

Innovations in finance: What Bitcoin is really about

[Download the Cryptocurrency report here](#)

Innopay consultants zijn innovatie-experts in betalen, digitale identiteit and e-business



- Opgericht in 2002
- Partners: Shikko Nijland & Douwe Lycklama
- Hoofdkantoor in Amsterdam
- 20+ consultants plus internationaal netwerk van geassocieerde experts
- Drie kern praktijken: betalen, digitale identiteit en E-Business
- Strategy, Co-creatie and Transformatie
- Focus op transactie en dienstverlenende sectoren
- ING, Western Union, Mastercard, Paypal, CCV, EMS, Rabobank, Equens, Worldline, BVN, iDEAL
- Geografische focus op EU
- Lid van o.a. EBA, ECP and EPCA
- Founding member HollandFintech

1 December 2014 Last updated at 15:30 GMT



HSBC severs fund

By Mike Weir
BBC News

Dutch Central Bank warns about Bitcoin and other virtual currencies

EUR per 1 XBT

XBT/EUR


4 mrt. 2014 01:00 - 3 mrt. 2015 08:09

last: 240,3796 low: 139,5203 high: 492,9305



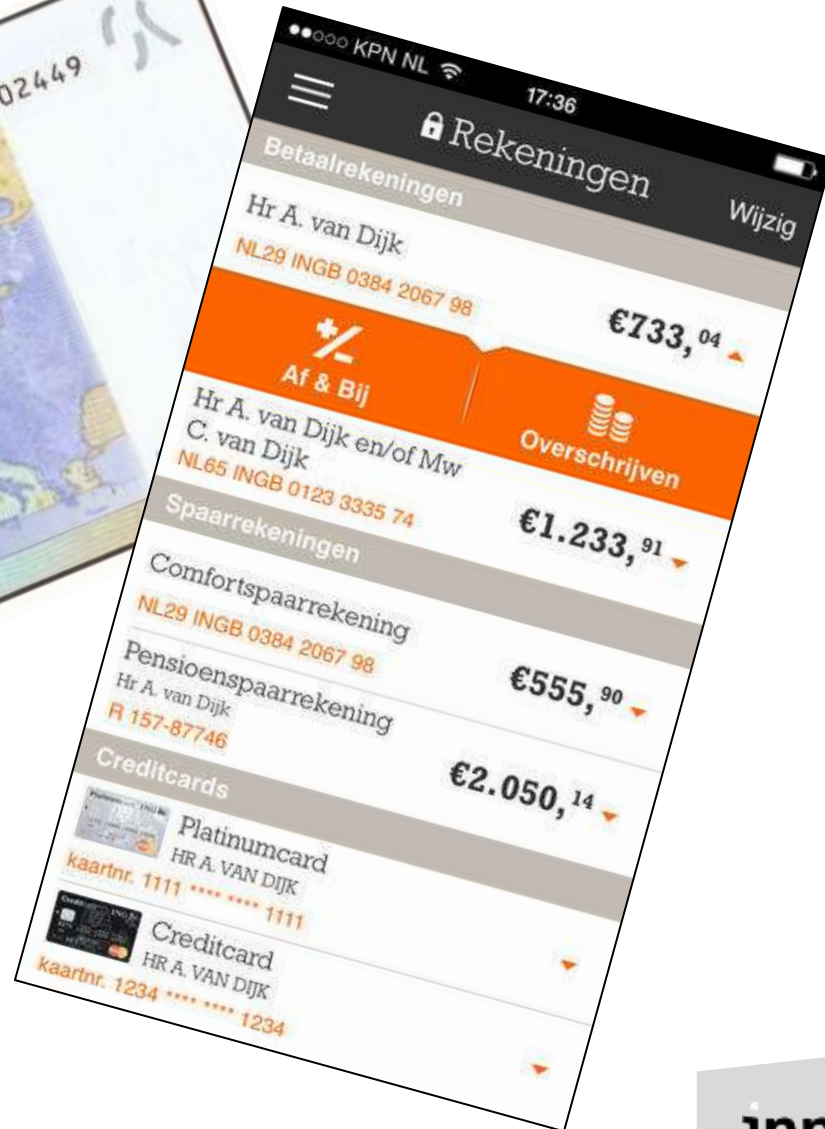
Storyline and main conclusion

1. What is Money?
2. What is Bitcoin about?
3. An example of what Bitcoin could mean
4. When will everybody use it? How?
5. So, what is the most important thing to take home?

- 
- **Bitcoin is about a technology (and a bit about a coin);**
 - **The technology is in its infancy;**
 - **Search companies that will be successful in the Bitcoin sphere and invest in them.**

