Blockchain
In a Digital Economy

- 4th December 2020
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Digital Economy Report

DIGITAL ECONOMY REPORT 2019

VALUE CREATION AND CAPTURE: IMPLICATIONS FOR DEVELOPING COUNTRIES

Geography of the digital economy is highly concentrated in two countries

- United States and China
- Rest of the world

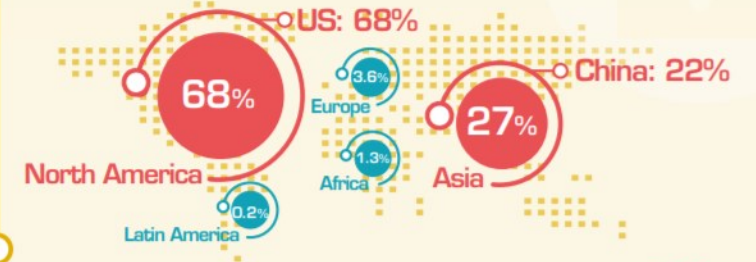**75%** of all patents related to **blockchain technologies**

50% of global spending on **IoT**

>75% of the **cloud computing** market

US and China: 90% of the market capitalization value of the world's **70 largest digital platforms**

US: 68%

China: 22%

68% North America

Latin America 0.2%

Europe 3.6%

Africa 1.3%

27% Asia

United Nations Conferences on Trade and Development
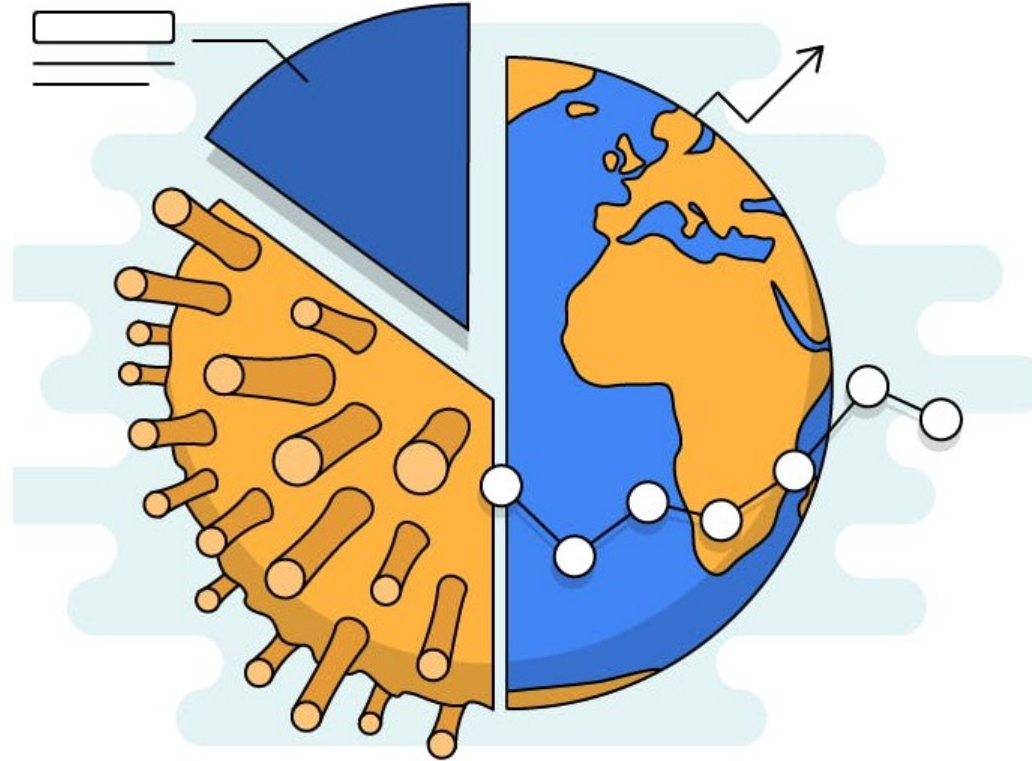
UNITED NATIONS UNCTAD

Agenda

- Impact of COVID-19 on Digital Economy
- Birth of Blockchain - Bitcoin
- How blockchain works – Transactions
- Security in Blockchain
- Solving business problems
- How to start a blockchain project

COVID-19 on Digital Economy

Covid 19
Accelerated the digital
Transformation of
Companies..

