

# Introduction to Blockchain Technology 区块链 (基础课)

Faster \* Accurate \* Secure  
(For Non-Technical People)

Presented by: Patrick Oh 胡文狮

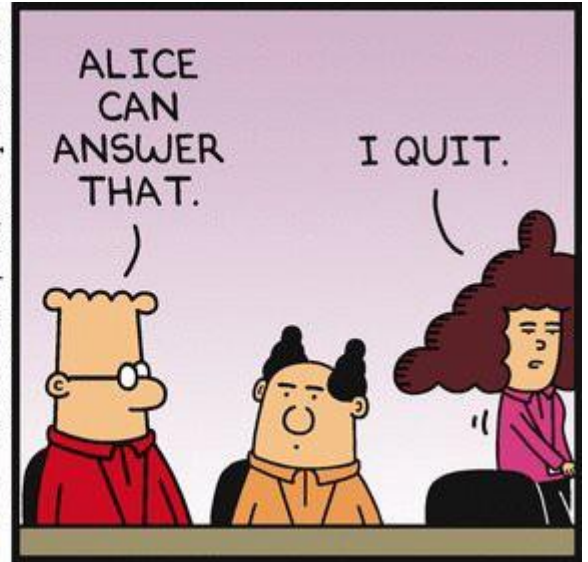
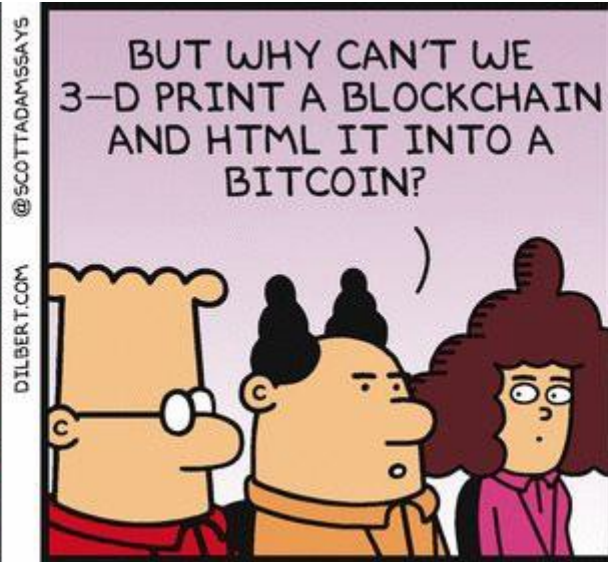
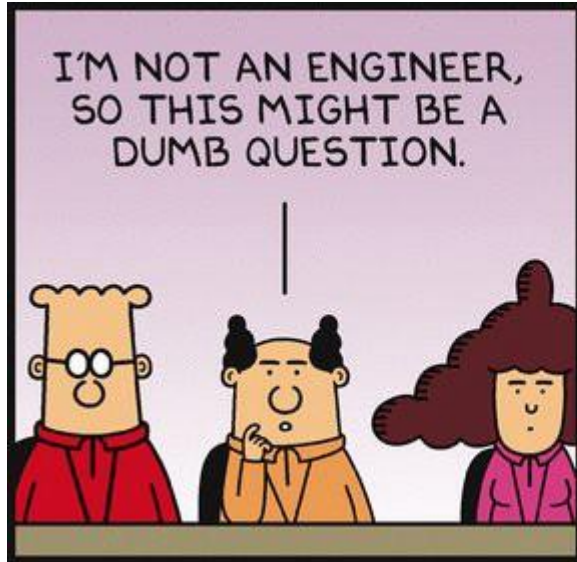
*Note: This material is not for publication. It is meant for used in live presentation to audience with non-technical understanding of Blockchain.*



# Activity: What do you think Blockchain is?



If you already know what Blockchain means —  
realize that you are in the  
1% of privileged nerds 😊



# Learning Journey

Introduction

1



Understanding  
Blockchain  
Technology

2

Why  
it's making  
an IMPACT?



3

Various  
Usage of  
Blockchain



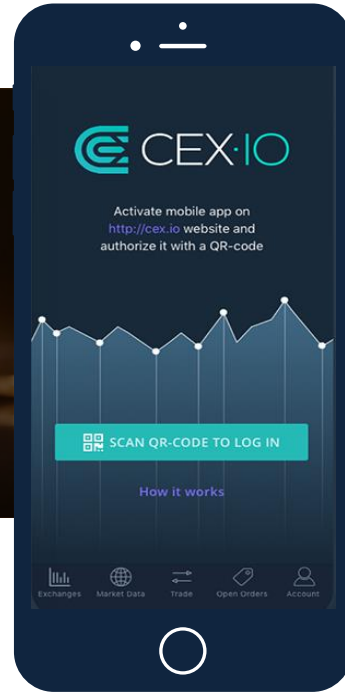
Summary



# Learning Objectives

**At the end of the session, learners will be able to:**

- ✓ Explain what Blockchain Technology is
- ✓ Explain why Blockchain Technology is making Impact
- ✓ Explain where and how Blockchain Technology can be applied



**Bitcoin or cryptocurrency  
is NOT EQUAL  
to Blockchain  
It simply USES  
Blockchain Technology**

# Many SCAMs using Blockchain

## Mainly in the FinTech Sector:

- Promise high returns
- Various models; e.g. small investment top-up model with money “multiplying”
- Ponzi Schemes: Pyramid framework – build downline
- Promising High commission; up to 45%
- Selling a “dream” or business-made-to-fail

**Note: Blockchain Technology is not about all these!**

# **Blockchain Technology**

**hitting the news worldwide!**

**The Game Changer that  
will disrupt and impact the world!**



**“What we don’t understand, we fear.  
What we fear, we judge as evil. What we  
judge as evil, we attempt to control. And  
what we cannot control...we attack”  
- Unknown**

- 1 - Isle of Man
- 2 - Jersey
- 3 - Malta
- 4 - Liechtenstein
- 5 - ECB
- 6 - EU
- 7 - FATF
- 8 - Interpol
- 9 - Singapore
- 10 - Hong Kong

## Regulations in the Realm of Digital Assets

PERMISSIVE    CONTENTIOUS    HOSTILE    UNKNOWN

## China goes bullish on blockchain

Charlie Wood, Business Insider US

October 28, 2019



Chinese President Xi Jinping inspects troops at the People's Liberation Army (PLA) Hong Kong Garrison in one of events marking the 20th anniversary of the city's handover from British to Chinese rule, in Hong Kong Damir Sagolj/Reuters

China's President Xi recently announced to make Blockchain a key technology for China.



Tencent 腾讯



新的金融



## Dubai set to making Dubai into a Blockchain City!

### Dubai approves three blockchain initiatives

**News** 20 Aug 2019 by SmartCitiesWorld news team

Dubai Future Council for Blockchain event brought together various government departments and private companies with a vested interest in smart city technologies.



One of the initiatives focuses on Dubai's cryptocurrency positioning

The Dubai Future Council for Blockchain has held a second meeting where three initiatives were presented and approved for 2019.

The council was formed by the Dubai Future Foundation, earlier this year, with the aim of finding innovative solutions for strategic sectors and to forecast their future over the next 50 years.