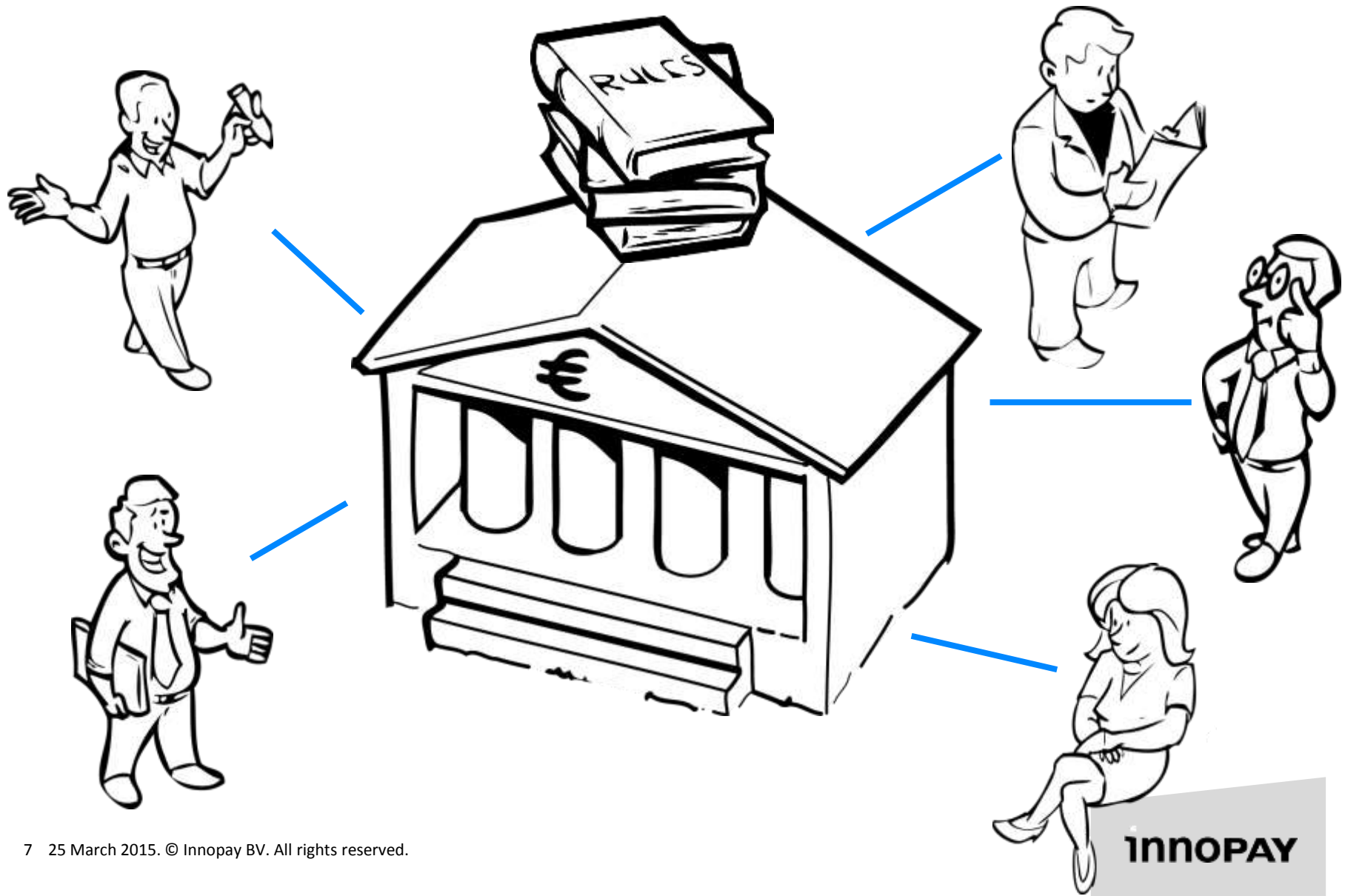
1: What is money?

We collectively agree that money has value



Value?

We trust the banks to keep score according to the rules



Meanwhile, banks keep spreadsheets that say how much is in your account: a Ledger

	A	B	C	D	E	F	G
1	14104000	Base Rent					
2							
3	Date	Description	Tp	Ref.	Batch	Amount	Balance
4	9/30/2000	Balance Forward				-142,189.89	-142,189.89
5	10/2/2000	Breathless Aerobics Corp.	PM	650	22363	-3,766.25	-145,956.14
6	10/2/2000	Callaway Exports	PM	654	22363	-780.00	-146,736.14
7	10/2/2000	Dr. Robert Synder	PM	8362	22363	-4,393.50	-151,129.64
8	10/2/2000	Ralph Taxar, CPA	PM	8362	22363	-4,072.50	-155,202.14
9	10/4/2000	Bendum Chiropractic	PM	1360	22391	-1,851.67	-157,053.81
10	10/5/2000	Breathless Aerobics Corp.	PM	297	22387	-1,150.00	-158,203.81
11	10/11/2000	Pisa Architectural	PM	512	22397	-788.33	-158,992.14
12	11/1/2000	Breathless Aerobics Corp.	PM	262	22627	-1,150.00	-160,142.14
13	11/1/2000	Callav				.00	-160,922.14
14	11/1/2000	Dr. Ro				.50	-165,315.64
15	11/1/2000	Ralph				2.50	-169,388.14
16	11/3/2000	Bendu				1.67	-171,239.81
17	11/7/2000	Pisa A				.33	-172,028.14
18	11/14/2000	Ralph				5.65	-172,353.79
19	12/4/2000	Breath				.00	-173,503.79
20	12/4/2000	Callav				.00	-174,283.79
21	12/4/2000	Dr. Ro				.50	-178,677.29
22	12/4/2000	Pisa A				.33	-179,485.62
23	12/4/2000	Ralph Taxar, CPA	PM	300	22956	-1,223.33	-183,688.95
24	12/6/2000	Bendum Chiropractic	PM	1497	23148	-1,851.67	-185,540.62
25	12/31/2000	Breathless Aerobics Corp.	PM		23138	-72.23	-185,612.85
26	12/31/2000	Year-End Close:	**			185,612.85	.00
27	1/2/2001	Bendum Chiropractic	PM	1530	23317	-1,851.67	-1,851.67
28	1/2/2001	Callaway Exports	PM	264	23317	-780.00	-2,631.67
29	1/2/2001	Dr. William J. Kaplan	PM	813	23317	-2,431.67	-5,063.34
30	1/3/2001	Breathless Aerobics Corp.	PM	360	23315	-1,150.00	-6,213.34
31	1/8/2001	The Law Office	PM	331	23311	-2,762.50	-8,975.84





Conclusion:
Money is about collectively trusting
central organizations to manage a
shared ledger.



