

Blockchain Technology



Blockchain is Redefining Trust



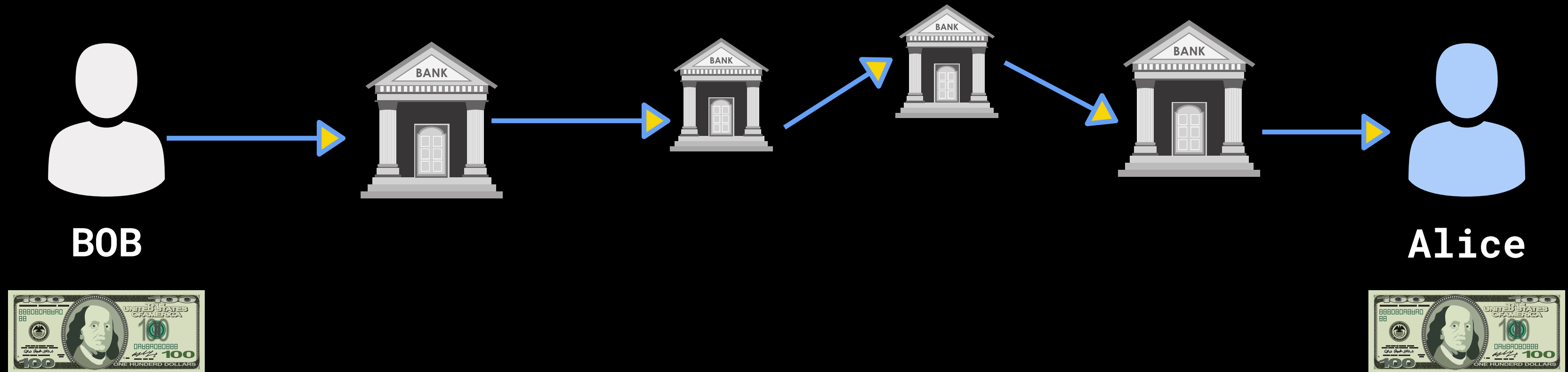
Fra Luca Pacioli (1447–1517)



- Italian mathematician
- Also known as **The Father of Accounting and Bookkeeping**
- Introduced the use of **ledgers** in accounting systems

The essentials of ledgers have for the most part remain unchanged **for over 500 year and** Pacioli ledgers are used everywhere today

Ledgers are everywhere



Through a series of entries into the ledgers, 100\$ are transferred from Bob to Alice.

Our whole financial system is only a system of ledger. When sending money, is just an entry into the ledger.

Which ledger do you trust?



WaMu is largest U.S. bank failure

By Elinor Comlay, Jonathan Stempel

8 MIN READ



NEW YORK/WASHINGTON (Reuters) - Washington Mutual Inc was closed by the U.S. government in by far the largest failure of a U.S. bank, and its banking assets were

How it all started?

- Satoshi Nakamoto publishes **Bitcoin** paper during the financial crisis in 2008.
- **Blockchain** is the underlining technology behind Bitcoin.

"A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another **without going through a financial institution.**"