***“WHEN IT COMES TO BITCOIN,  
I’M NOT SO INTERESTED IN IT MYSELF.  
WHAT I WANT TO KNOW IS,  
WHAT CAN BITCOIN BRING TO SOCIETY?  
AFTER SOME THOUGHT, I MYSELF THINK THAT THE TECHNOLOGY  
BEHIND BITCOIN IS TREMENDOUS,  
SO AT ALIBABA AND ALIPAY WE ARE USING IT  
TO HELP BUILD OUR ROADMAP TO A TRULY CASHLESS SOCIETY.”***

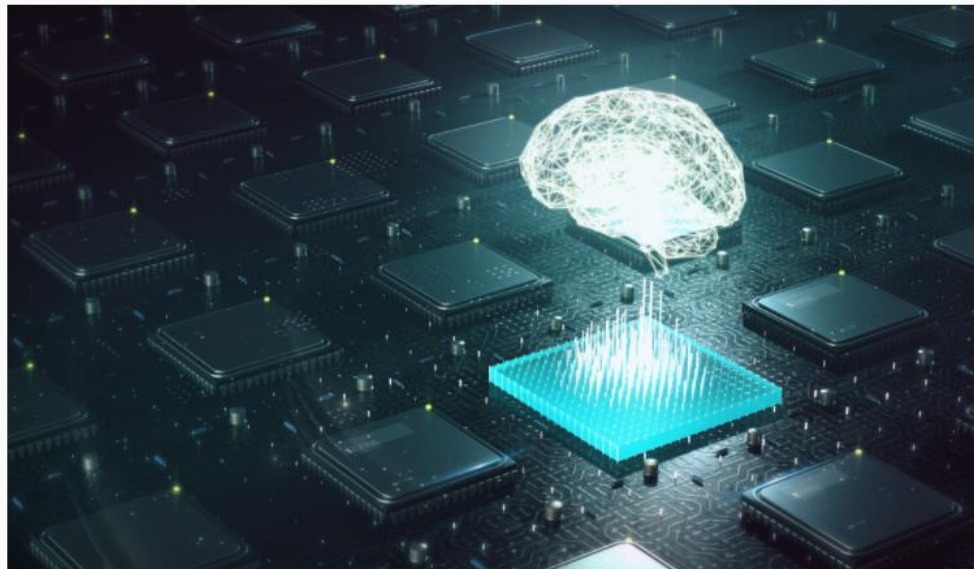
**- Jack Ma**

European Investment Fund is also focusing on Blockchain and Artificial Intelligence projects.

## European Investment Fund to Invest in Blockchain and AI Projects

Asia Blockchain Review

DECEMBER 1, 2019



The European Commission and European Investment Fund (EIF) has announced that the agencies will be supporting blockchain and artificial intelligence (AI) projects in Europe with a new investment plan.

# POLL

RANK THE TOP 10 COUNTRIES LEADING  
BLOCKCHAIN TECHNOLOGY IN THE WORLD  
AND SEE YOUR RANKING WITH ACTUAL 2019

# POLL

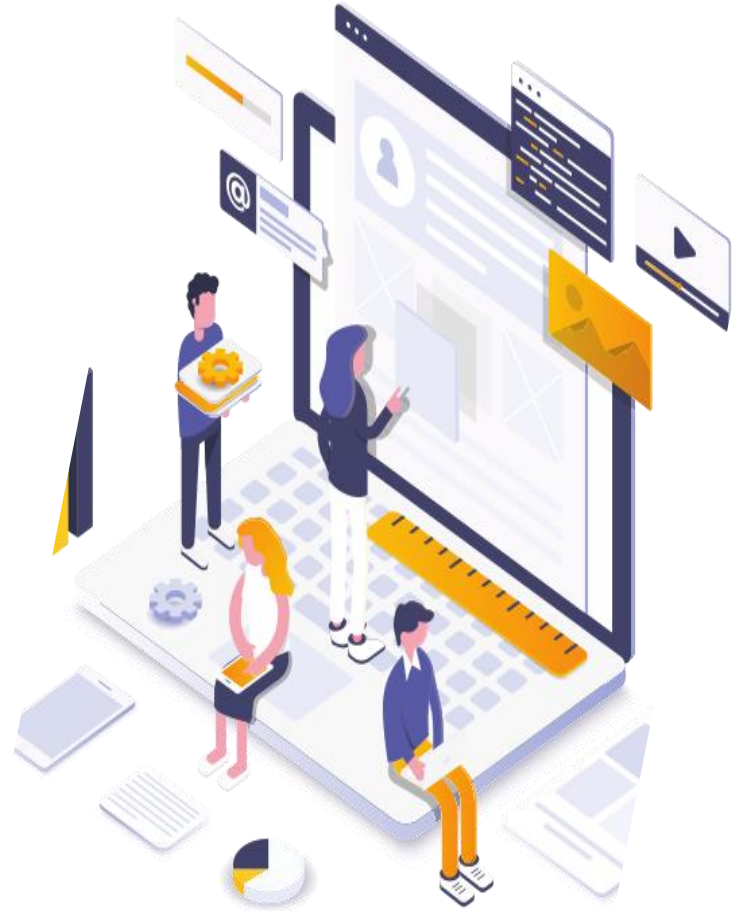
## TOP 10 COUNTRIES LEADING BLOCKCHAIN TECHNOLOGY IN THE WORLD

1. Australia
2. China
3. Japan
4. United Arab Emirates (Dubai)
5. Malta(Europe)
6. Switzerland
7. USA
8. Estonia
9. United Kingdom
- 10.Singapore



# Part 01

# Understanding Blockchain Technology







# **The Video gives a quick overview of Blockchain Technology**

**Let's us now go into details on the  
explanation and understanding  
of this emerging technology!**

## Distributed Ledger Technology (DLT)

A collection of data that does not belong to someone and is shared with anyone.

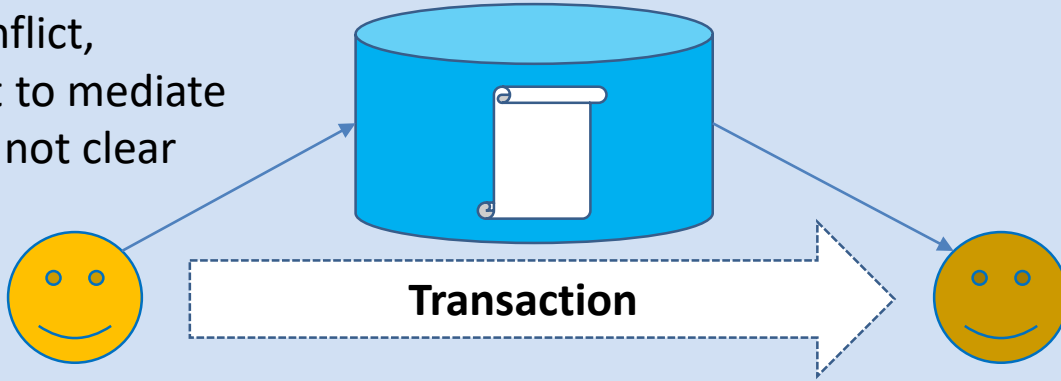
Blockchain is a form of DLT which transacts and stores information in blocks.



Note:

