

THE NEW STAR WARS: BLOCKCHAIN AND THE FUTURE OF POLITICS

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WHAT IS BLOCKCHAIN?

A globally visible ledger that is owned by no one but can be trusted by everyone

SHEET NO. 1 ACCOUNT NO. 101

TERMS. NAME W. A. Brooks

RATING. ADDRESS

CREDIT LIMIT.

DATE	ITEMS	Folio	DEBITS	DATE	ITEMS	Folio	CREDITS
Nov 12	Cash from S.H. Allen		1587.00	Nov 18	Draft to Barton T1		597.85
13	" " Payroll T1		173.50	18	Bal.		2724.5
			332.20				3320.20
13	Bal.		2724.5	20	Draft to Barton T2		166.65
20	Cash from Payroll T2		1542.20	20	Bal.		266
			4266.5				4266.5
20	Bal.		266.00	27	Draft to Barton T3		1548.5
27	Cash from Payroll T3		100.10	27	Bal.		2117.5
			3661.0				3661.0
27	Bal.		2117.5	Dec 4	Draft to Barton T4		146.20
Dec 4	Cash from Payroll T4		126.30	11	Bal.		2117.0
4	" " Eagle Eye "		25-				
			363.10				363.10
Dec 4	Bal.		2167.0	11	Draft to Barton T5		125.20
11	Cash from Payroll T5		116.70				2034.0
			333.00				333.00
11	Bal.		2084.0	18	Draft to Barton T6		121.05
18	Cash from Eagle Eye T6		25-	18	Cash advanced over amount of payroll		31.60
			2334.0	18	Bal.		1807.5
18	Bal.		807.5				2334.0
25	Cash from Payroll T7		56.00	25	Draft to Barton		184.30
			7.50	25	Bal.		254.5
			1367.5				1367.5

WHY?



HOW TO BUY A HOT DOG

Go to the bank

Get \$5

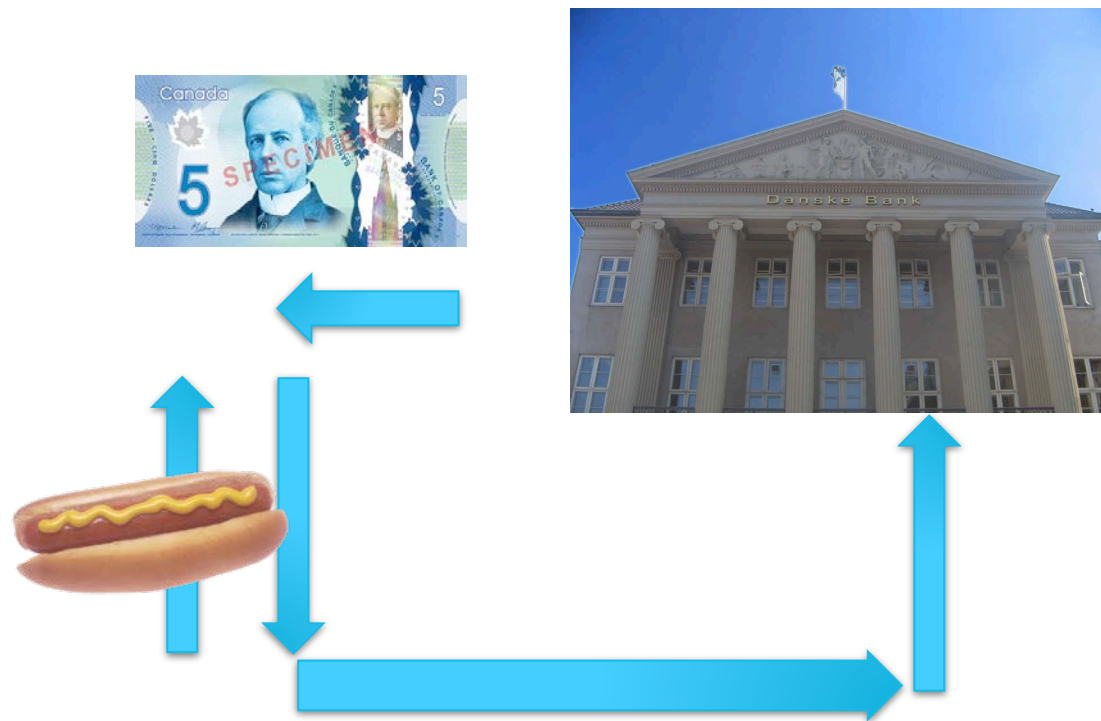
- Bank reduces your account balance by \$5

Pay \$5 to vendor and get a hot dog

Vendor deposits \$5

- Bank increases vendor's account balance by \$5

Why bother with bank notes?