Satoshi Nakamoto

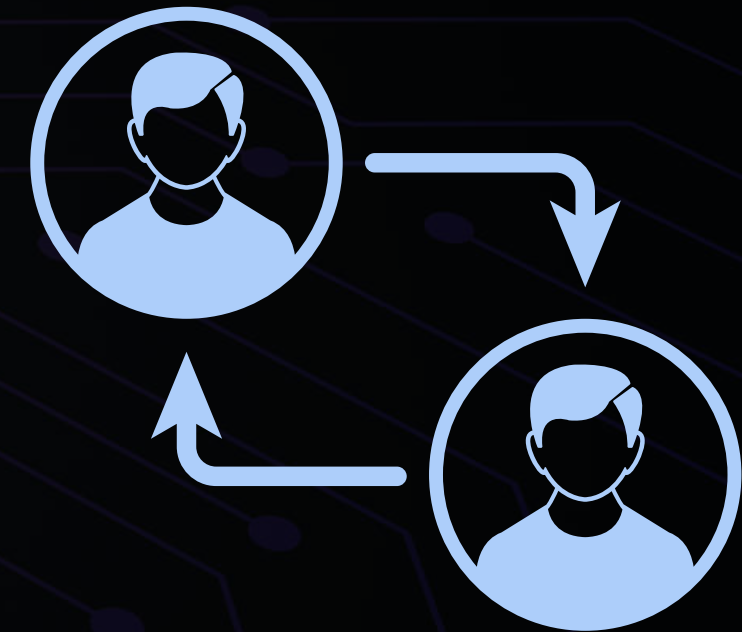
Decentralized



- ✓ Each member has exact same copy of distributed ledger for complete transparency.
- ✓ Ensures that the entire system will not break down upon a single point of failure.
- ✓ Any data, once written on the blockchain cannot be changed or removed.
- ✓ Enables record keeping in different fields like court records, university degree records, digital voting, etc. which will make it impossible to forge records.

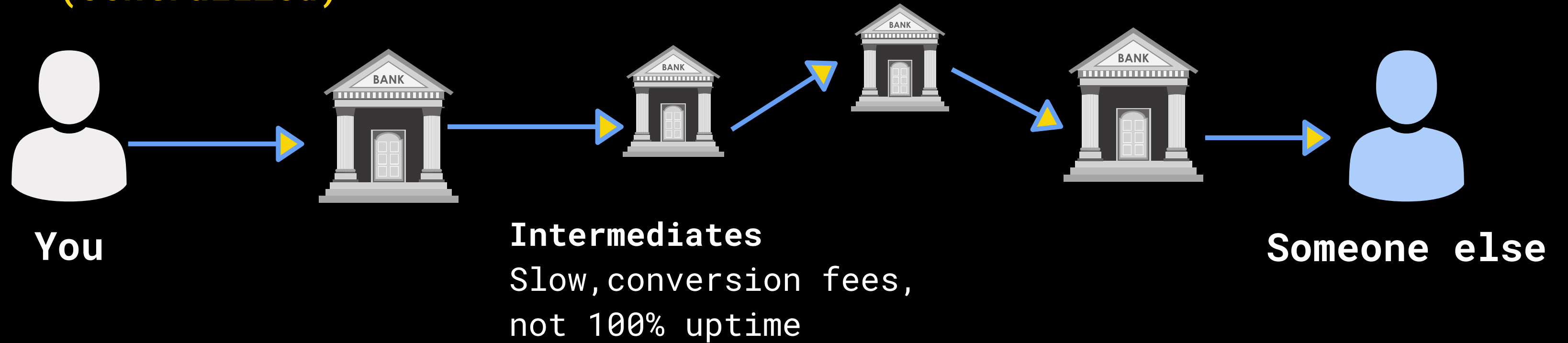
Peer to Peer

- ✓ The interaction between two parties is accomplished without the need of any third party.
- ✓ Cross border transactions.
- ✓ Blockchain removes the need for trust

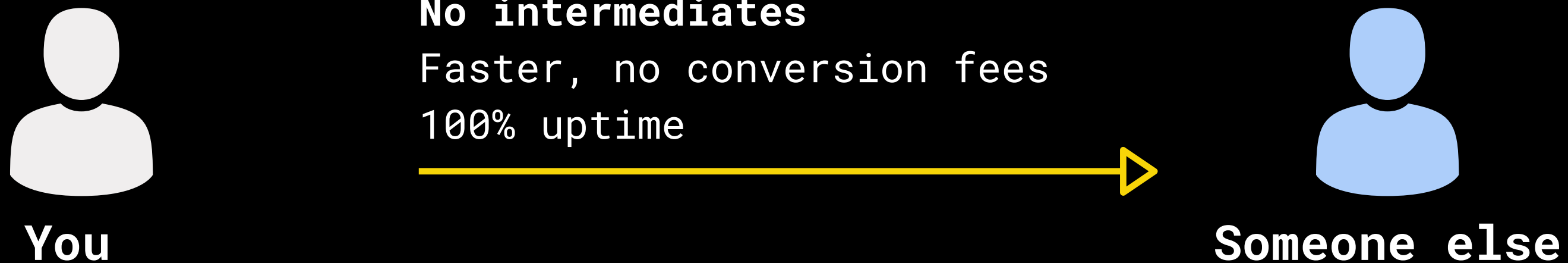


Cross Borders Payments

Traditional Bank Transfer (Centralized)