As customers became
more demanding, this
Added pressure for
Companies to improve
Their USP

Leverage latest innovative technologies to improve the USP

The birth of blockchain
How we got here…

Financial Crisis of 2008/2009,

World Economy

- The Wall Street banks
- Bailout of AIG, Fannie Mae,
- US Government TARP
- A CEO has unlimited power which can contribute to fraud activities
- Bitcoin was born

Vitalik Buterin

A new economic model

STO

Security Token Offering
In a Market place
Smartlands.io (UK).

Records Registration

Certificate of records, birth
certificates, documents
authenticity, government
issued ID's – again fraud
cases

Token Share Ownership

Token allocation of
assets, real estate,
stocks, bonds

Smart Contracts

Financial Services,
allocation of assets

Transactions and blocks

1. Open Ledger
Open source
Transactions cannot be altered
No central authority

2. Transactions
Has date/time stamp
sender/receiver
An account address – hexa

3. Blocks
Has 100 to 120 transactions on it
Blocks are never deleted or altered
Permanently recorded

4. Decentralized
No central authority
No gross settlement system
Transactions occur in real time

Smart contracts, records registration,
Crypto currency

Security Layer

SHA-256 Hash Functions

https://tinyurl.com/s5rhufk

If on mobile, use landscape mode

https://andersbrownworth.com/blockchain/blockchain

Blockchain

Block:	# 1
Nonce:	11316
Data:	
Prev:	0000000000000000000000000000000000000000000000000000000000000000
Hash:	000015783b764259d382017d91a36d206d0600e2cbb3567748f46a33fe9297cf
	Mine

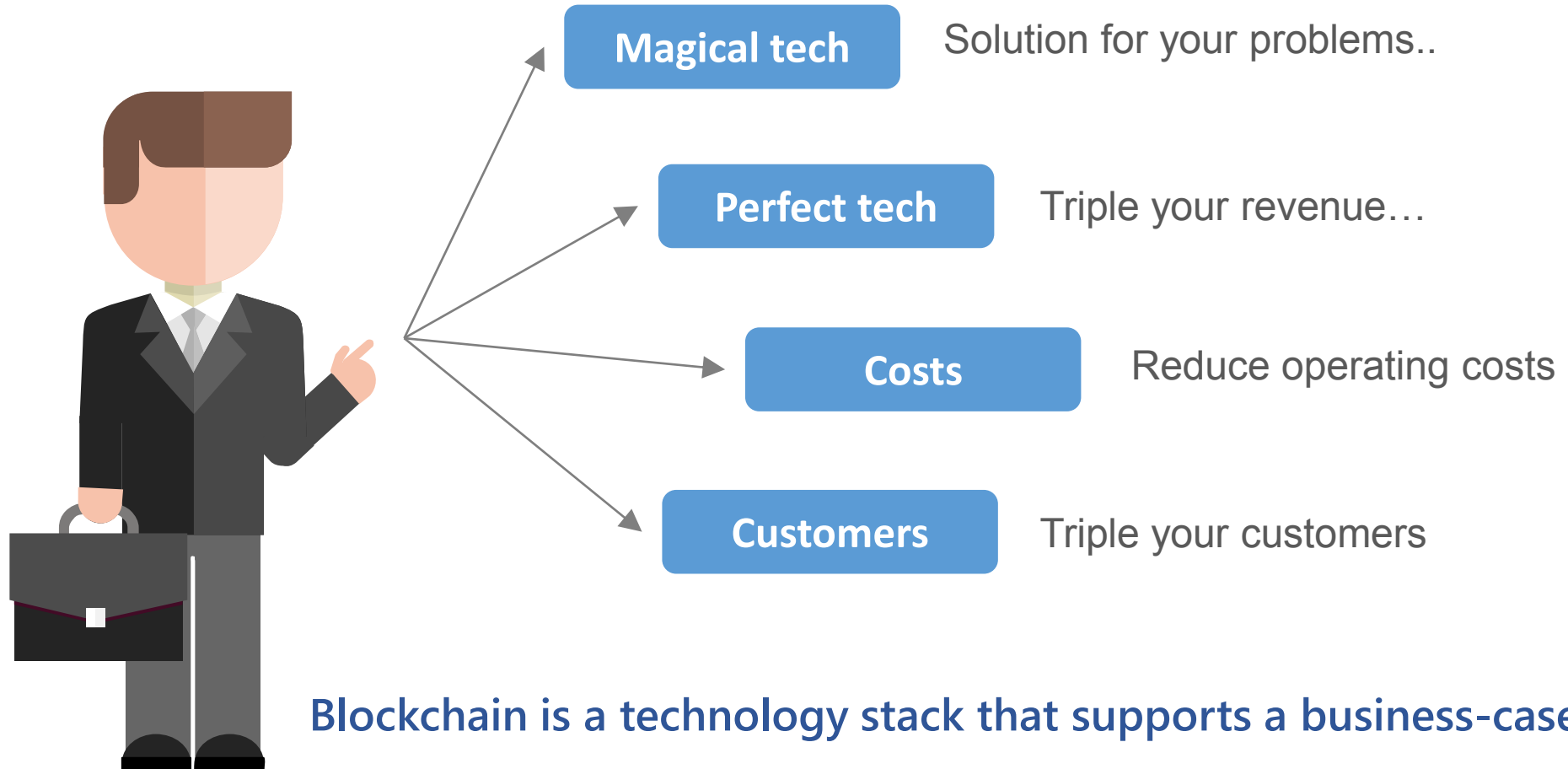|	
Block:	# 2
Nonce:	35230
Data:	
Prev:	000015783b764259d382017d91a36d206d0600e2cbb3567748f46a33fe9297cf
Hash:	000012fa9b916eb9078f8d98a7864e697ae83ed54f5146bd84452cdafd043c19
	Mine