BUYING WITH A LEDGER

Transfer \$5 to vendor

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DATE	ITEMS	Folio	✓	DEBITS	DATE	ITEMS	Folio	✓	CREDITS
Nov 12	Cash from S.H. Allen			1587.00	Nov 18	Draft to Barton 71			597.85
13	" " Payroll 71			173.50	18	Bal.			272.15
				332.20					332.20
13	Bal.			272.45	20	Draft to Barton 72			166.65
20	Cash from Payroll Tr			154.20	20	Bal.			266.65
				426.65					426.65
20	Bal.			266.00	27	Draft to Barton 73			154.85
27	Cash from Payroll 73			100.10	27	Bal.			211.75
				366.10					366.10
27	Bal.			211.75	Dec 4	Draft to Barton 74			146.20
Dec 4	Cash from Payroll 74			126.80	11	Bal.			211.75
4	" " Egleby "			25.00					363.10
				363.10					363.10
Dec 4	Bal.			216.70	11	Draft to Barton 75			125.20
11	Cash from Payroll Tr			116.70					241.70
				333.60					333.60
11	Bal.			208.10	18	Draft to Barton 76			121.05
18	Cash from Egleby 76			25.00	18	Cash from Egleby 76			31.60
				233.10		18	Bal.		180.75
18	Bal.			80.75					233.10
25	Cash from Payroll 77			56.00	25	Draft to Barton			114.30
				75.35	25	Bal.			25.15
				136.75					136.75

PRIVATE CURRENCY

Transfer 5 SolarCoins to vendor



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DATE	ITEMS	Folio	DEBITS	DATE	ITEMS	Folio	CREDITS
Nov 10	Cash from S.H. Albu		1587.00	Nov 13	Draft to Barten T1		597.50
13	" " Payroll T1		173.50	13	Bal.		2721.50
			322.20				3322.00
13	Bal.		2721.45	20	Draft to Barten T2		160.65
20	Cash from Payroll T2		154.20	20	Bal.		211.00
			426.65				426.65
20	Bal.		266.00	27	Draft to Barten T3		154.85
27	Cash from Payroll T3		100.10	27	Bal.		211.75
			366.10				366.10
27	Bal.		211.75	Dec 4	Draft to Barten T4		146.20
Dec 4	Cash from Payroll T4		126.30	4	Bal.		211.90
4	" " Style Eye "		25.00				363.10
			363.10				363.10
Dec 4	Bal.		216.90	11	Draft to Barten T5		125.20
11	Cash from Payroll T5		116.70				205.40
			333.60				333.60
11	Bal.		208.40	18	Draft to Barten T6		121.05
18	Cash from Engberg T6		25.00	18	Cash balance over		31.60
			233.40	18	Commitment of Payroll		180.75
			80.75	18	Bal.		233.40
18	Bal.		56.00	25	Draft to Barten T7		184.30
25	Cash from Payroll T7		56.00	25	Bal.		25.45
			136.75				136.75



CS TO THE RESCUE!

Distributed

- Ledger is stored at many servers and tracks all transactions

Transparent


- Everyone can see and **validate** transactions
- Though private transactions possible

Immutable

- Once in the ledger, information cannot be changed

Secure

- Non-repudiable
- Allows a certain fraction of servers to be hacked/become untrusted



5	3			7			
6			1	9	5		
	9	8					6
8				6			3
4			8		3		1
7				2			6
	6					2	8
			4	1	9		5
				8			7
							9

Smart contract

“If you receive 1 unit of energy from me, I will get 1 SolarCoin from you”



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Nov 12	Cash from S.H. Allen		1587.00	Nov 18	Draft to Barton T1		59.75
13	" " Payroll T1		173.50	18	Bal.		272.45
			332.20				332.20
13	Bal.		272.45	20	Draft to Barton T2		166.65
20	Cash from Payroll T2		154.20	20	Bal.		266.65
			426.65				426.65
20	Bal.		266.00	27	Draft to Barton T3		154.85
27	Cash from Payroll T3		100.10	27	Bal.		211.75
			366.10				366.10
27	Bal.		211.75	Dec 4	Draft to Barton T4		146.20
Dec 4	Cash from Payroll T4		126.30	11	Bal.		267.90
4	" " Eagle Eye "		25-				
			363.10				363.10
Dec 4	Bal.		216.75	11	Draft to Barton T5		125.20
11	Cash from Payroll T5		116.70				203.40
			333.60				333.60
11	Bal.		208.40	18	Draft to Barton T6		121.05
18	Cash from Eagle Eye T6		25-	18	Cash advanced over amount of payroll		31.60
			233.40	18	Bal.		180.75
18	Bal.		80.75	25	Draft to Barton T7		184.30
25	Cash from Payroll T7		56.00	25	Bal.		25.45
			136.75				136.75





COORDINATION

Blockchain allows coordination between mutually untrusting parties

- Without a central coordinator

Decentralized Autonomous Organizations

- Re-thinks organizations and companies
 - No deeds, no titles, no registrar
 - Everything as smart contracts
- Can take on centralized entities
 - Jedi against the Evil Empire
- Is this the future?