Blockchain Transfer (Decentralized)



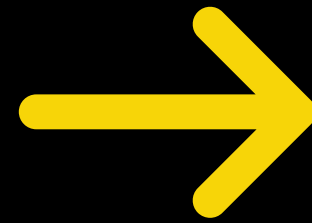
Other **Blockchain** use case



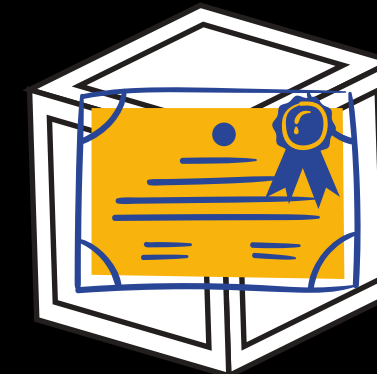
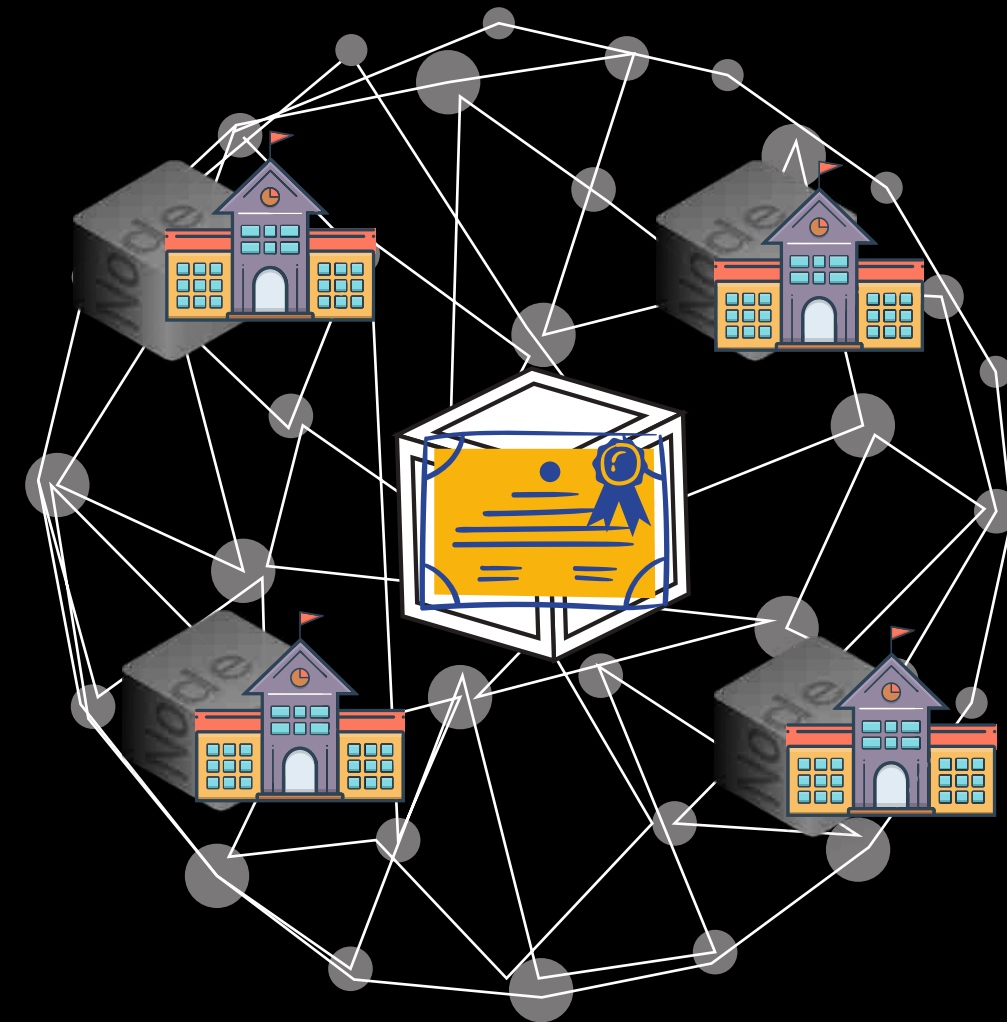
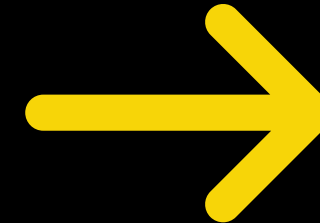
BLOCKCHAIN FOR CERTIFICATES