Block:	# 3
Nonce:	12937
Data:	
Prev:	000012fa9b916eb9078f8d98a7864e697ae83ed54
Hash:	0000b9015ce2a08b61216ba5a0778545bf4ddd7ce
	Mine

Blockchain Is Not…

Magical tech Solution for your problems..

Perfect tech Triple your revenue…

Costs Reduce operating costs

Customers Triple your customers

Blockchain is a technology stack that supports a business-case.

Solving Business Problems

Business Problem

Customer

Education
Fake certificates,
Masters, PhD's etc.

Fraud – Health Care
Fraudulent Official ID's
Patient Records
passports, death cert,

Funding limitations
Real estate assets,
government projects
Fraud activities in Real
Estate

'Staggering' trade in fake degrees revealed

By Helen Clifton, Matthew Chapman and Simon Cox
File on 4

😣

16 January 2018

Blockchain Solution

A BBC reporter was offered a degree from the fake Nixon University for $3,600 (£2,600)

Thousands of UK nationals have bought fake degrees from a multi-million pound "diploma mill" in Pakistan, a BBC Radio 4's File on Four programme investigation has found.

*https://www.bbc.com/news/uk-42579634

Health Care

Blockchain prevents medical errors

A study published by Johns Hopkins patient safety experts suggests that in the United States, over 250,000 people die every year due to medical errors. This is particularly alarming when considering the leading cause of death in the U.S.—heart disease—which is responsible for about 647,000 deaths annually.

Blockchain data can only be added, not erased. This is precisely how health information should be stored. Physicians can access the historical medical records of their patients from their very first hospital visit. Dr. David Classen, a chief medical information officer at Pascal metrics, admitted in an interview that the system of care is fragmented. He continued, "Any tools that enable patients to manage their health-care needs will be a game-changer." Blockchain has come to effectively dissolve the dilemma of errors and digitize patient health records.

