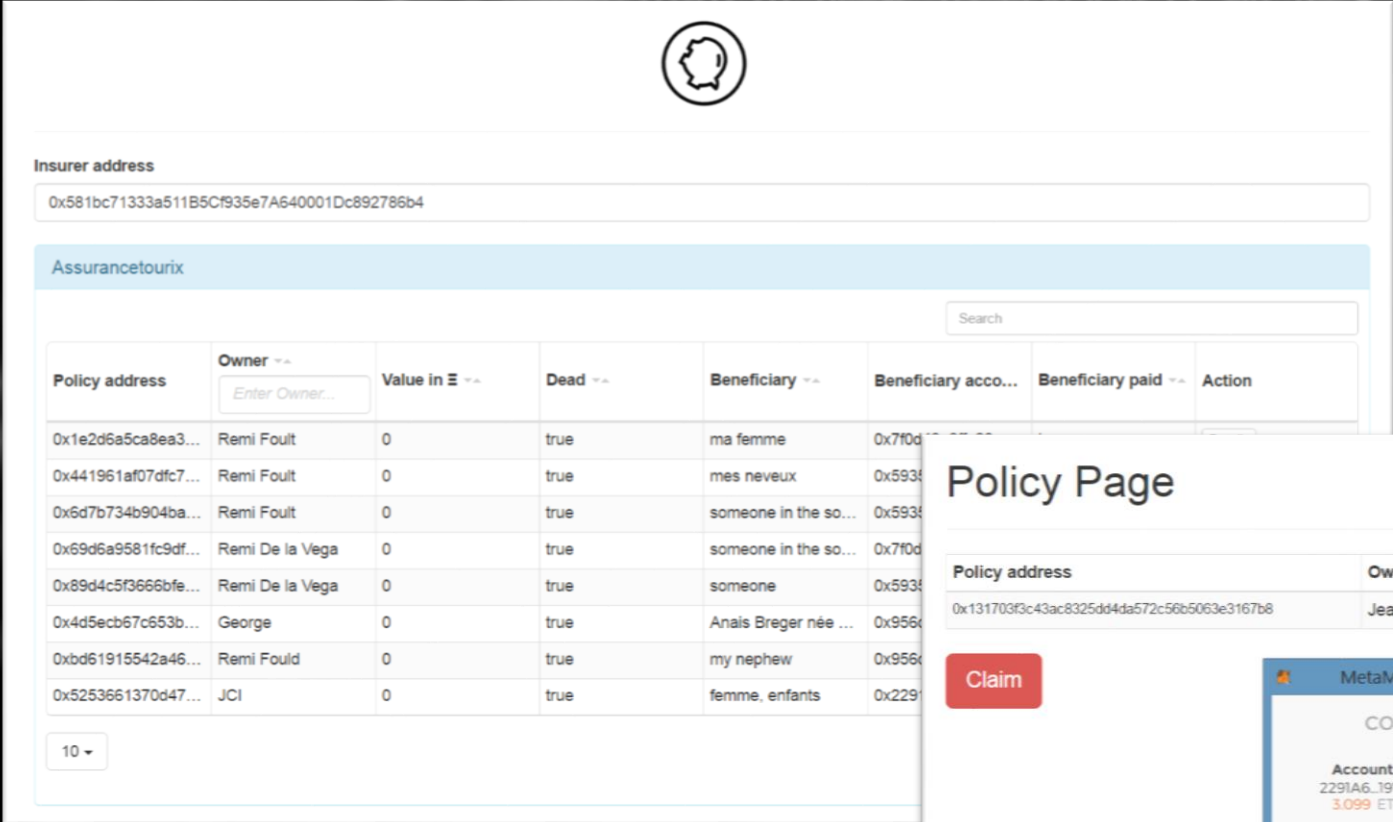
15 - 29	30 - 44	45+	Cancelled	Diverted
20.34%	6.78%	6.78%	0.00%	0.00%
0.95€	1.43€	2.86€	4.77€	4.77€

0.5

Apply

DESTINATION	FLIGHT	GATE	REMARKS
BERLIN	LH543	09	CANCELLED
NEW YORK	AA978	28	CANCELLED
TORONTO	AC902	11	CANCELLED
MADRID	IB342	15	CANCELLED
BEIJING	CX654	02	CANCELLED
HOUSTON	AA384	08	CANCELLED
PARIS	AF893	14	CANCELLED
SYDNEY	KL242	23	CANCELLED