2: What is Bitcoin about?

Bitcoin is a network of unique addresses that are part of a single ledger



Address: 3J98t1WpEZ73CNmQviecrnyiWrn
qRhWNLy.



Secret code: 5Jbqxe3AisuHck95ysBPKVR9poq
noNwj3MJJaQ91mPKgTJKsdCJe



Compare with e-Mail:

Address: Gijs.burgers@innopay.com



Secret code:




Just like how you use an e-mail client, you use a Bitcoin client to send/receive bitcoins

The screenshot displays a Bitcoin wallet application window with a menu bar (File, Settings, Help) and a toolbar (Overview, Send coins, Receive coins, Transactions, Address Book, Export). The main content is divided into two sections: 'Wallet' and 'Recent transactions'.

Wallet

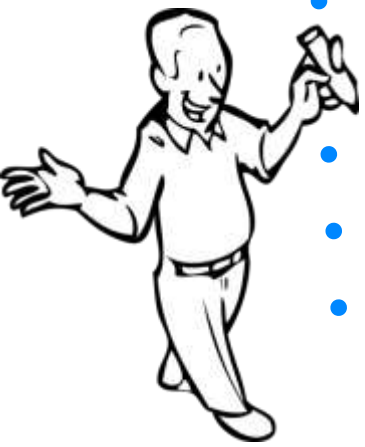
Balance:	0.00072234 BTC
Unconfirmed:	0.00 BTC
Number of transactions:	7

Recent transactions

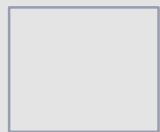
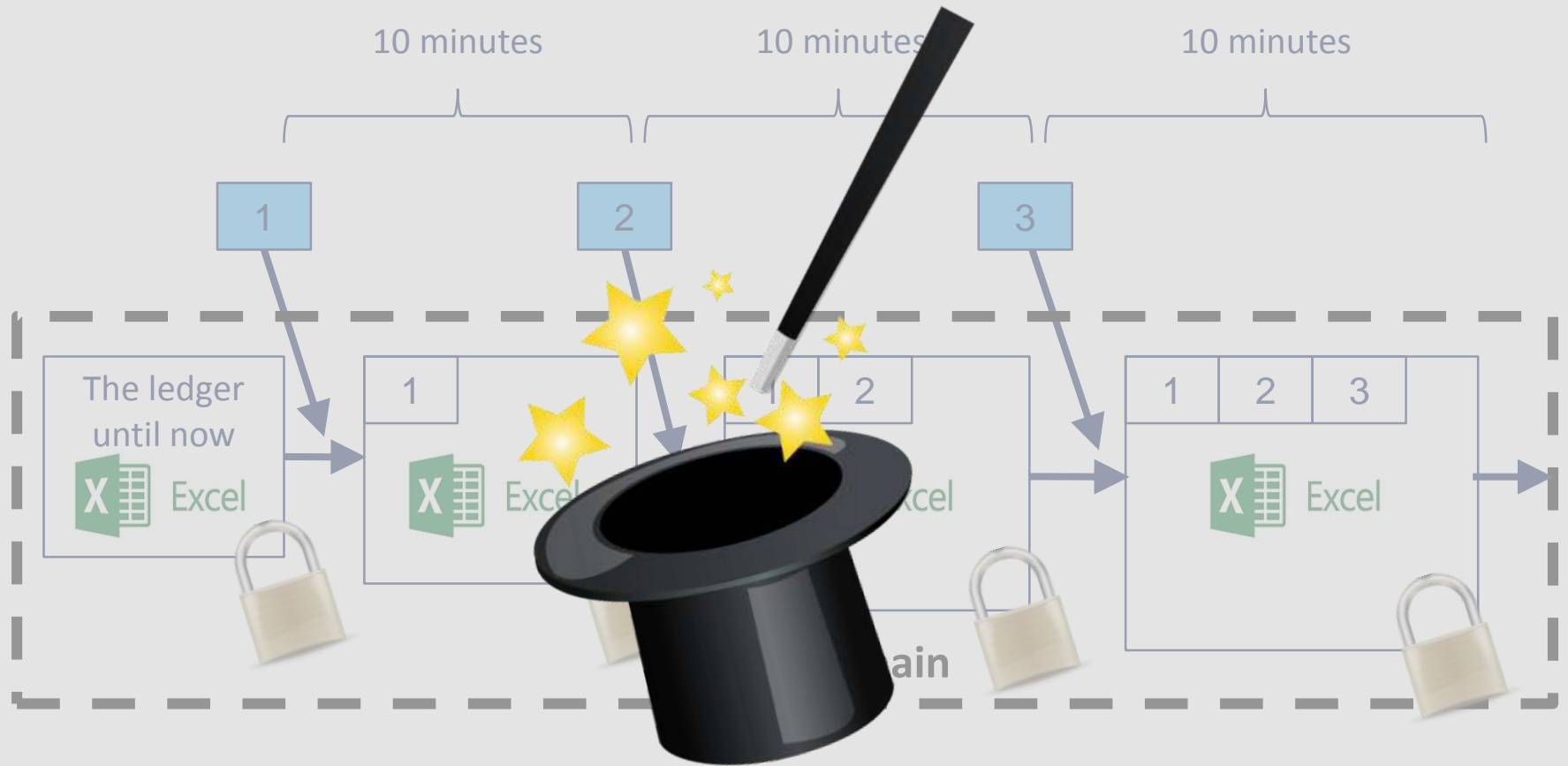
	2012-01-10 00:07	-18.2105 BTC
	(1EX2vQ8w6BN2Q1f7u8k5ouuz7d3VZzE7aZ)	
	2012-01-09 23:58	+18.21 BTC
	(17nrH9N6NeDHDp6ntbXfqWyRFecc3bZrup)	
	2012-01-09 23:20	-1.6205 BTC
	(1MjswGr6b6zF5Dy6mbnsMrxfCeaZNsZdN7)	

