Blockchain insights
From The
United Arab Emirates

مجالـس دبـي للمستقبل
DUBAI FUTURE COUNCILS

The Dubai Future Councils are tasked to share knowledge and expertise to find solutions to various challenges, launch initiatives and national strategies to create future and current opportunities, with the participation of leading government and private sector's experts specialized in exploring the future.

The councils include groups for blockchain, Community Security, Education, Humanitarian Aids, Media, Transportation, Future Cities, Energy, Artificial Intelligence, Talents, Health & Wellbeing, Entrepreneurship & Innovation Ecosystem, and Logistics.

DUBAI
BLOCK&CHAIN
CENTER

في دولة الإمارات
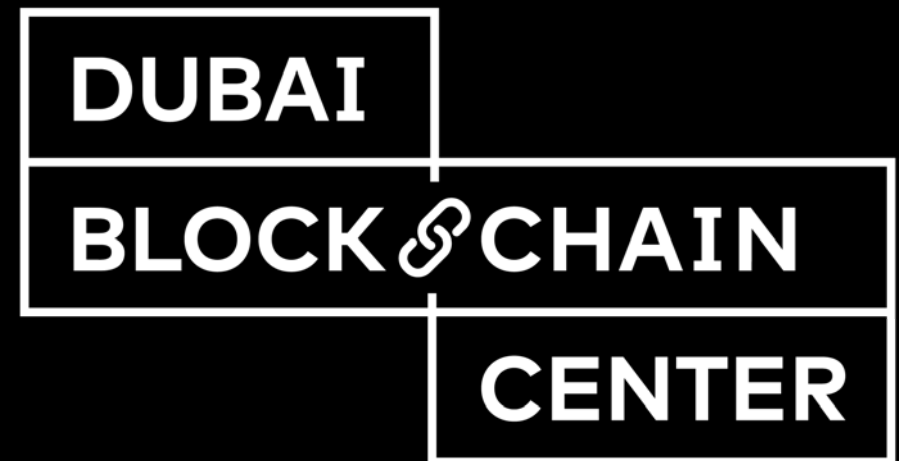
HH Sheikh Mohammed ✔ **@HHShkMohd** · Apr 23

We launched the world's first virtual "Ministry of Possibilities," a new government work system in the UAE. The virtual ministry, administered by the cabinet, will address pressing national portfolios and build future government systems.

"Dubai government will issue its last paper transaction in 2021, we have instructed Smart Dubai Office to oversee this goal."

His Highness Sheikh Hamdan Bin Mohammed Al Maktoum
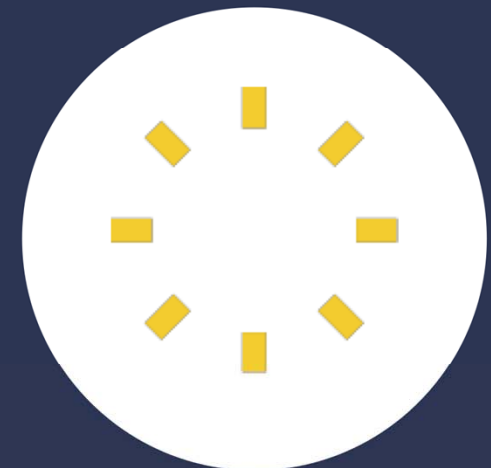Crown Prince of Dubai & Chairman of the Dubai Executive Council

WHAT TECHNOLOGIES WILL POWER THIS TRANSFORMATION?

BLOCKCHAIN
Unlocking the power of Blockchain to open the future economy from Dubai

HIS EXCELLENCY OMAR BIN SULTAN AL OLAMA

Minister of State for Artificial Intelligence

His Excellency Omar bin Sultan Al Olama has been appointed as Minister of State for Artificial Intelligence following the Cabinet reshuffle of October 2017. His responsibilities include enhancing the government performance by investing the latest technologies and tools of artificial intelligence and applying them in various sectors.