Blockchain Solution

Falsified lab test results, manipulation of patient records, forged prescriptions,

15

Real Estate

Blockchain Solution

Dh7.7 million property scam: Real estate agent flees Dubai after duping businessman in fake deal

Forged documents used to 'sell' hotel accommodation near Burj Khalifa

Published: September 08, 2020 11:36

Ali Al Shouk, Senior Reporter

Contracts were fake, unit document was fake, property details were forged.

If we solve this problem ☺

*https://www.bbc.com/news/uk-42579634

Benefits Gained

Reduced Cost

- Built in Security layers in the blockchain architecture.

Immutability

- Transactions cannot be changed or deleted. -> Customer loyalty

Reduction in transaction errors

- No Gross settlement system needed, no clearance system required..

Do you really need blockchain...
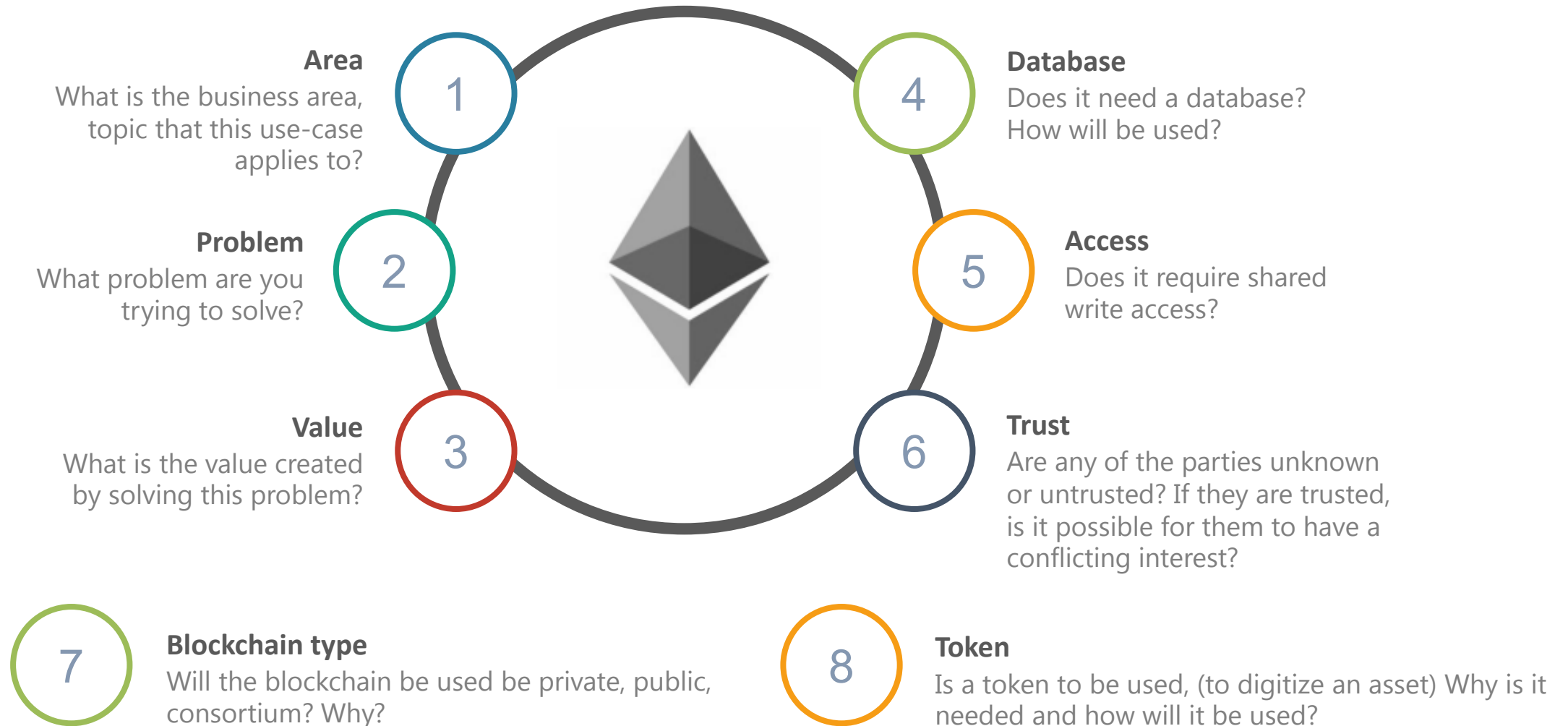
Can we solve these problems without blockchain

# How to start a blockchain project

Blockchain Analysis Document

Area
What is the business area, topic that this use-case applies to?