While ensuring personal data are properly protected

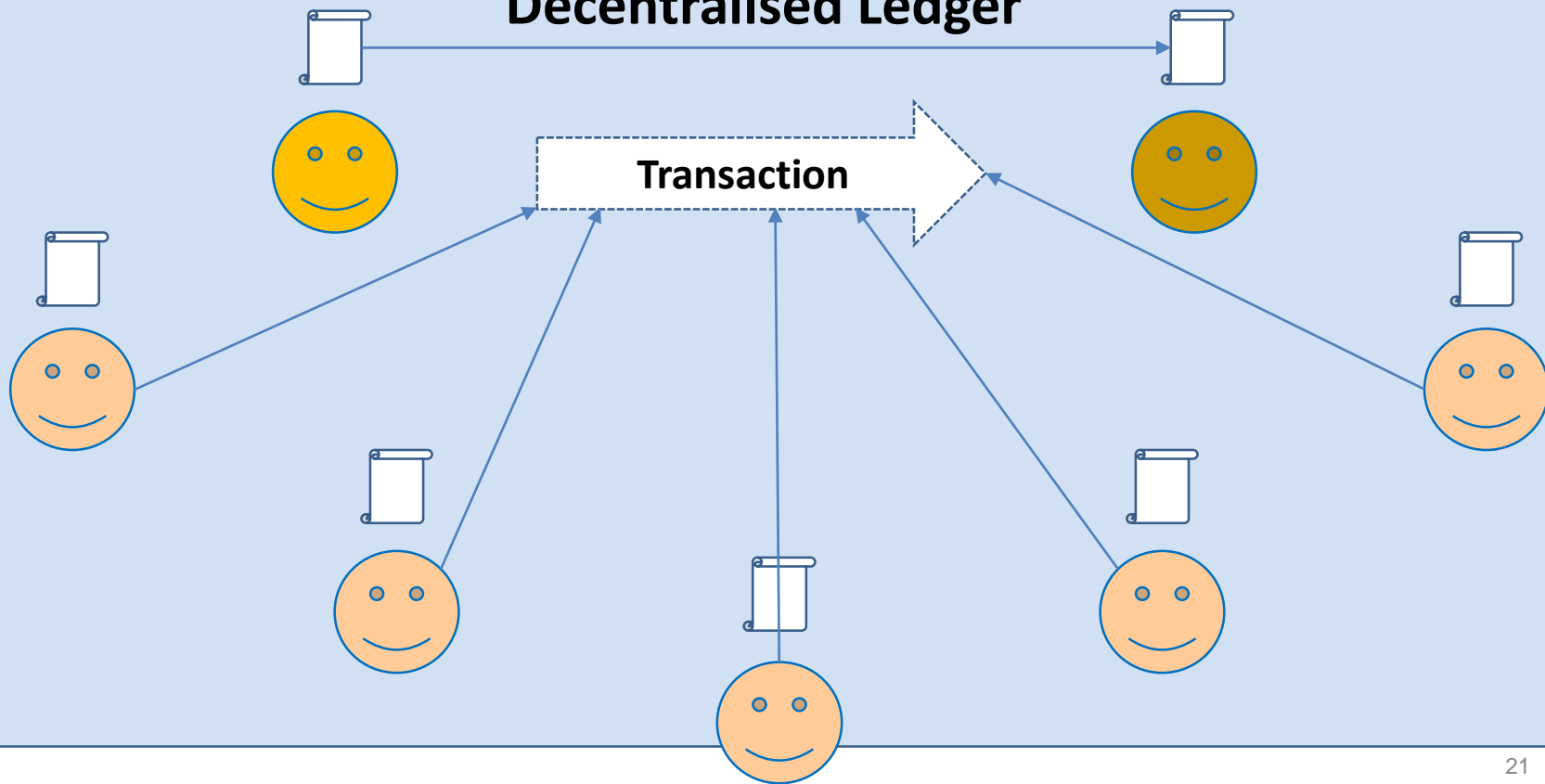
If any conflict,  
it will be difficult to mediate  
if evidence is not clear



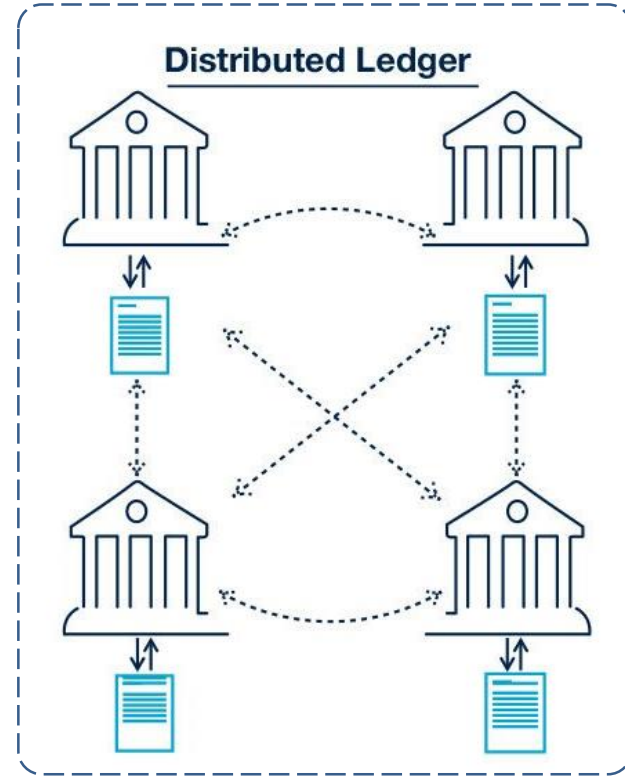
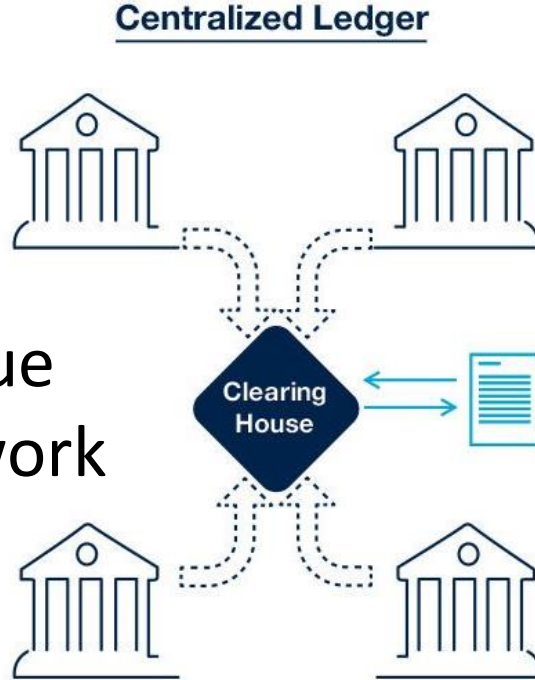
**Current Conventional System  
Centralised Ledger**



# Decentralised Ledger



- High fees
- Tedious; queue
- Slow; paperwork



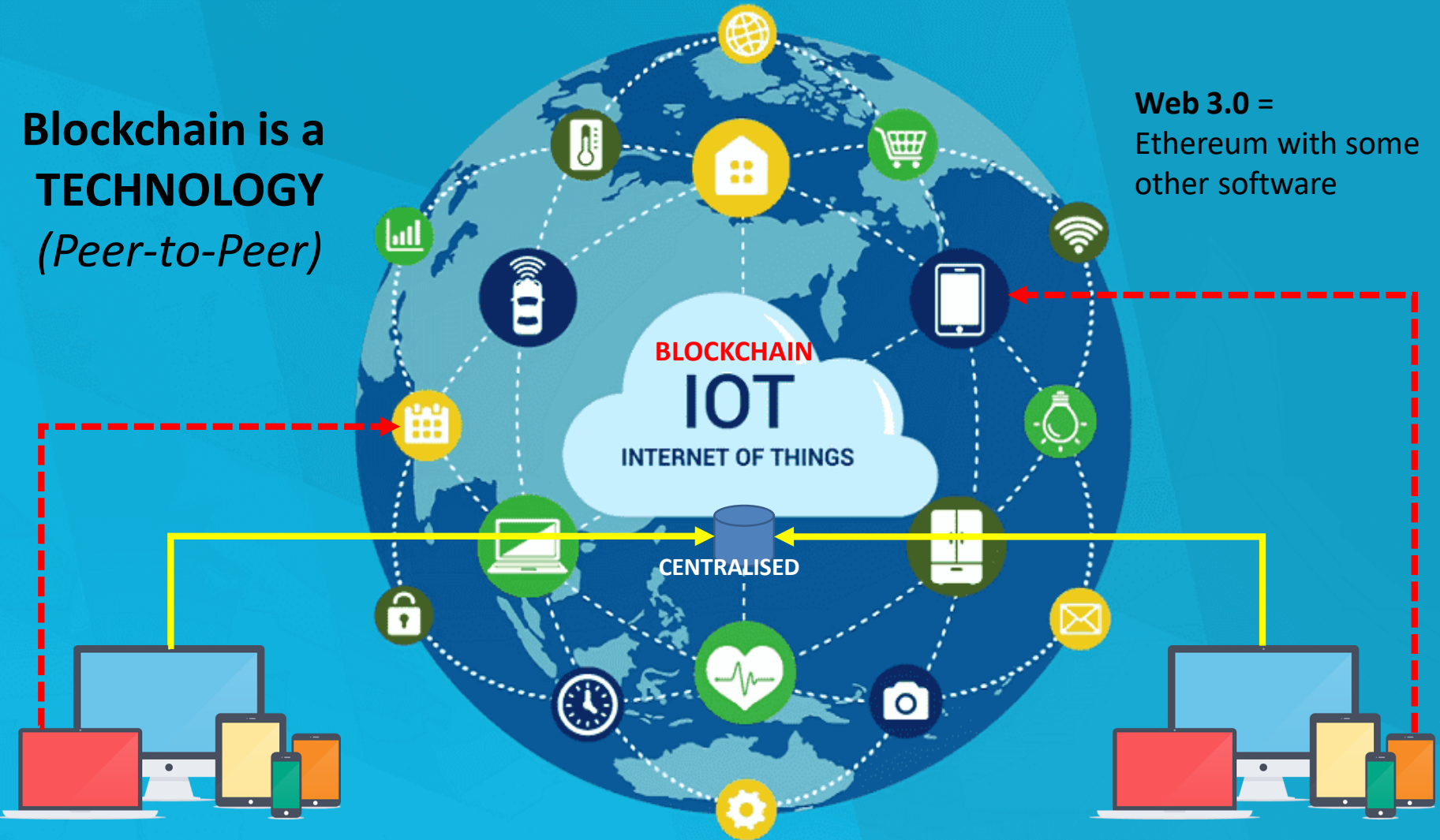
Source: Capgemini Financial Services Analysis, 2015; "The Fintech 2.0 Paper: rebooting financial services", Santander InnoVentures, Oliver Wyman, and Anthemis Group, 2015