The “Blockchain” contains the ledger: It tells us which addresses contain bitcoins

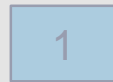
- 3HBrS6jzE3AJ4sZ3tFij1BmTcpFGgN86hA - 3.87 bitcoins
- 9DMr6tHVzY7AJ832sZij1cXsc4GGgM51N - 0.56 bitcoins
- 1Jg2SkDtNnDTQM8FHKYpJyyUfYVbPaFiXk – 1.20 bitcoins
- 17zNnPEBZnoNmDPS5M53xjL1szvHhjjeQC – 100.76 bitcoins
- 1KS2sWDuJ8S – 2000.00 bitcoins
- 1Kg4UwJNdDl – 5.56 bitcoins
- 1BpoCkcr6yCv – 3.94 bitcoins
- 1DwJGY5sd6F – 321.53 bitcoins
- 1Q744BpwuJ – 75846.32 bitcoins
- 123YKR2g5czuE3gjt6F14NqVLXLJXf8Yfq – 3.12 bitcoins
- 1Ng3RGJo3D1KuJFUJSwzzxCZ4YccfuTd2k – 8.34 bitcoins
- 1MPGXodxGDSexVBJnP8n14WqKH – 8.02 bitcoins



Every 10 minutes the latest additions to the blockchain are added to the blockchain