1

Problem
What problem are you trying to solve?

2

Value
What is the value created by solving this problem?

3

Database
Does it need a database? How will be used?

4

Access
Does it require shared write access?

5

Trust
Are any of the parties unknown or untrusted? If they are trusted, is it possible for them to have a conflicting interest?

6

Blockchain type
Will the blockchain be used be private, public, consortium? Why?

7

Token
Is a token to be used, (to digitize an asset) Why is it needed and how will it be used?
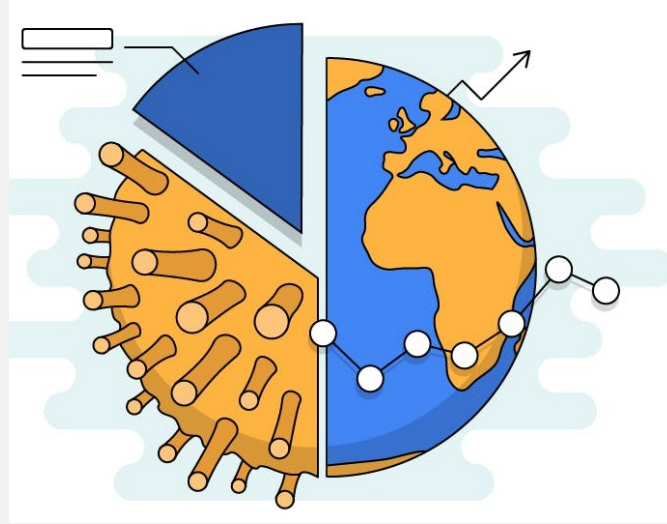
8

The Cons

The negative side:

 - Blockchain projects are expensive – High
Capex.
 - Blockchain is not 100% secure.
 - Public blockchain – Risk of 51% hashing attack
 - Private blockchain vs public blockchain

Conclusion
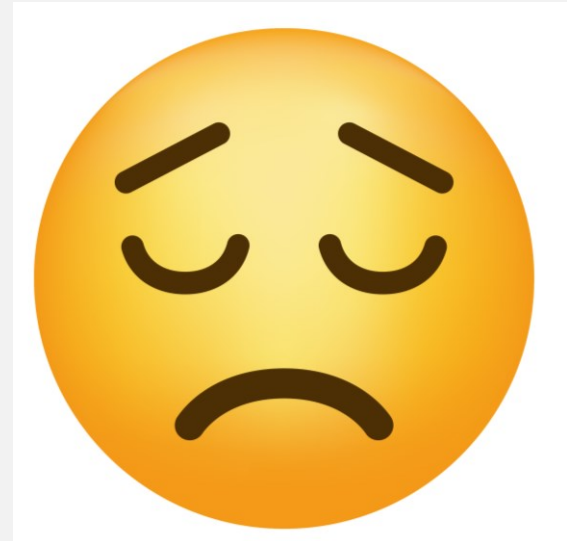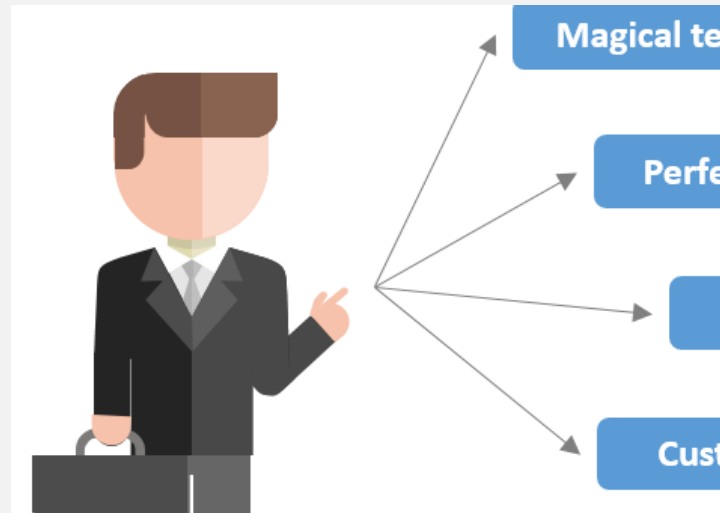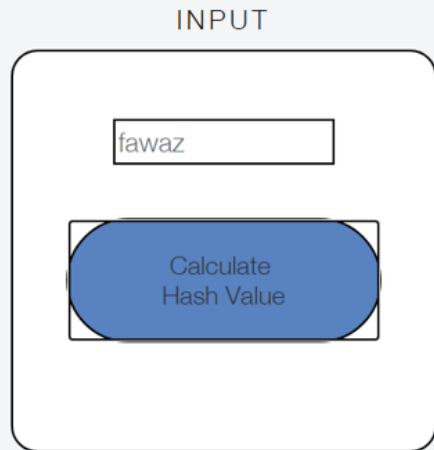
Options to upgrade your skill set