**Blockchain is a  
TECHNOLOGY**  
*(Peer-to-Peer)*

**Web 3.0 =**  
Ethereum with some  
other software



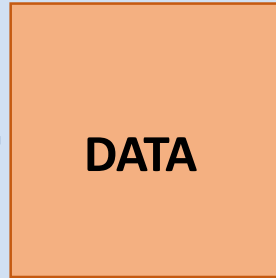


Start of ledger

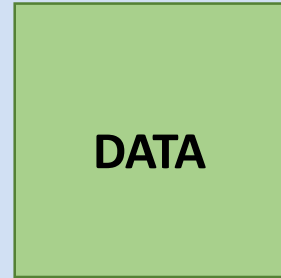
Unbreakable tracing of transactional records...

**0****1****2**

DATA



DATA



DATA

HASH: A1C6

HASH: D3E4

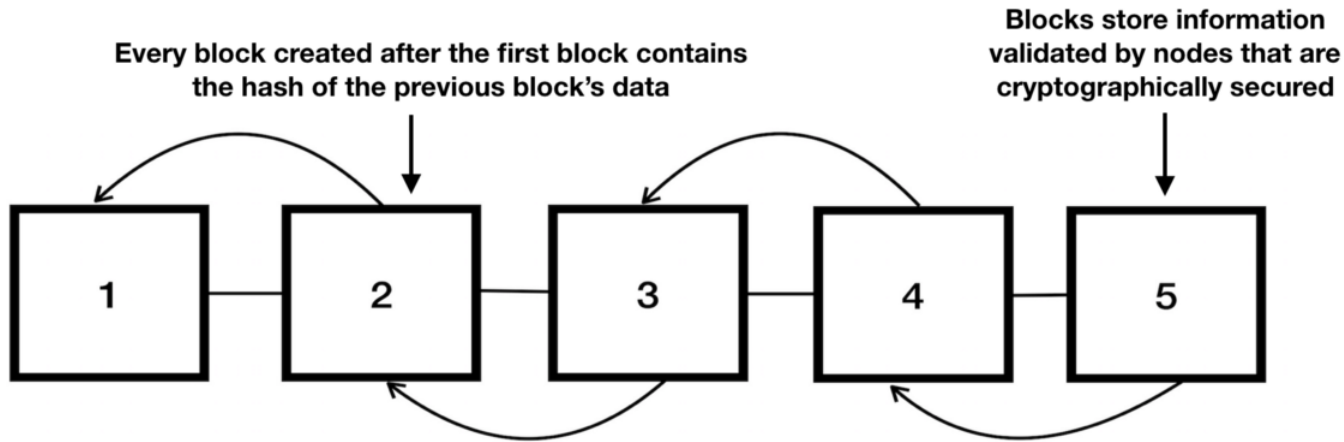
HASH: Z5B8

PREV HASH:  
0000PREV HASH:  
A1C6PREV HASH:  
D3E4

Every node on the system has a copy of the digital ledger. To add a transaction every node needs to check its validity. If the majority thinks it's valid, then it's added to the ledger. This promotes transparency and makes it corruption-proof.

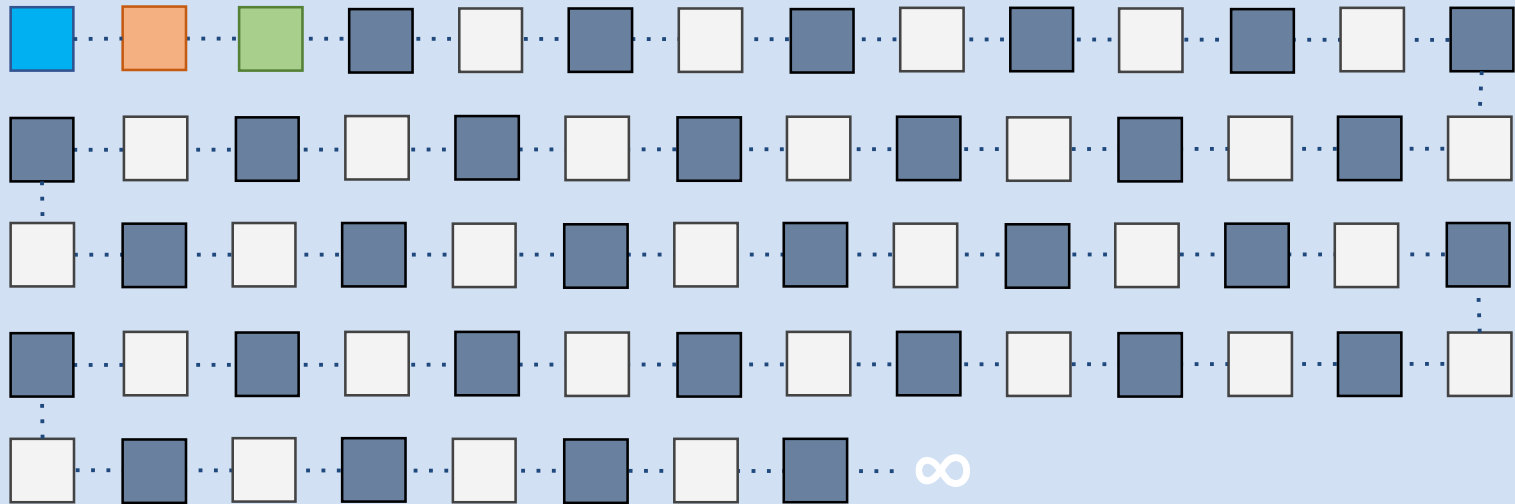
So, without the consent from the majority of nodes, no one can add any transaction blocks to the ledger.

Another fact, that backs up the blockchain features is that, once the transaction blocks get added on the ledger, no one can just go back and change it. Thus, any user on the network won't be able to edit, delete or update it.



“When a block is full, a new block will be created to store data and all blocks are linked hence blockchain.”