= Blocks with data on what changed when

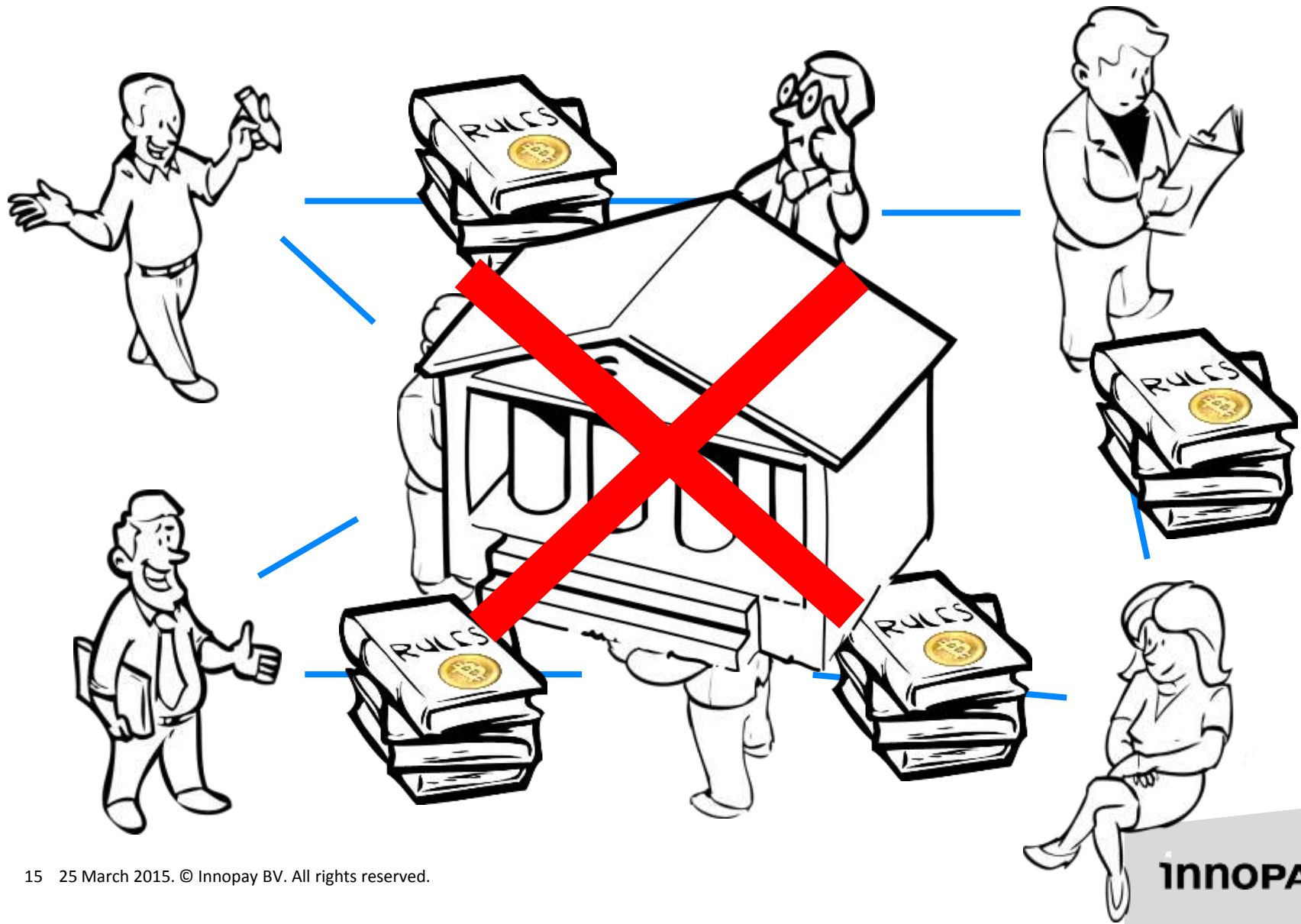


= Additions to the blockchain (new transactions)



= Constant re-encryption of all existing data

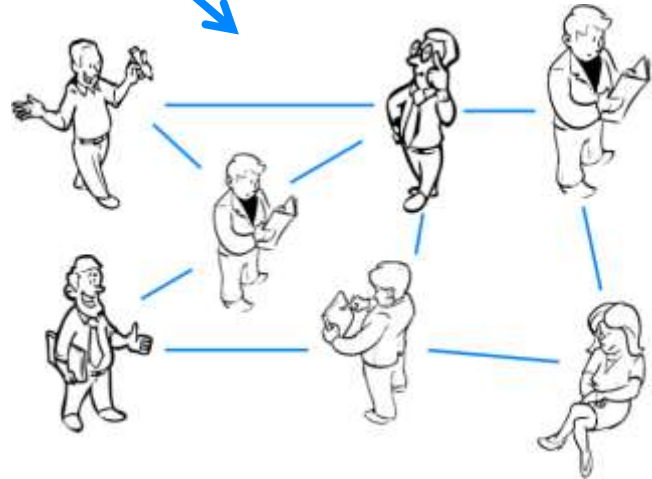
With Bitcoin, all participants collectively check and update the shared ledger (blockchain)



Conclusion:
Bitcoin is about
organizing consensus on the
contents of a shared ledger in a
decentralized & distributed
manner



Excel



3.
Ok, so what?

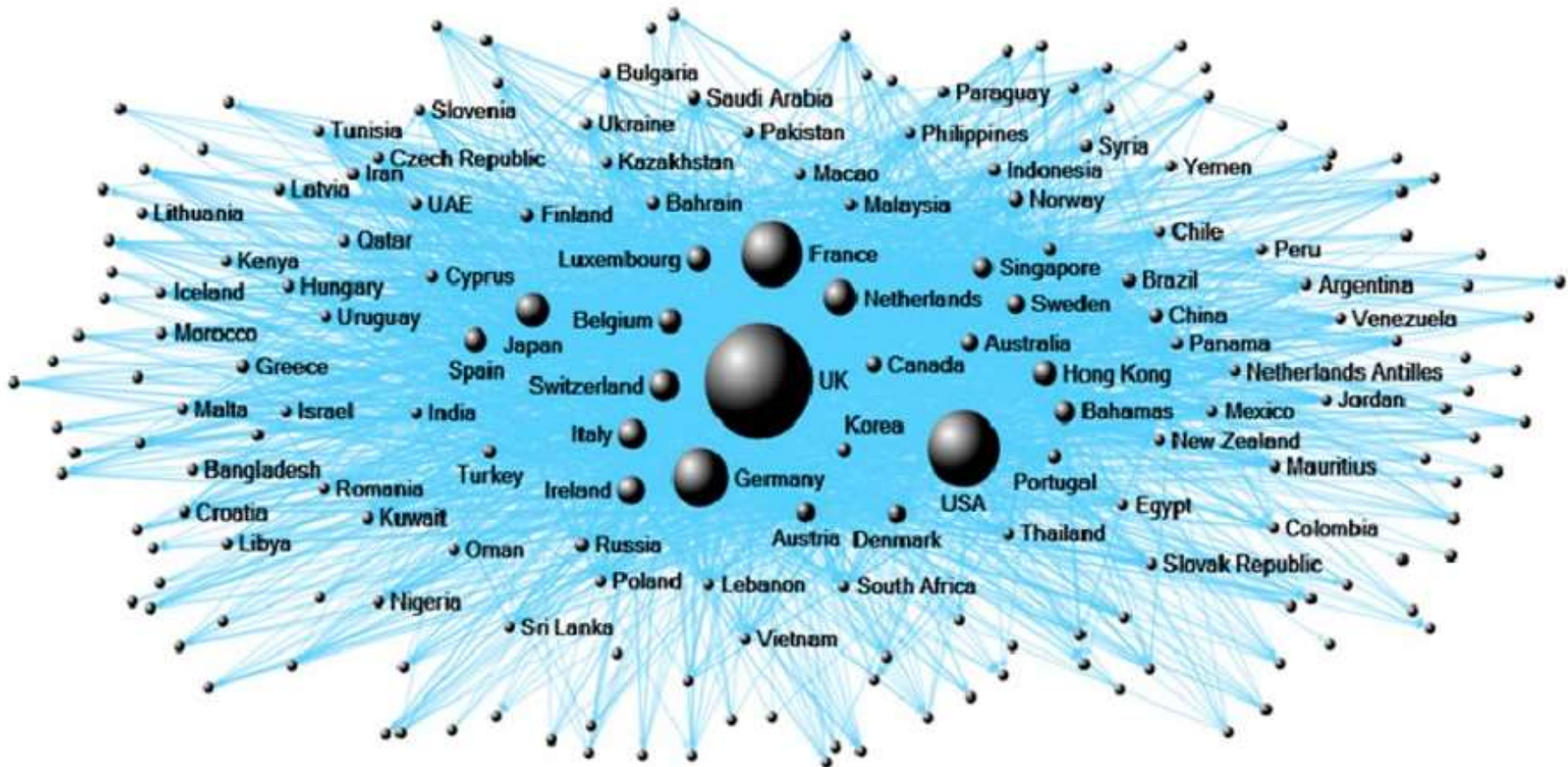
... Let's see an
example of what
Bitcoin could mean!