ChainStage
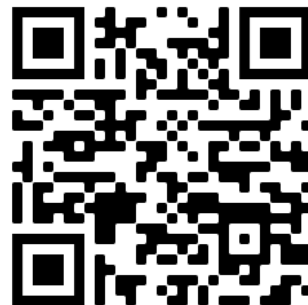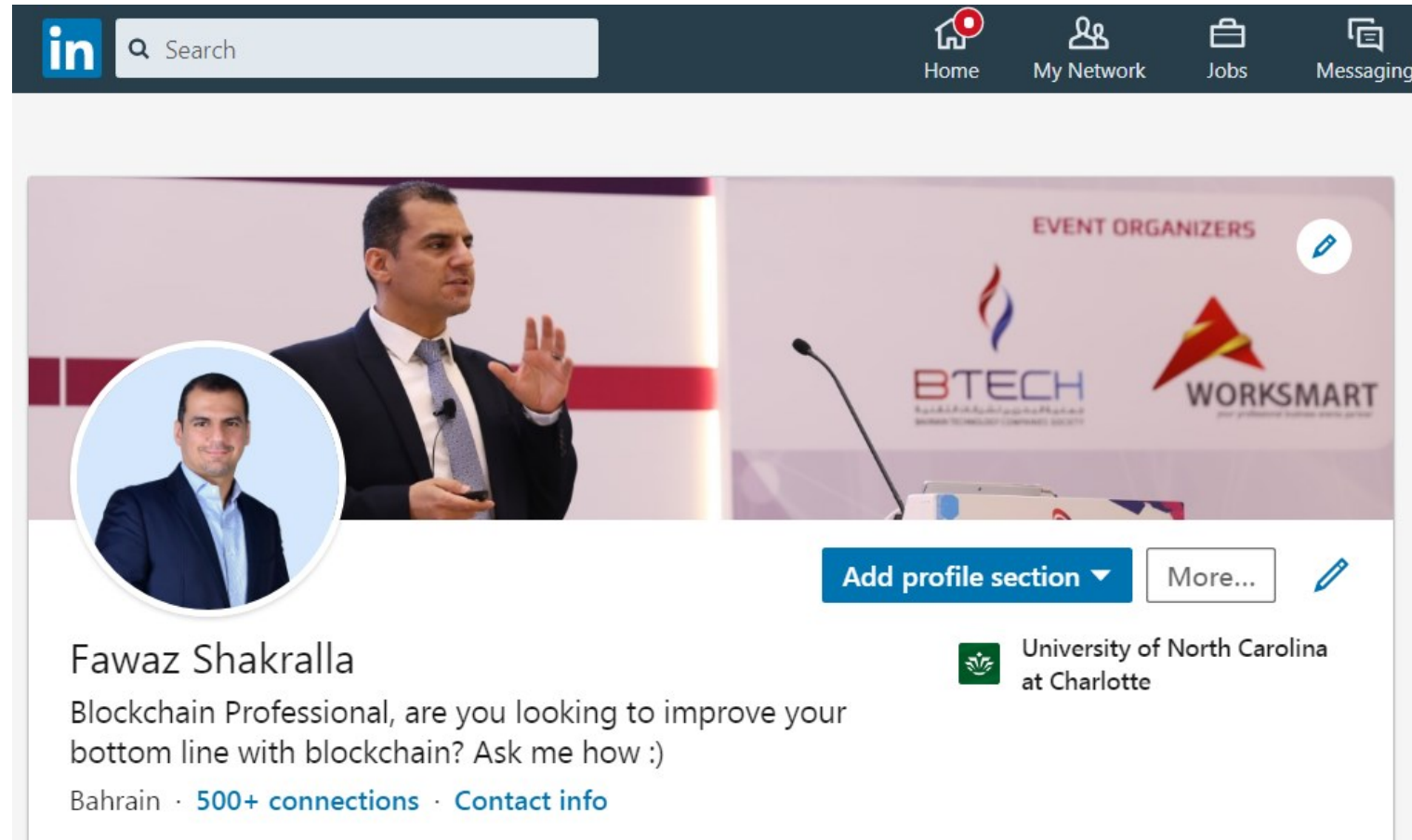
Blockchain for Finance