Thus **GREAT for banking system**



# Part 02

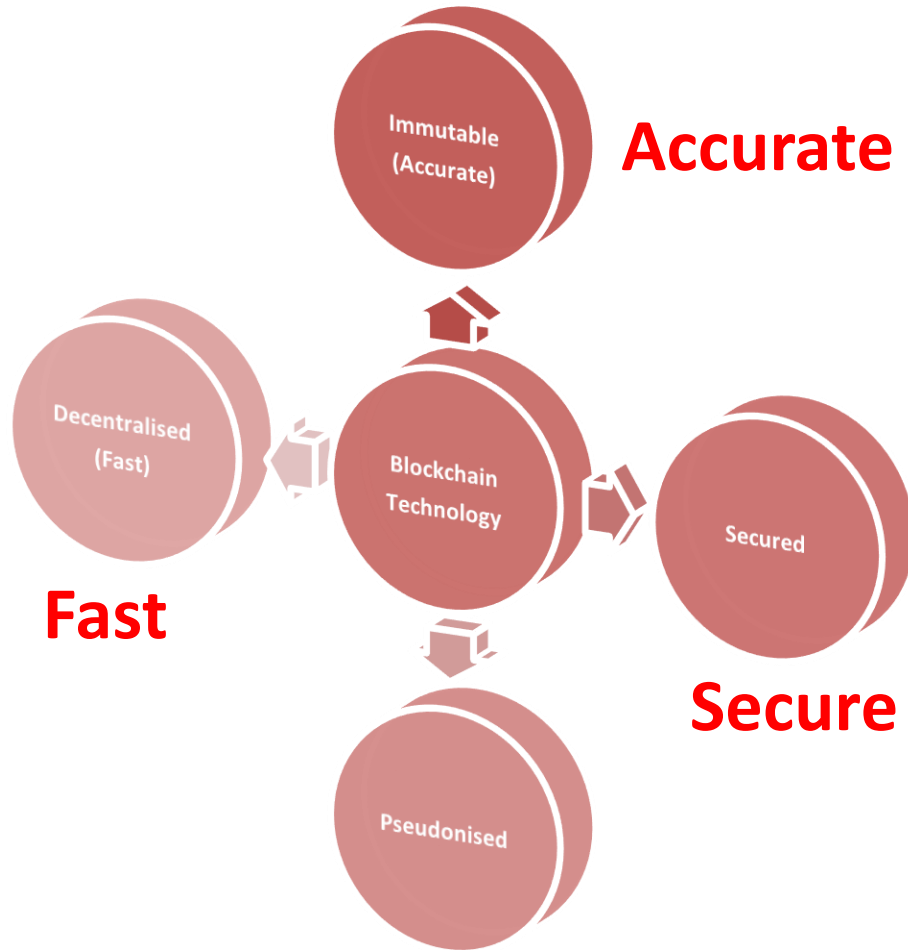
## Why It is making an IMPACT



Partner of  
Morpheus Labs



# Blockchain Technology has the following Integrated Benefits



## Benefit 1:

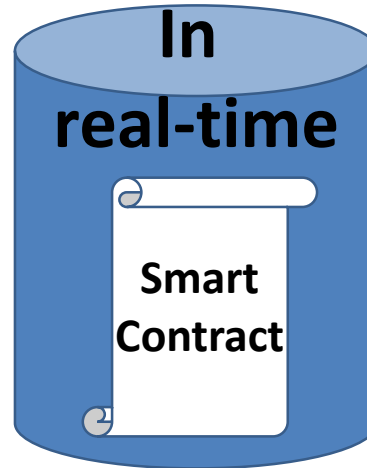
**FAST** (Decentralised)

“Data don’t have to all go to one central location for processing.”

So what does Distributed Ledger or  
Decentralised ledger mean in Blockchain?



**Fast and Paperless**



## Benefit 2:

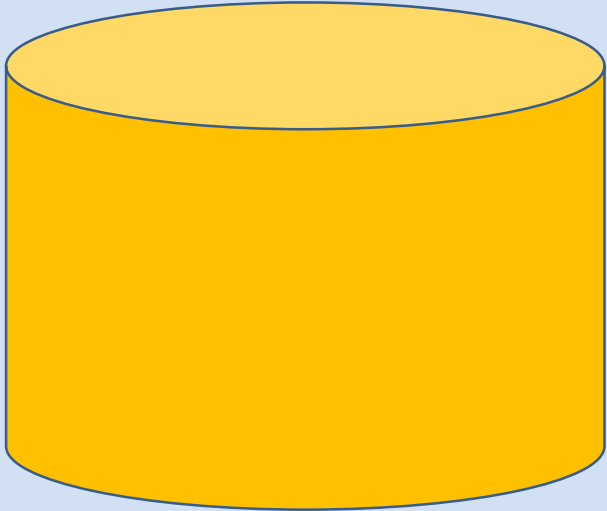
**Accurate** : Data Integrity (Immutable)

“Data exists within a blockchain cannot be change, hence tamper-resistant.”



## Benefit 2: Accuracy

### Hard-disk



In conventional way, files can be changed and you only get a time-stamped.

However, with blockchain, the record is immutable cause it is chained together validated by nodes.

## Benefit 3:

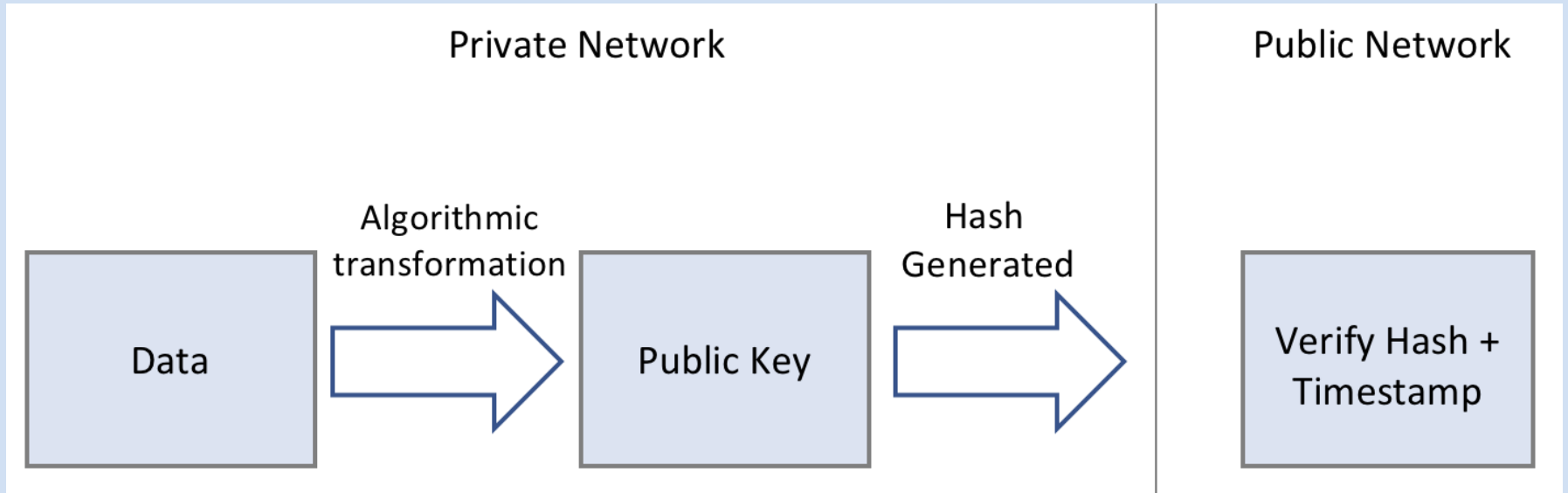
**Secured** - Enhanced Security

“Copies of same data exists throughout the network and are synchronize in real time.”