DIGITAL SERVICES
UAE PASS

BLOCKCHAIN

Unlocking the power of
Blockchain to open the
future economy from
Dubai

"DUBAI WILL BE THE FIRST CITY FULLY POWERED BY BLOCKCHAIN BY 2020"

His Highness Sheikh Hamdan Bin Mohammed Al Maktoum
Crown Prince of Dubai & Chairman of the Dubai Executive Council
On the launch of the Dubai Blockchain Strategy, 5 October 2016

Making Dubai the global capital of blockchain

- **DUBAI BLOCKCHAIN STRATEGY**

GOVERNMENT EFFICIENCY

INDUSTRY CREATION

INTERNATIONAL LEADERSHIP

ACHIEVE EFFICIENCY BY USING BLOCKCHAIN IN 100% OF APPLICABLE GOVERNMENT SERVICES

CREATE AN ACTIVE AND ENABLING BLOCKCHAIN ECOSYSTEM FOR STARTUPS AND BUSINESSES

LEAD THE STRATEGIC THINKING AND PROGRESS ON BLOCKCHAIN GLOBALLY

Virtual Onboarding

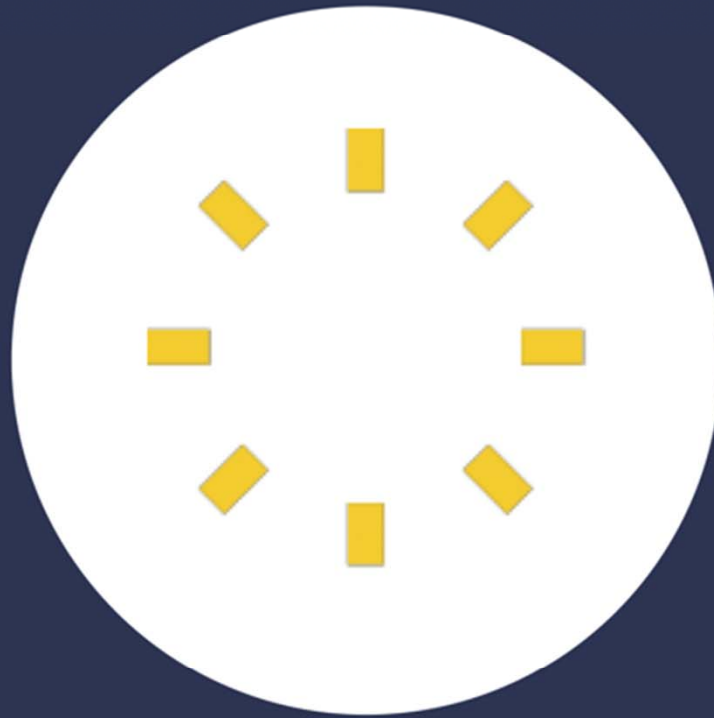**Self enrollment of biometrics**
Seamless sharing of Identity across providers
Based on international standards

Single Mobile Identity

Access Different services across all sectors
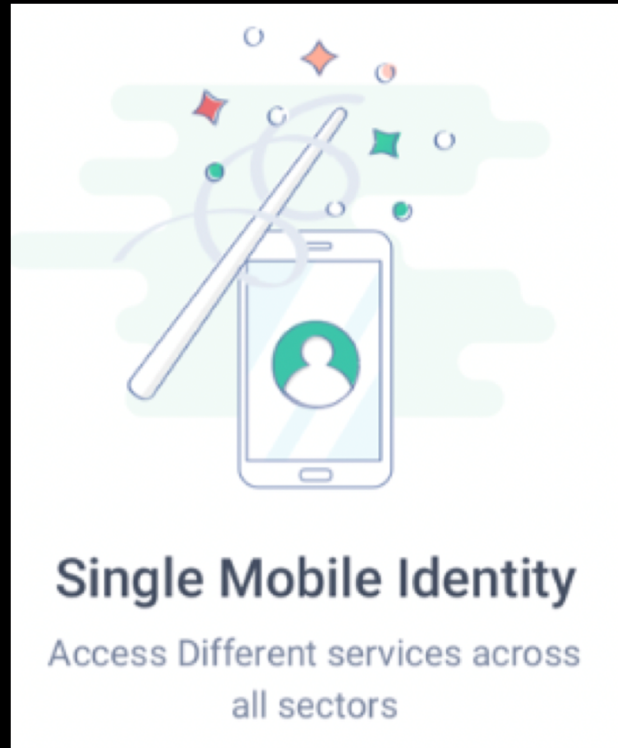
Sovereign Identity

**Privacy controlled by users
Based on PKI Technology
Not only for humans but also things
Humans are the first use case**