Blockchain for Logistics/ Supply Chain

Blockchain for Real Estate

35% Discount Code– BCCI
Avail: 3 days Only

Fawaz Shakralla

Blockchain Professional, are you looking to improve your bottom line with blockchain? Ask me how :)

Bahrain · 500+ connections · Contact info

University of North Carolina at Charlotte

Thank You!!!

24

The End..

Blockchain for Metro Station

ChainStage

Token Share ownership
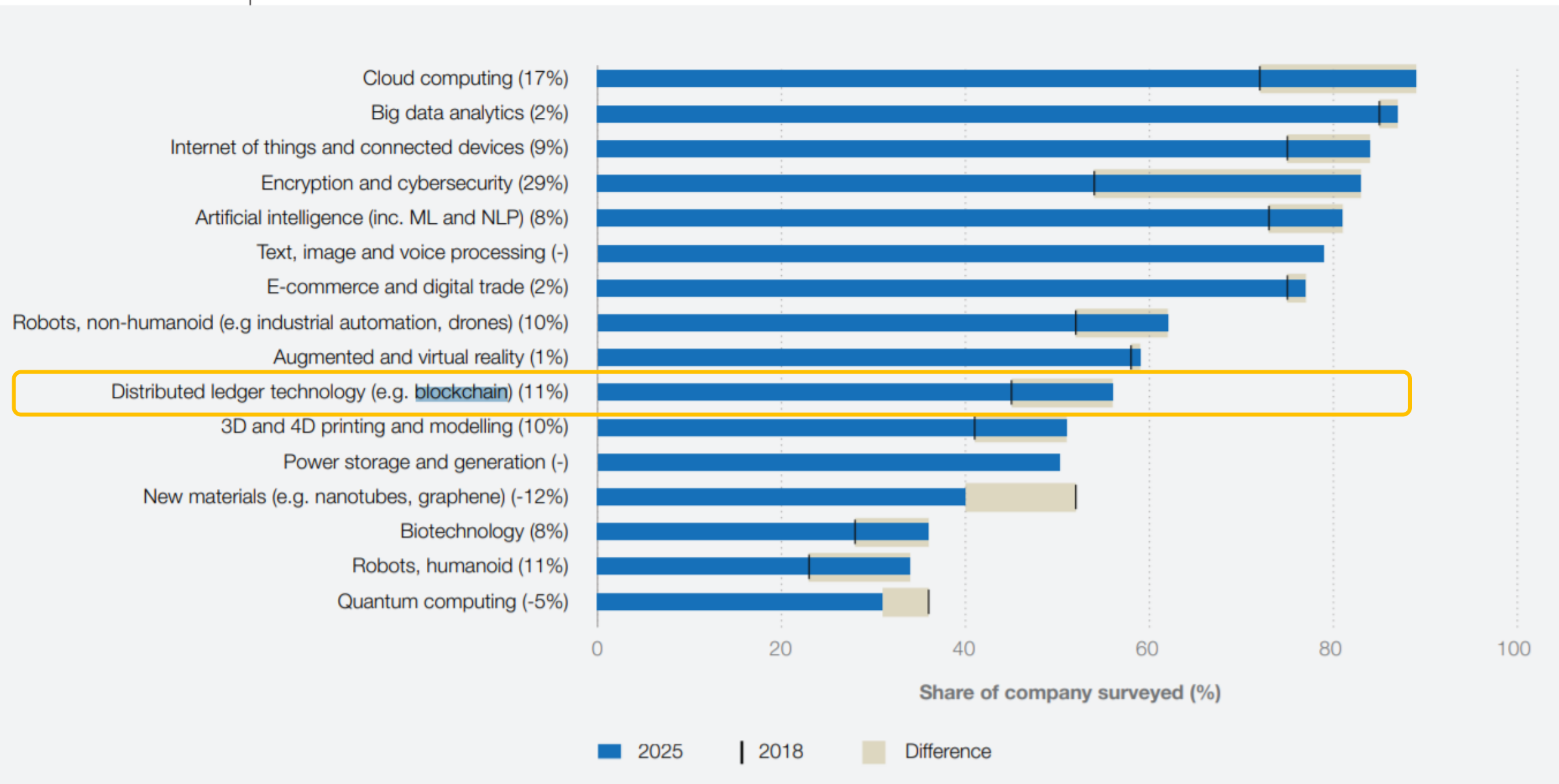
Sharjah to Dubai

Solving the problem of funding limitations, and offering an STO to benefit the public

The End..

FIGURE 18 | Technologies likely to be adopted by 2025 (by share of companies surveyed)

Cloud computing (17%)
Big data analytics (2%)
Internet of things and connected devices (9%)
Encryption and cybersecurity (29%)
Artificial intelligence (inc. ML and NLP) (8%)
Text, image and voice processing (-)
E-commerce and digital trade (2%)
Robots, non-humanoid (e.g industrial automation, drones) (10%)
Augmented and virtual reality (1%)
Distributed ledger technology (e.g. blockchain) (11%)