**So how to enhance the security and privacy?**

## Benefit 3:

### Secured - Enhanced Security

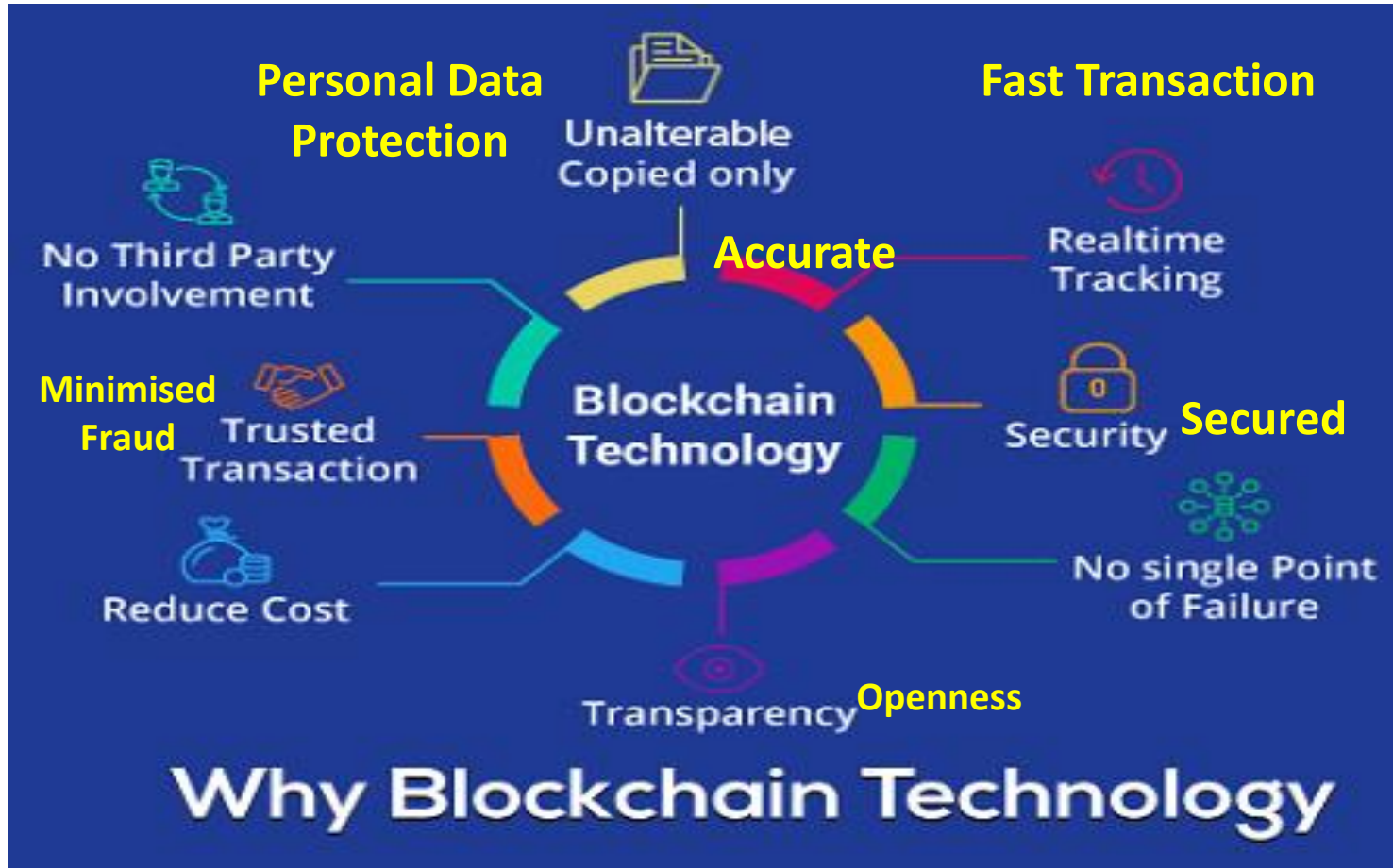


Benefit 4:

## Pseudonymity

“Legal identities are validated by the network, not necessary to know the actual persons.”

**Providing Great  
Personal Data Protection**



A quick overview

# QUIZ

**What are the benefits of  
Blockchain Technology?**



- ✓ **Fast**
- ✓ **Accurate**
- ✓ **Secure**

# Part 03

## Various usage Of Blockchain Technology



Partner of  
Morpheus Labs



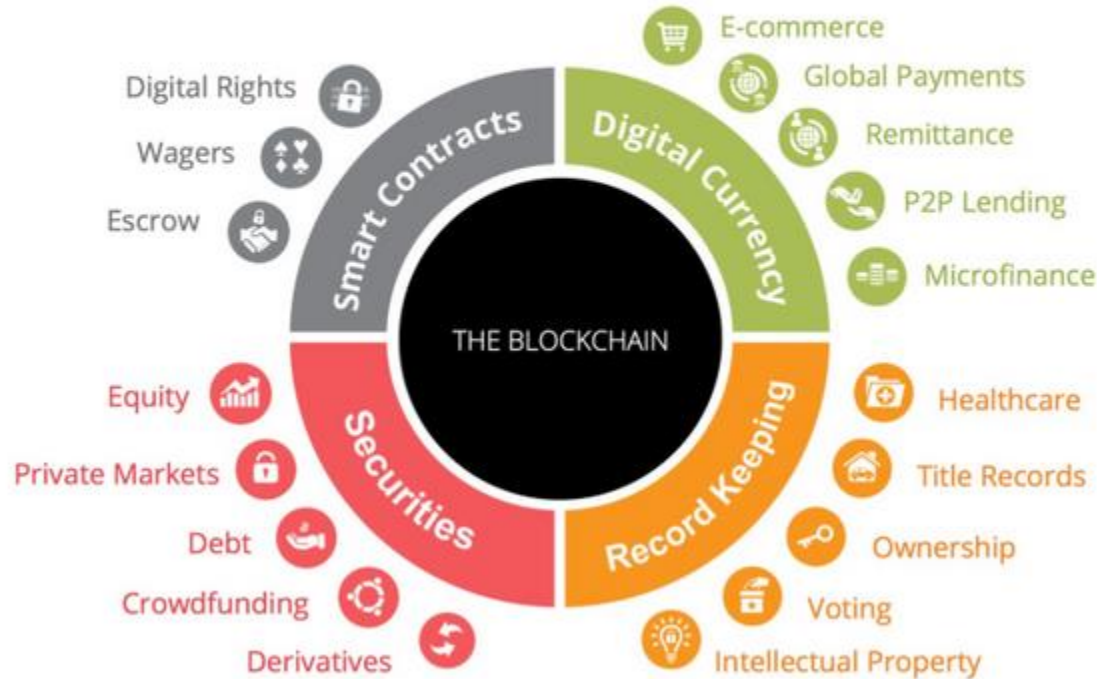
Let us now watch this short video  
at how Europe is utilising  
Blockchain Technology for  
identification, education and  
other aspects all integrated.





# Blockchain Potential Applications & Disruption

The blockchain is radically changing the future of transaction based industries



## Assets:

- Financial; insurance, remittance, banking
- Property; estate, antiques, music, arts, etc.
- Logistics