UAE PASS

The National Digital Identity and Signature Solution

Document Signing and Verification

Digital Signatures and eSeals
Dynamic Data Vaults
Seamless and Intelligent
Enables for Data Marketplaces and countless other use cases
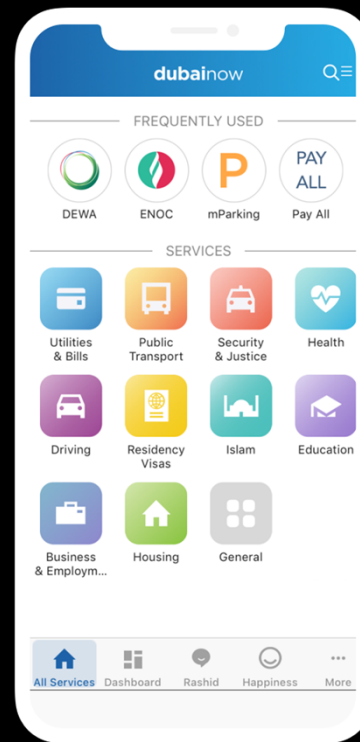
Unified Wallets

Universal KYC/AML

AI and Machine learning can be used to establish reputation and credit building

Hamdan bin Mohammed ✔
@HamdanMohammed

I have directed all government entities to provide their consumer services through the 'DubaiNow' app, which provides 88 government services and has already facilitated transactions worth AED4 billion. Our aim: the Dubai government to become 100% paperless by December 12, 2021.

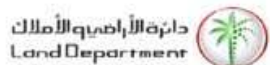# FEATURED DUBAI BLOCKCHAIN USE CASES

دائرة الأراضي والأملاك Land Department	دائرة التنمية الاقتصادية DEPARTMENT OF ECONOMIC DEVELOPMENT	هيئة المعرفة والتنمية البشرية KNOWLEDGE & HUMAN DEVELOPMENT AUTHORITY	جمارك دبي DUBAI CUSTOMS	DUBAI	هيئة الصحة بدبي DUBAI HEALTH AUTHORITY
Renting or Buying a Property	**Obtaining a Commercial License**	**Enrolling and Managing Students in School**	**Tracking Shipments (Dubai Customs & Dubai Trade)**	**Purchasing Event Tickets**	**Seeking Medical Treatment**
Obtaining Housing as a Local	**Reconciling Payments on Dubainow SDG**	**Developing Skills via Smart City University**	**Loyalty, Logistics Mngt & Spare Parts Prov. (Ek)**	**Interacting in the Tourism Industry Marketplace**	**Licensing Medical Institutions and Doctors**

PASSPORT	(notary)	هيئة الطرق والمواصلات ROADS & TRANSPORT AUTHORITY RTA	شرطة دبي DUBAI POLICE	بلدية دبي DUBAI MUNICIPALITY	دائرة الشؤون الإسلامية والعمل الخيري Islamic Affairs & Charitable Activities Department
Obtaining a Residency as an Expat	**Obtaining Notary Services**	**Managing the Lifecycle of a Vehicle**	**Processing Civil & Criminal Cases**	**Ensuring Food Safety (Chain of Custody)**	**Building a Charity Marketplace**
					Distributing Aid Regionally and Globally

Emirates NBD	الإمارات الإسلامي EMIRATES ISLAMIC	Emirates NBD ICICI Bank	Emirates NBD Infosys	BitOasis	DXmarkets DMCC
Smart Cheques - Cheque Chain (ENBD)	**Smart Cheques (Emirates Islamic Bank)**	**Bank Remittances (Enbd and Icici)**	**Banking Network (Enbd and Infosys)**	**Cryptocurrency Trading (Bitoasis)**	**Transferring Titles (Dxmarkets and Dmcc)**

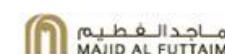| Dubai International Financial Centre	guardtime du	DMCC	loyyal	ماجد الفطيم MAJID AL FUTTAIM	هيئة كهرباء ومياه دبي Dubai Electricity & Water Authority
Creating Digital Wills (DIFC DRA)	**Securing Medical Records (Du and Guardtime)**	**Securing Kimberley Certificates (DMCC)**	**Offering Dubaipoints Loyalty Program (Loyyal)**	**MAF Blockchain Use Cases**	**Charging Electric Vehicles**