# Gestion des prestations d'assurance vie



Insurer address  
0x581bc71333a511B5Cf935e7A640001Dc892786b4

Assurancetourix

Policy address	Owner	Value in €	Dead	Beneficiary	Beneficiary acco...	Beneficiary paid	Action
0x1e2d6a5ca8ea3...	Remi Foult	0	true	ma femme	0x7f0d...		
0x441961af07dfc7...	Remi Foult	0	true	mes neveux	0x5933...		
0x6d7b734b904ba...	Remi Foult	0	true	someone in the so...	0x5933...		
0x69d6a9581fc9df...	Remi De la Vega	0	true	someone in the so...	0x7f0d...		
0x89d4c5f3666bfe...	Remi De la Vega	0	true	someone	0x5933...		
0x4d5ecb67c653b...	George	0	true	Anais Breger née ...	0x9564...		
0xbd61915542a46...	Remi Fould	0	true	my nephew	0x9564...		
0x5253661370d47...	JCI	0	true	femme, enfants	0x2291...		

Liquidation automatique en cas de décès

### Policy Page

Policy address	Owner	Value in €	Dead	Beneficiary	Beneficiary account	Beneficiary paid
0x131703f3c43ac8325dd4da572c56b5063e3167b8	Jean Paul	10	true	my wife	0x2291a6f40f5bb137716fb43c6afe5c6dffe31971	false

[Claim](#)

MetaMask Notification

CONFIRM TRANSACTION

Account 3  
2291A6\_1971  
3.099 ETH

131703\_67b8

Amount: 0 ETH

Max Transaction Fee: 0.000833 ETH

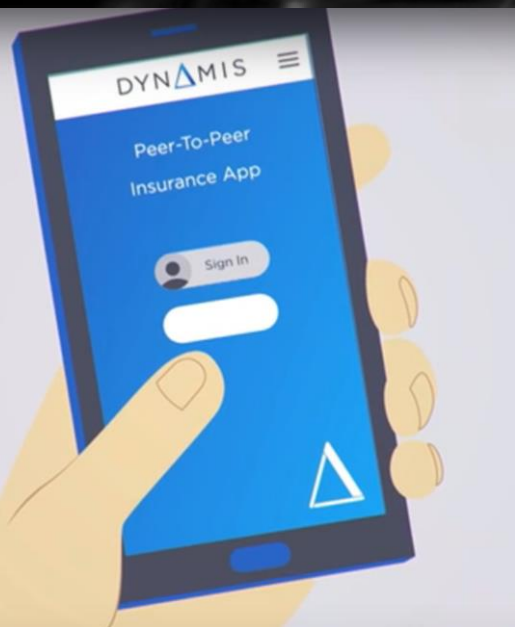
Max Total: 0.000833 ETH

Data included: 4 bytes

[ACCEPT](#) [REJECT](#)

# Assurance collaborative et blockchainisée

DYNΔMIS



DYNΔMIS Logged in as User

Create Account

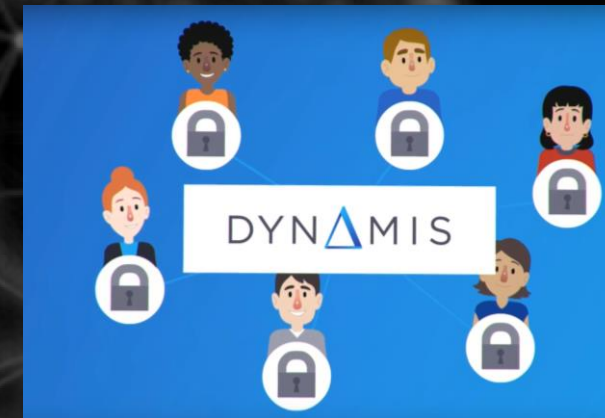
User

Email: John Dav

User name:

Password:

New User



DYNΔMIS Logged in as User

Online Identity

User

New Claim

Start

# Assurance collaborative et blockchainisée



## RISK

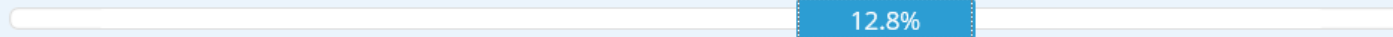
➤ Auto-reduction of Risk by **0%** after 6 claim-free months

🕒 1h: 0.2% 🕒 72h: 15.6%

▼ Auto-increase of Risk by **0%** after a claim

🕒 1h: 0.2% 🕒 72h: 12.8% ?