## Medical:

- Health records

## Education:

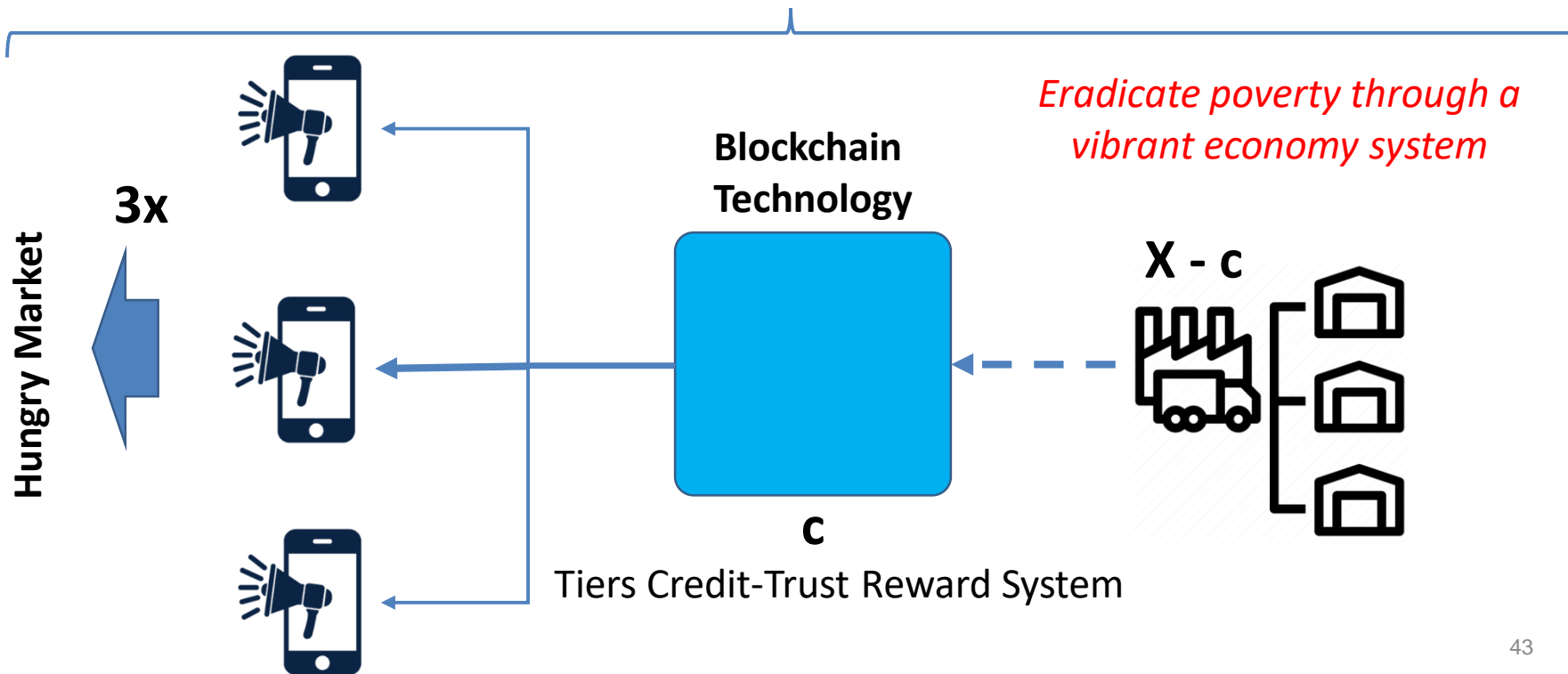
- Qualification authentication

## Government:

- Identification
- Voting
- Records; tax, etc.

# Micro-Credit System (Suppliers-Retails)

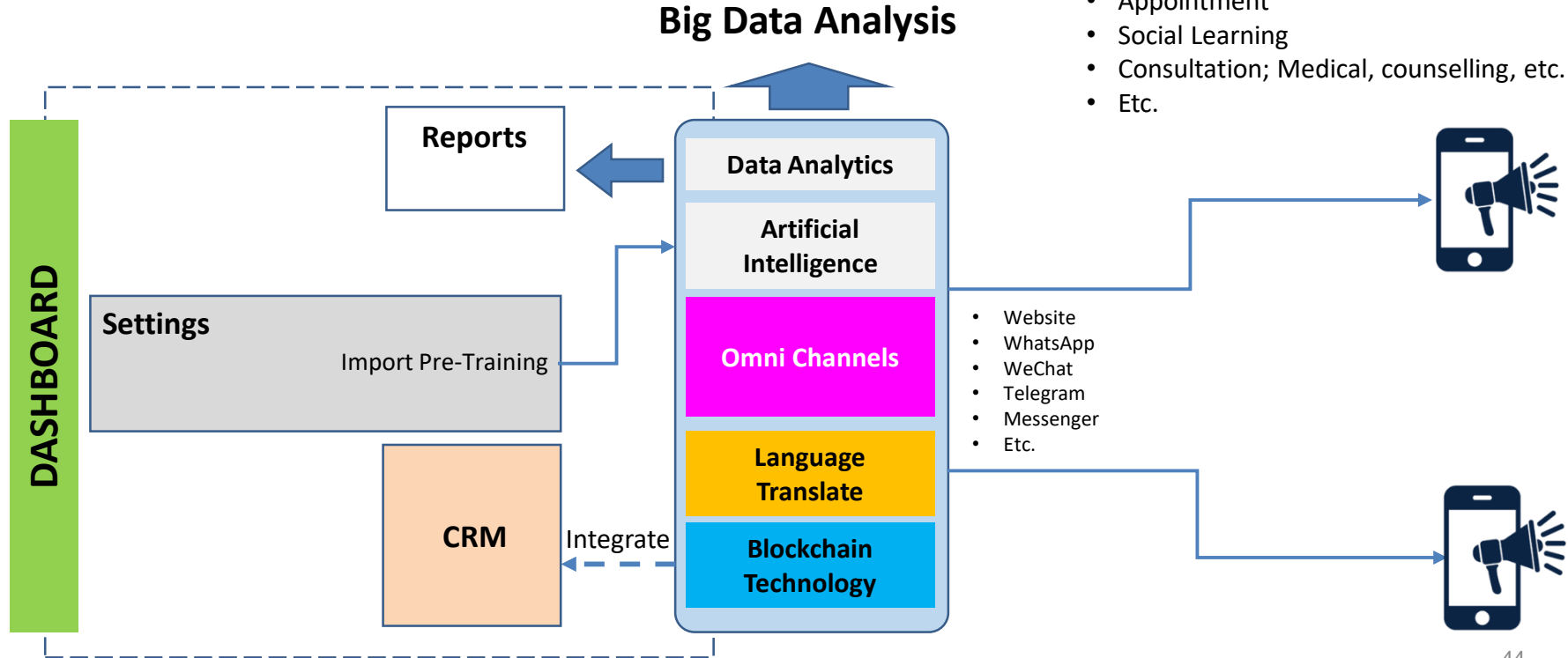
Data Analytics  
(Manage Market Saturation)



# Automated Interactive Messaging

Web 3.0 - (The Future of Services Automation)

- Marketing and Sales
- Leads Collection
- Leads Follow-up and Nurture
- Support Desk
- Surveys
- Appointment
- Social Learning
- Consultation; Medical, counselling, etc.
- Etc.



## The Ultimate Trainer's Tool **WORLDWIDE!**

### Auto Attendance!

Instead of taking attendance, your audience simply has to scan the Q-code and you will capture your audience profile that they have set when they install the apps and open a Quizmic account.

You can thus keep track of who attended which of your class in your finger tips!

### Quiz and Evaluation

- Create Quiz to see how much your students have learned
- Create Evaluation form to get feedback from your audiences
- Create polls
- Have all these save for future use or modification



### Live Mic!

Your audience can use their mobile phone as a Live Mic through the Quizmic apps!

Gone are the days where you need additional helper/s to walk around passing a mic to your audience who have a question to ask.

### Q&A Posting

Encourage shy students to post their questions and you can answer once those with similar questions either live or in your next lessons as you get to download a file of the questions asked.

APPLE STORE

GOOGLE PLAY

WINDOWS STORE

"The Trainer's Swiss Knife That He Needs For Each Session!"  
NEW YORK TIMES

### User-Friendly

The apps is easy to use. Simple enter the code the trainer gave and you are connected with the features and the trainer!  
Fast registration and Login with Facebook, LinkedIn or Email.



### Free Training

We provide Free training for trainer on how to use the Dashboard to create quizzes and use the many features of this amazing application! After you use it, you will not want to conduct training without it anymore!

WWW.QUIZMIC.COM



## THE PROBLEMS

**THE NEEDS**

### Essential Tasks in Training:

- ✓ Attendance taking
- ✓ Poll and survey; understand audience
- ✓ Question & Answer
- ✓ Assessment or trainees
- ✓ Course Evaluation
- ✓ Analytics to understand how audience's knowledge & understanding
- ✓ Assessment of trainers

*Note: Motivating trainees involves culture transformation strategy*

Attendance Taking

Q & A  
(Roaming Mic)

LMS  
(Link-up)

Quizzes  
(Short-Long)

Mentimeter

Kahoot!

slido

Gimkit



## QUIZMIC

Quizmic

**THE SET-UP**



Wow!  
Can get really big data!