http://i.dr.mw/wto
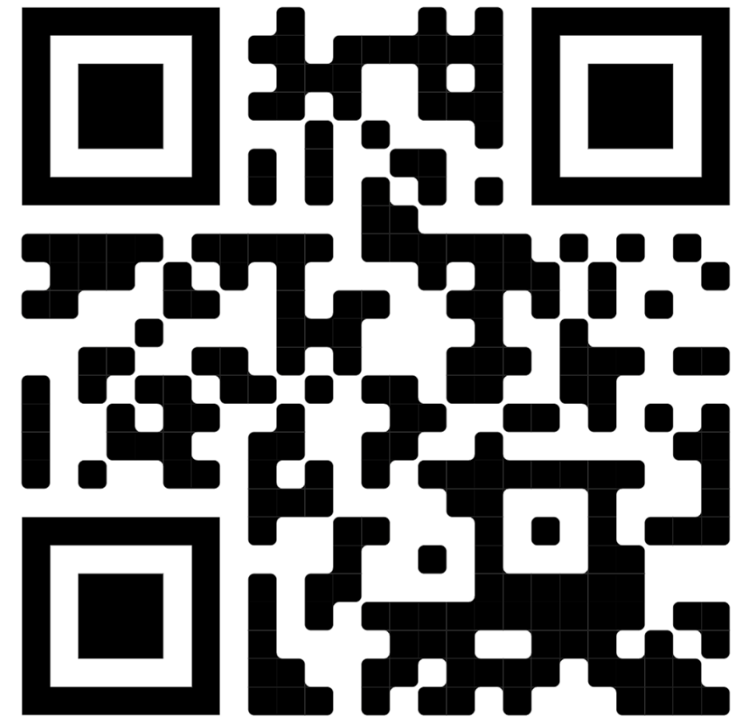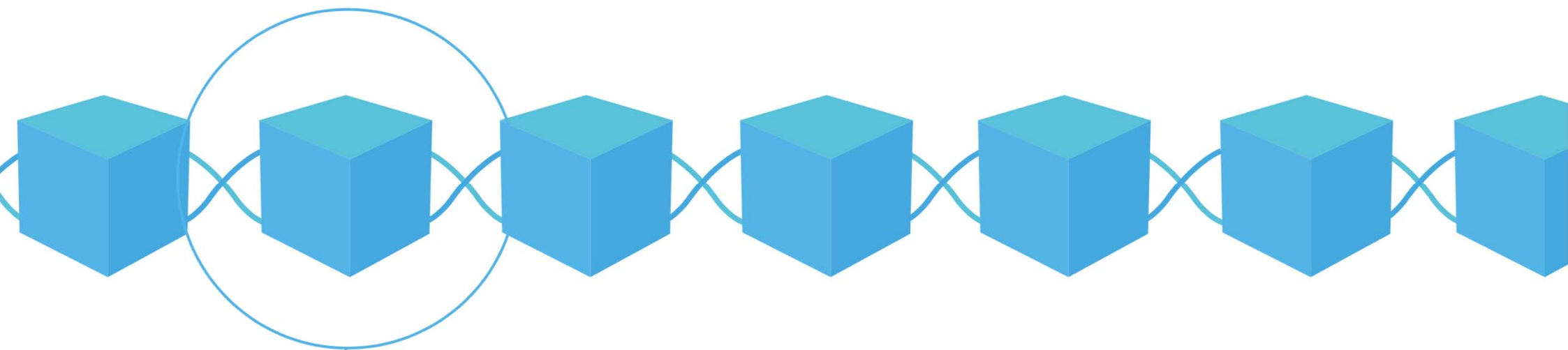
WHAT BLOCKCHAIN CAN BE USED FOR?