Your Vote:



12.8%

💬 Discussion (0)

➤ Re-voting on Risk upon a claim with expenses over **\$1,000**

➤ Requests for re-voting on Risk are **allowed**

## All-Teams Voters Rating

#	Q Name	Proxy Rank	
--	John Smith New York, NY, USA	0.00	<a href="#">Opt Into Rating</a>
1	Albert Einstein Princeton, NJ, USA	92.91	<a href="#">Invite to Team</a>
2	Margaret Thatcher London, United Kingdom	52.87	<a href="#">Invite to Team</a>
3	Leonardo da Vinci Florence, Italy	25.20	<a href="#">Invite to Team</a>
4	Abraham Lincoln Washington DC, USA	14.36	★ In My Proxies
5	Pablo Picasso Paris, France	12.45	<a href="#">Invite to Team</a>
6	Ronald Reagan Washington DC, USA	4.71	<a href="#">Add to My Proxies</a>
7	Jimmy Carter Washington DC, USA	0.00	<a href="#">Add to My Proxies</a>

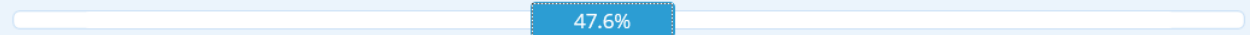
## Claim 1028074 ( 24 Jul 2016)

### Voting: Reimbursement

Voting ends in 5 days

Team's Vote: **80%** ? \$800 ?

Your Vote: **47.6%** \$476 ?



47.6%

➤ [Help Me Decide](#)