What if you... want to send 750 euros to Sri Lanka?

€ 750



Sending money with the current financial system costs time... and money



Source: Yahoo / AA News 2014

What if you could
send those same
750 euros **instantly**
for the price of 1
euro?

... That would be huge!

With
Bitcoin
technology
we can!

bitcoin is a decentralized consensus technology;
not just a currency



=



The technology can make transfers of anything that requires a certain consensus possible



And there are a lot more possibilities to think about



4.
Great. When will
everyone use it? How?

Right now, the technology is in its infancy: it will take time to build services that are usable



MAC OS 2014

```
76 total, 2 running, 1 stuck, 73 sleeping, 294 threads
0.90, 0.25, 0.10 CPU usage; 1.09% user, 4.72% sys, 83.48% idle
rux = 0, resident = 45M code, 200K data, 3040K linkedit.
rux = 953K, resident = 270M + 18M private, 124M shared.
13M wired, 362M active, 62M inactive, 755M used, 269M free.
977K 409205(10) pageins, 144518(8) pageouts

PID COMMAND %CPU TIME #th #PRI #PAGE RPRVT #SHRD #SIZE #SIZB
5318 screenshpt 0.0% 0:00.02 1 30+ 163 612K 3080K 2412K 171M*
5599 top 1.4% 0:00.00 1 19 20 800K 188K 1572K 10M
5499 bash 0.0% 0:00.00 1 14 19 256K 76K 908K 10M
5498 login 0.0% 0:00.01 1 17 35 344K 268K 1116K 19M
5488 bash 0.0% 0:00.00 1 14 19 248K 76K 892K 10M
5487 login 0.0% 0:00.01 1 17 35 344K 268K 1116K 19M
5456 Terminal 0.0% 0:04.04 1 160 231 4300K 16M 13M 262M
5442 adworker 0.0% 0:00.25 3 67 32 1256K 4056K 3820K 31M
5440 adworker 0.0% 0:00.22 3 51 36 876K 432K 2328K 31M
5428 usbmuxd 0.0% 0:00.00 2 21 26 204K 184K 694K 19M
5426 iTunesHelp 0.0% 0:00.07 2 52 49 402K 5032K 2509K 164M
5364 SecurityAg 0.0% 0:00.01 1 112 166 2392K 13M 6632K 248M
5363 authrpcd 0.0% 0:00.02 1 31 34 588K 2556K 1584K 29M
4656 notton 0.0% 0:00.00 29 314 791 21M 32M 62M 447M
4735 thruclnt 0.0% 0:00.00 1 0 25 24K 292K 134K 19M
4733 thruclnt 0.0% 0:00.00 1 0 24 0 242K 108K 10M
4732 thruclnt 0.0% 0:00.19 1 18 25 76K 292K 238K 10M
4730 thruclnt 0.0% 0:00.74 1 14 24 12K 292K 412K 10M
4708 vnet-brid 0.0% 0:00.00 1 15 24 0 104K 154K 20M
4706 vnet-dhcp 0.0% 0:00.03 1 10 25 52K 246K 184K 22M
4703 vnet-net1 0.0% 0:00.00 1 0 24 0 154K 54K 20M
4702 vnet-net1 0.0% 0:00.00 1 0 24 0 104K 54K 20M
4698 vnet-dhcp 0.0% 0:00.03 1 10 26 58K 246K 208K 22M
4692 vnet-net0 0.0% 0:00.12 1 0 29 88K 184K 312K 23M
4527 appleSpel1 0.0% 0:00.03 1 22 31 483K 6156K 508K 58M
```

UNIX 1972

Could you have invented YouTube (2005) in 2002? It was still unthinkable!

The screenshot shows a web browser window. On the left is the 'ilse.nl' website with a navigation menu. The main content area displays a YouTube video player. The video title is 'Susan Boyle - Britains Got Talent 2009 Episode 1 - Saturday 11th April'. The video player shows Susan Boyle singing into a microphone. Below the video player are various interaction buttons like 'Favourite', 'Share', and 'Playlists'. To the right of the video player is a sidebar with 'More From: UKAdvertChannel' and 'Related Videos'. The browser's address bar shows the YouTube URL. The top of the browser window shows the 'ilse.nl' logo and navigation links.

This page has been accessed 318979 times. The page was last modified 00:55 Sep 24, 2002.