Records & Data Notarization

Blocks can be used as decentralized notaries to store the origin and validity of data and claims.
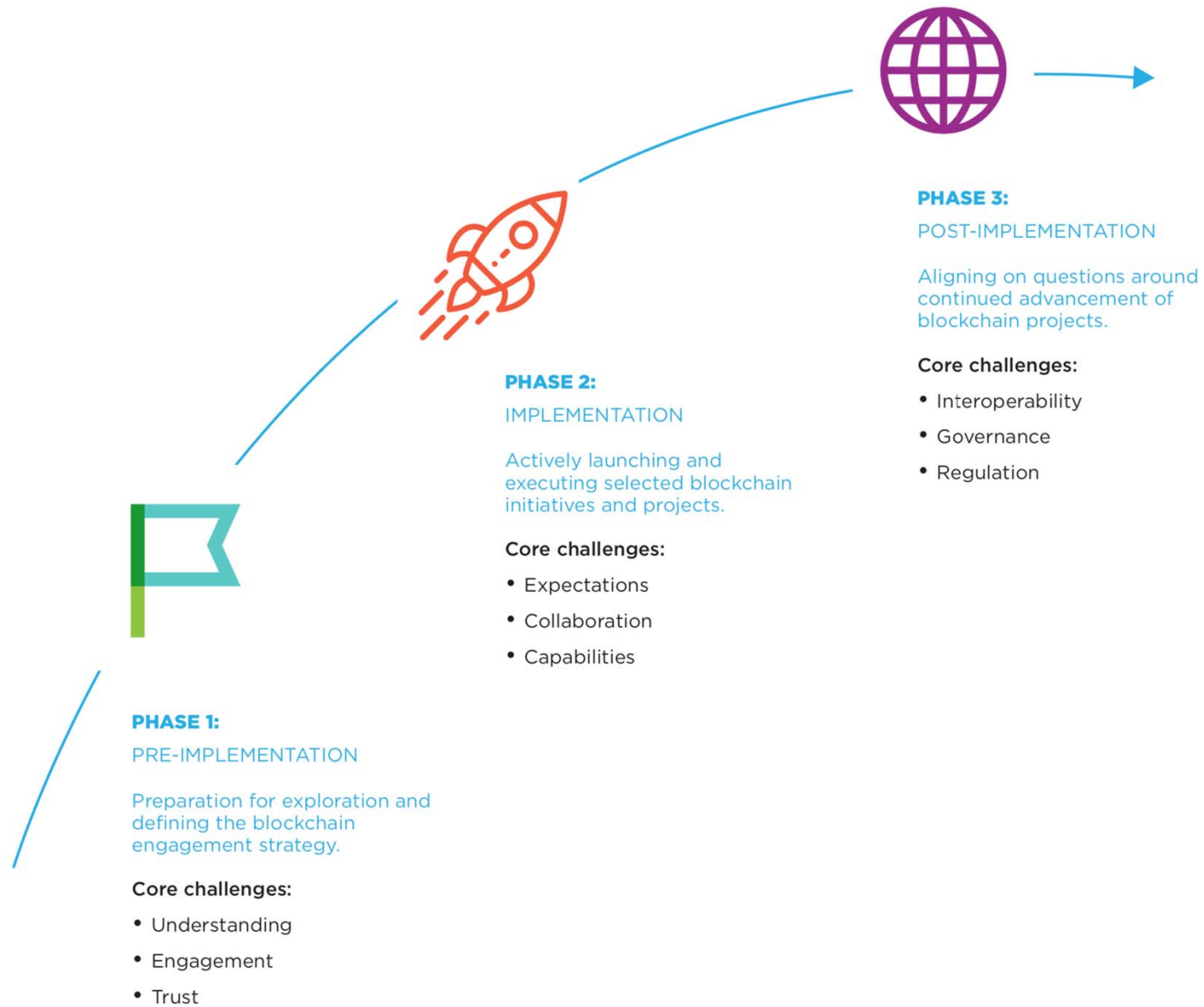
Smart Contracts

Smart Contracts can automate execution of business logic for exchange of data, value, and enforcing rules.

Value Exchange

Transactions occur directly peer-to-peer between transacting entitles, saving time and costs related to intermediaries as well as eliminating data asymmetry and reconciliation.
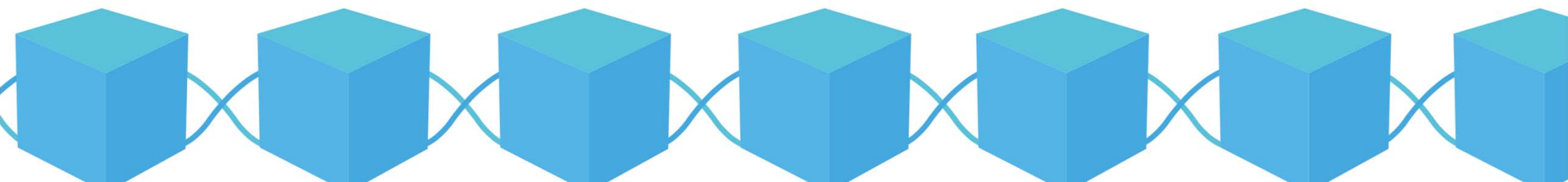
	Records & Data Notarization	Smart Contracts	Value Exchange
Agriculture	Medium	Medium	Low
Education	High	Medium	Low
Energy & Utilities	Medium	High	High
Financial Services	High	High	High
Government	High	High	Medium
Healthcare	High	Medium	Low
Manufacturing	High	Medium	Low
Media & Entertainment	Medium	Medium	Medium
Real Estate	High	Medium	Medium
Telecommunication	Medium	High	Low
Tourism	Medium	High	High
Transportation & Logistics	High	High	Medium
Retail	High	Medium	High

PHASE 3:

POST-IMPLEMENTATION

Aligning on questions around
continued advancement of
blockchain projects.