Claim Amount: **\$1,000** =  $(\$1,000 - \$0) * 100\%$

Estimated Expenses: **\$1,000**

Deductible: **\$0**

Coverage: **100%**

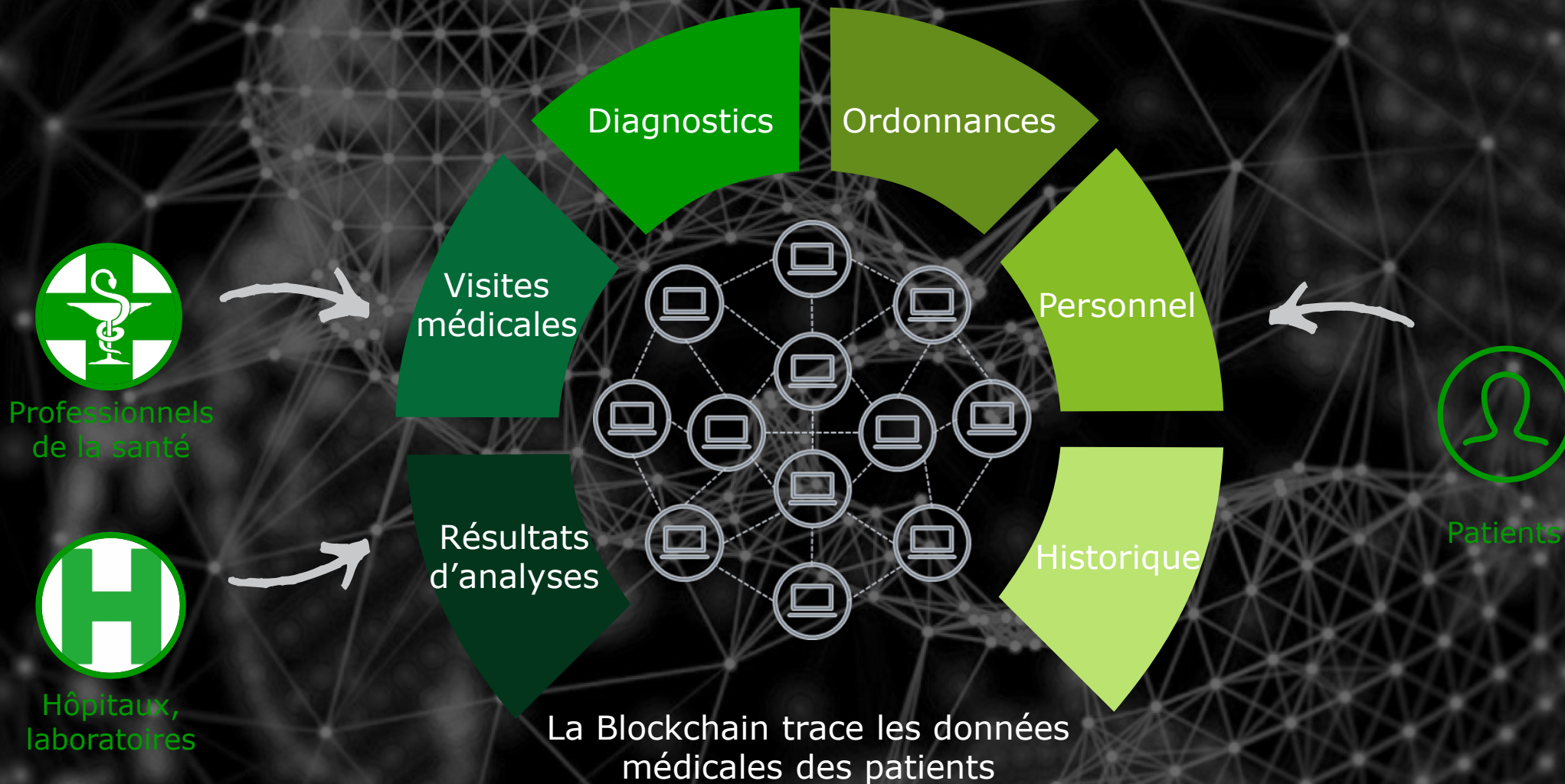
Incident Date: **30 Oct 2016**



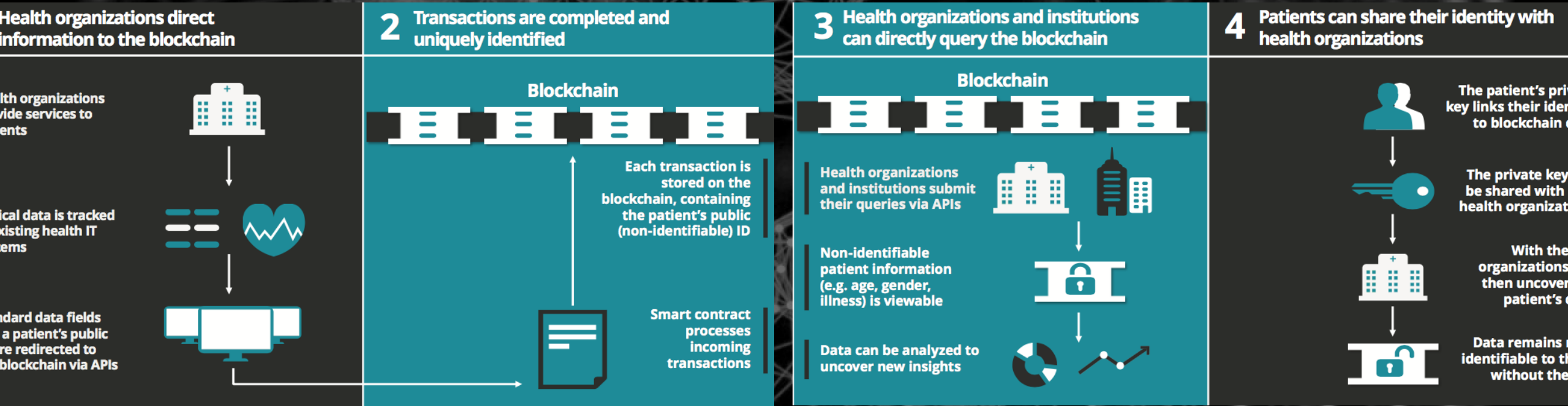
James K. Polk · Honda Civic 2005 · yesterday

Got into a little fender bender. I ballparked what it might cost to fix - probably within \$1000, right?

# Gestion des données médicales



# Gestion des données santé



**Deloitte.**