Companies will find ways to put the technology to use

amazon.com[®]



bitpay

PayPal

ebay

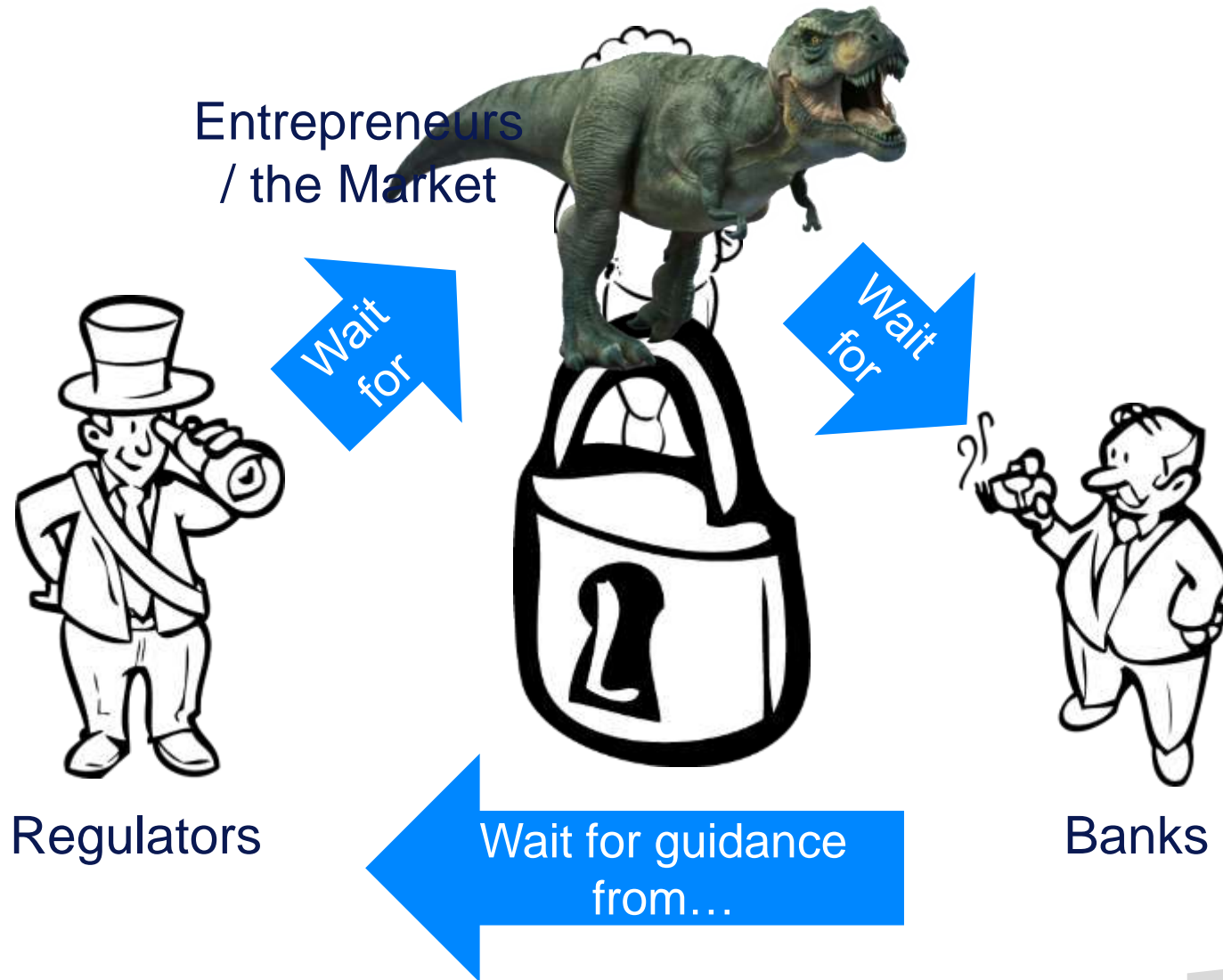


ethereum



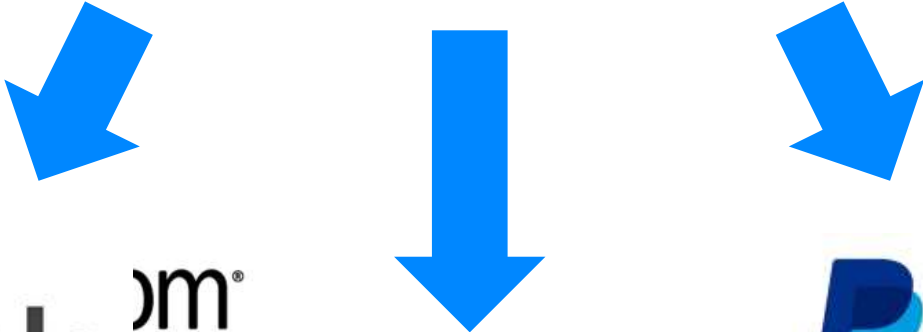
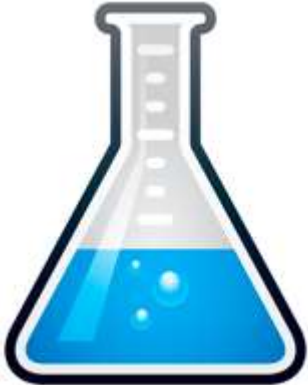
ripple