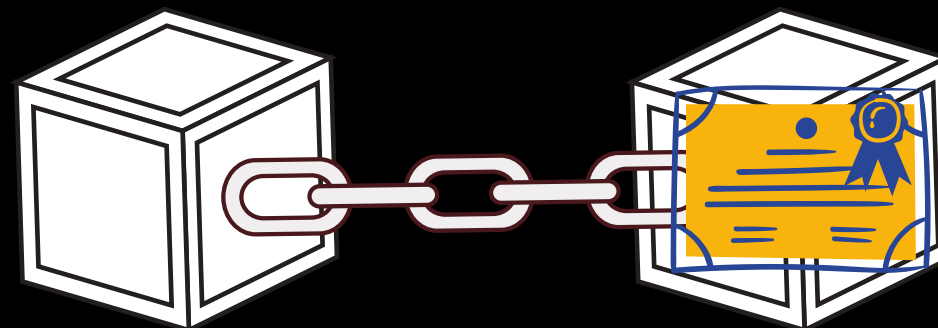
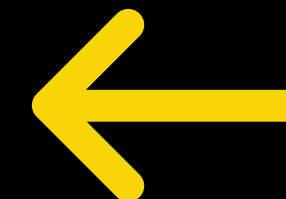
Organisation issues
the certificates



A block containing the
certificate data,
timestamp is created



The block is verified and approved



The block is added to the chain and is
linked with the previous chain

CERTIFICATE OF COMPLETION

THIS IS PRESENTED TO:

COMPETENCES GAINED:

ORGANISATION:



Co-funded by the
Erasmus+ Programme
of the European Union

REQUIRE

VOLUNTEER'S EMAIL ADDRESS

VOLUNTEER'S NAME

COMPETENCE 1

COMPETENCE 2

COMPETENCE 3

ORGANIZATION'S NAME

CERTIFICATE OF COMPLETION

THIS IS PRESENTED TO:

COMPETENCES GAINED:

ORGANISATION:



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VIEW & VERIFY

Message

General

Referenced by MS 2690653 at 2022-03-06 23:01

MESSAGE ID

846bf7e5f2b294050479e2d2583cab0ecd13fe60fddb79a1388475dc26c4fe7

LEDGER INCLUSION

No Transaction

The message is referenced by a milestone, the data is included in the ledger, but there is no value transfer.

Data

INDEX

Turing Certs - d4d3139c1a64bb2ca6723df674b615927bfa036c78c090b8

DATA JSON

```
{
  "base64": "IRrtYEK58EtuCZkEJ81x+EBb5KdgYD7+jQ6LlkYPJ0V4tP00nVc2kRCWnPTzzbbXvAcivh+QlnEpm1FWe  
tNEnc8+MK8Fy3kTyaQvKmpYvWHLjaFWwZcVT5P49/bveDA9dVYjQ+qMy9pcjZRSxEQ82GF4CMJnJuqu+UcaHFbeGL/5GQB  
7Ohg3vx+5qpk2ONSxvhXKlmAERye+ZPlx7C0l1ceKKUPKDFLfo42mq3QnE4iGc4gthLlwj7uzo8z63/xrGU8bXTHK1E6Rj  
n0ejB0JbbmM7HTx5g3zTB69381t5Bod7/SLc0Q2JDMnkrLtoF3aEcjfsx8L5pReir73TeMXag==",
  "version": 4
}
```

Stats

MESSAGES PER S

13.00 / 13.10

MILESTONES

2690700 8d2ba8

2690699 9ded42

2690698 3ed402

2690697 bba7ad

2690696 fd735fd

MESSAGES

Index 98c485

Index 4080b2

Index b652dc

Index c5a036

Certificate Information

Name of Certificate	Licensing Authority	Date of Issuance	Hash
Certificate of Competency	The DYVO Project	2022-11-07	bb1420f3849c6458f3de58f5b975 5ac18d3e8d0e28fe149f66d229b4 b050aca6

Thank you!

Andreas Harpas
Pundi X 365

PUNDI^x
365