3D and 4D printing and modelling (10%)
Power storage and generation (-)
New materials (e.g. nanotubes, graphene) (-12%)
Biotechnology (8%)
Robots, humanoid (11%)
Quantum computing (-5%)

Share of company surveyed (%)

■ 2025 | 2018   Difference

Service Features

Cheque Verification

- Customer opens the Emirates NBD App and scans the QR code on the cheque

Cheque Amount Verification

- In the Emirates NBD app, customer can check enough funds in the account

Cheque Amount on hold

- Customer can place amount on hold until cheque is cleared,

Solving Business Problems

Business Problem

Education
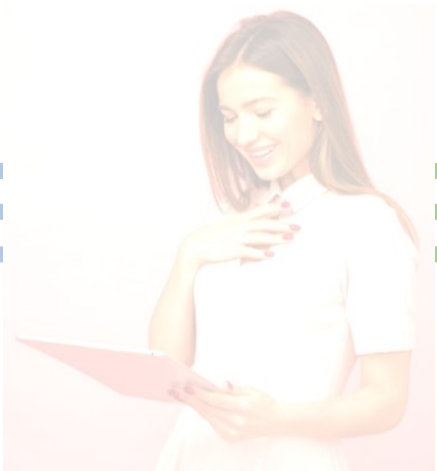Fake certificates, Masters, PhD's etc.

Fraud
Fraudulent Official ID's Birth cert, fake passports, death cert,

Funding limitations
Real estate assets, government projects

Blockchain Solution

Records Registration
QR Code on Certificates

Records Registration
QR Codes on documents records

STO
Token offering for a global market Smartlands.io (UK)

Advantages: Reaching a global market, cost reduction, security/transparency