Momentum of technology is growing; current deadlock needs to be dealt with



5.
So, what is the most
important thing to take
home?

it's about spotting the companies that find ways to unlock the potential of Bitcoin technology



om®



In de praktijk

1. Wallet installeren
2. Bitcoin aanschaffen
3. Gebruiken
 - Persoon ↔ persoo
 - Winkel
 - Facturen



Demo

Thuisbezorgd.nl

Bezorgadres Bezorgrestaurants Menukaart Eten bestellen Klantenservice Inloggen NL

Wijzig je locatie -selecteer een restaurant-

Eten bestellen in Gelderland » Zwartebroek » 3871

Eten bestellen in Zwartebroek 3871 Uitgebreide selectie

Populaire restaurants:

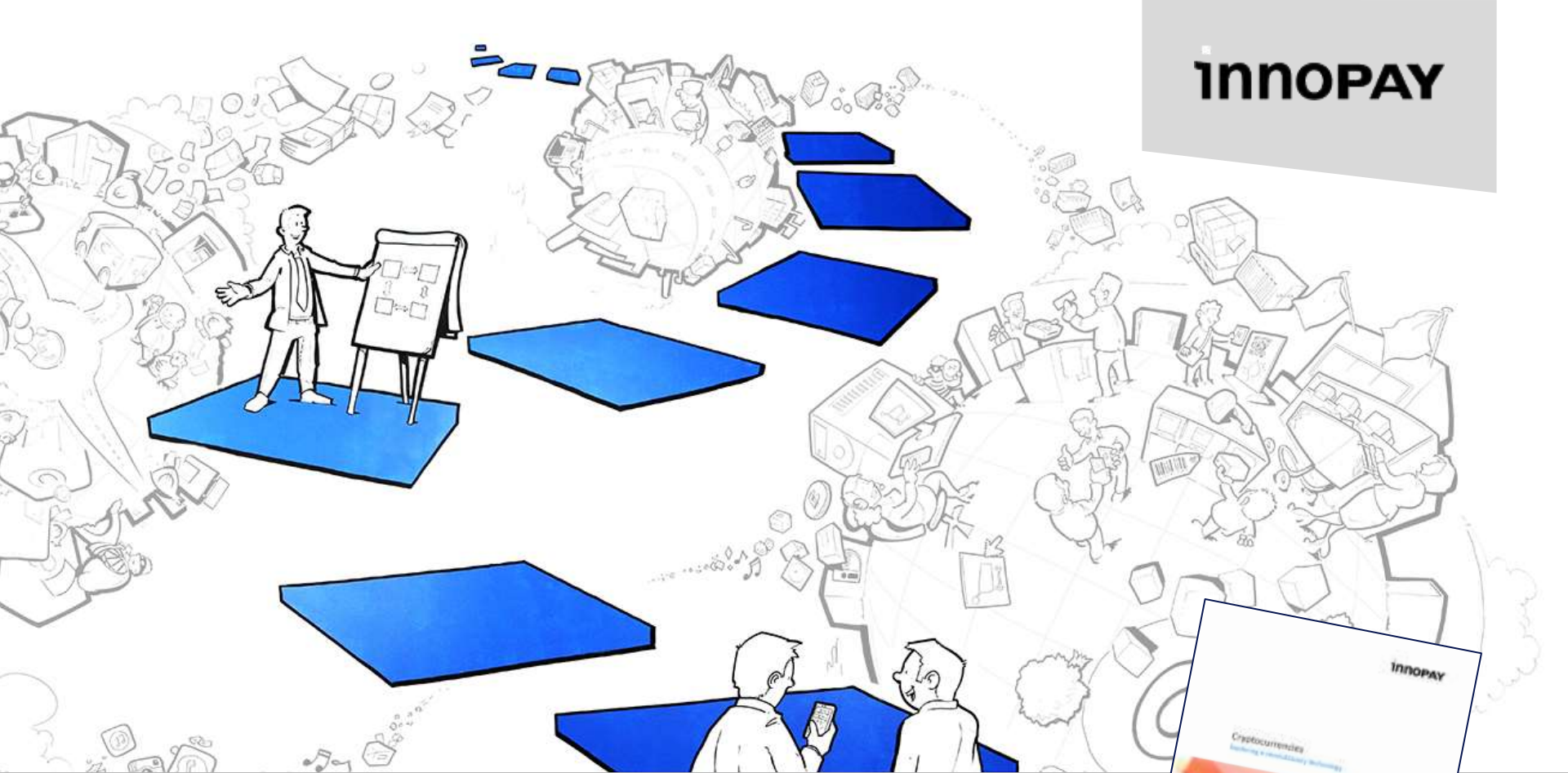
1. You Me Sushi
2. Food Imperium
3. Indian Flavour
4. Spare Rib Express
5. Snackbar Dario

Jouw mening:

20. 22 mrt 2016 om 21:53
Food Imperium ★★★★★
Top service en lekker eten
Rianne
[Meer beoordelingen](#)

15 Bezorgrestaurants Weergave: Beste match

Snackbar Dario ★ ★★★★★ Nu geopend	Chao! ★ ★★★★★ Nu geopend	Food Imperium ★ ★★★★★ Vooruit bestellen
Indian Flavour ★ ★★★★★	You Me Sushi ★ ★★★★★	Domino's Pizza ★ ★★★★★



Download the cryptocurrency report
here: www.innopay.com

Gijs.burgers@innopay.com