Audio projected to PA System



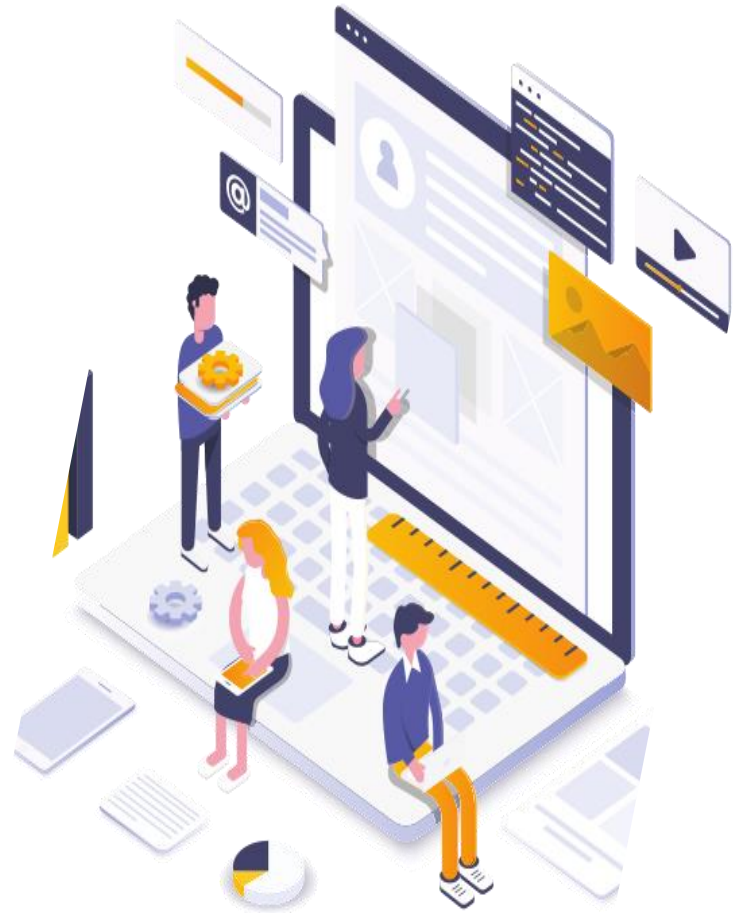
# QUIZ

**What kind of application is  
Blockchain Technology suitable for?**



**Ledger-type  
application**

# SUMMARY



# “ **BLOCKCHAIN** TECHNOLOGY...

➤ **Faster:**

➤ **Accurate:**

➤ **Secure:**





## About Us



- Former Industrial automation engineer
- Sustainable Community Development Regional trainer and consultant (13 years China)
- Experiential Learning Designer / Facilitator
- WSQ Trainer (ACTA)
- Advanced Certificate PDPA (Operation)
- Franchising Design and Management
- Branding and Marketing (SCMC-TUV-SUD)
- Parenting Mentor (Signpost-KKH)
- Certified Advance Fitness Trainer
- Certified Precision Nutritionist
- Certified Functional Ageing Specialist

Digital Transformation Consulting

**SG** Venture CONSULTING

探胜咨询服务  
SG Venture Consulting  
UEN : 53391282B

走进一带一路  
Venturing into One Belt One Road

**Patrick Oh 胡文狮** Singapore Certified Management Consultant by TUV-SUD

*DIRECTOR*

Morpheus Labs PARTNER  
Powering Blockchain Worldwide

TUV SUD

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Branding & Marketing \* Technology \* Data Protection \* Franchising

Seek to increase the adoption of Blockchain technology

	Course 1	Course 2	Course 3	Course 4
	Blockchain Aware!	Blockchain Application Conceptualisation	Ideation With Blockchain Technology	Morpheus Labs Console
<b>Purpose</b>	Awareness	Usage Ideas	Ideation	ML: Usage
<b>Learning Objectives</b>	Seeing the potential of blockchain	Initial conceptual idea in using Blockchain Technology	Ideate application with Functionality specification & Technical Specification	Usage of ML console
<b>Duration</b>	2 hr	16hr	21hr	21hr
<b>Target</b>	Public	Business Owners and Operation Personnel	Business Owners and Operation Personnel, and developers	Developers
<b>Prerequisite</b>	NA	NA	NA	Programming ability

*The first of its kind*  
**Cloud-based Blockchain Application development console**  
*that save time and money!*



The screenshot shows the Morpheus Labs IDE workspace. At the top, the logo 'MORPHEUS LABS' is on the left, and search, chat, notifications, and user profile (Johnson) are on the right. Below the logo is a navigation menu with 'Collapse' and options: Dashboard, Membership, Team, App Library, Blockchain Ops, Technical Support, and Profile Settings. The main area is titled 'My IDE Workspace' with 'RAM: 10/12' and a refresh icon. A '+ New Workspace' button is in the top right. The workspace contains several project cards: 'token-vesting-ui' (play button), 'sample-hft-exchange' (stop button), 'smp-api-smart-contract' (play button), 'multichain-web-ui' (play button), and 'multichain-web-ui-2' (stop button). Below this is the 'My Repositories' section, showing a search for 'smp' and a dropdown menu with options 'from My Gitlab', 'from AppStore', and 'All'. Repository cards include 'smp-api-smart-contract', 'smp-api-smart-contract\_2', 'demo-projects\_3', and 'demo-projects\_2'. A 'More' link is at the bottom left. Copyright text at the bottom left reads 'Copyrights © 2018 Morpheus Labs. All Rights Reserved.'

## *The Leading Cloud-based Blockchain Application Development Console*

### WHAT PEOPLE SAY

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*“ One thing that prevents TIBA's community from building blockchain apps is the imperfect UX and high entry barrier of existing platforms. Morpheus Labs makes it easy to start building applications on a number of different chains. Such platforms will be among the main driving forces behind business adoption of blockchain. “*

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#### **Péter Garamvölgyi**

Master's, Advanced Computing, Tsinghua University | President of the  
Tsinghua International Blockchain Association (TIBA)



**23,000,000+**

Software Developers  
Worldwide.  
- EDC, 2018

**109,000+**

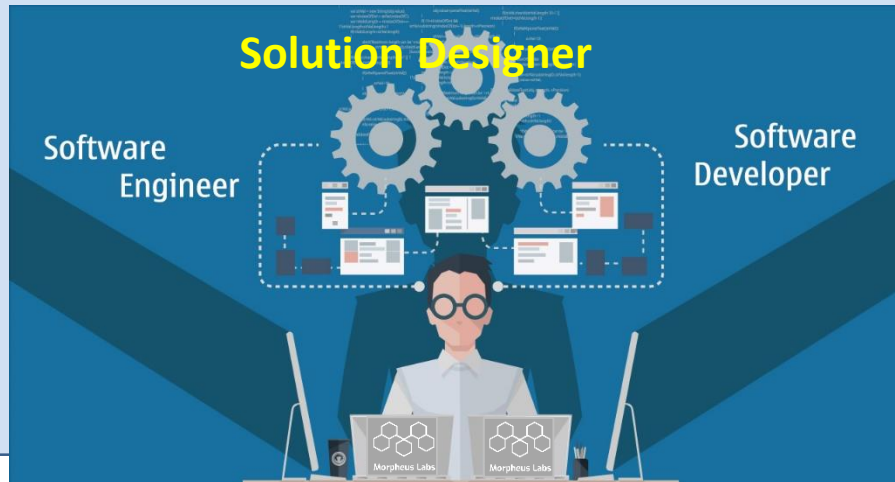
Blockchain Developers  
Worldwide.  
- ICORATING, 2018

We would like to add  
the next **100,000**  
Blockchain Developers  
by 2022



# Solution Design

Helping company look at their challenges,  
then using Blockchain and  
other technologies  
to co-create solutions



Developers are  
programmers who  
develop the design.  
They are like the  
fabricators who develop  
the various parts  
needed for the design.



Partner of  
Morpheus Labs



Morpheus Labs  
[www.morpheuslabs.io](http://www.morpheuslabs.io)

# THANK YOU!

Blockchain Application Development Console  
*(for developers and educational institutions)*

Blockchain Technology Application Consultancy

Email : [consult@sgventure-consulting.com](mailto:consult@sgventure-consulting.com)