Core challenges:

- Interoperability
- Governance
- Regulation

PHASE 2:

IMPLEMENTATION

Actively launching and
executing selected blockchain
initiatives and projects.

Core challenges:

- Expectations
- Collaboration
- Capabilities

PHASE 1:

PRE-IMPLEMENTATION

Preparation for exploration and
defining the blockchain
engagement strategy.

Core challenges:

- Understanding
- Engagement
- Trust

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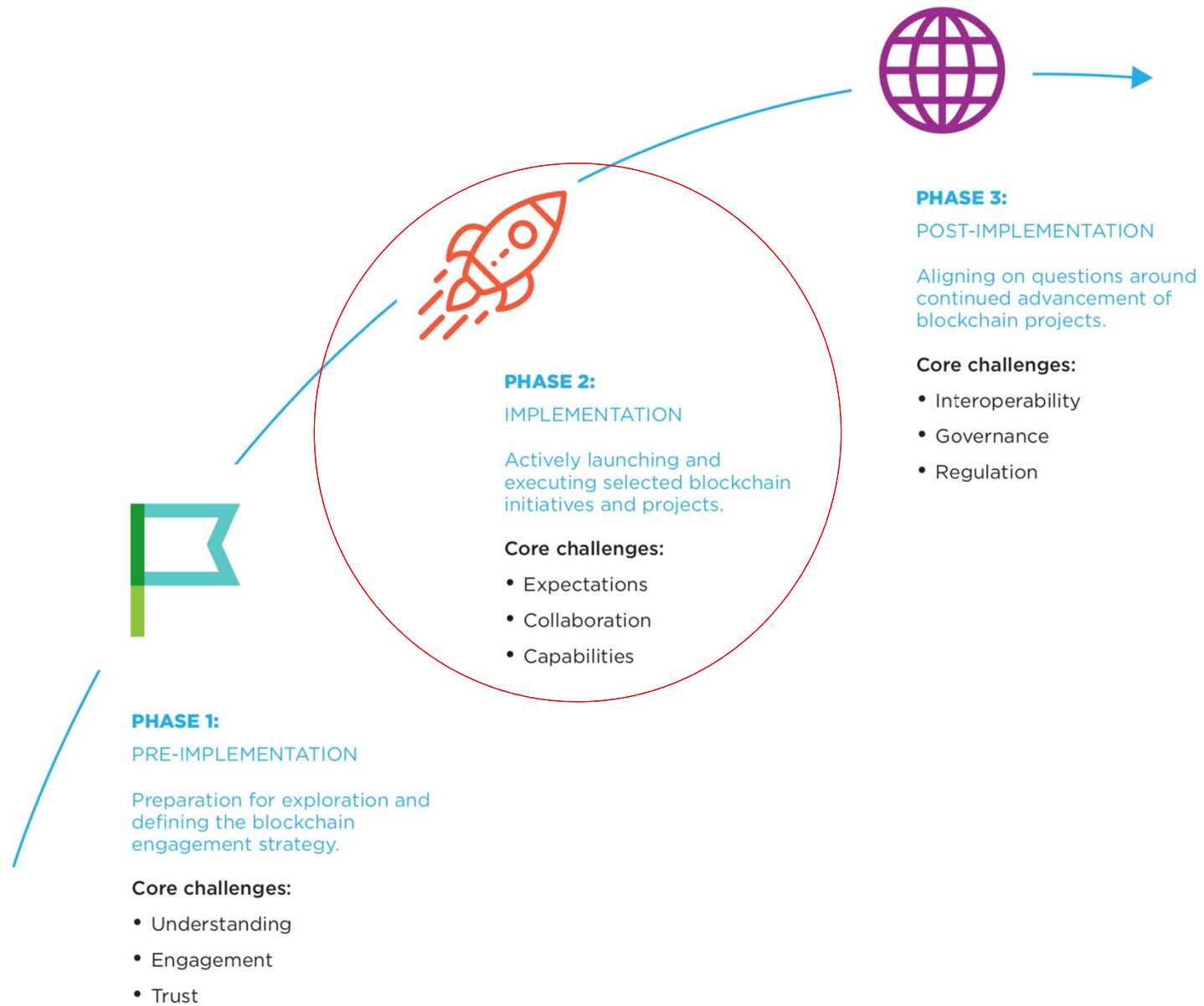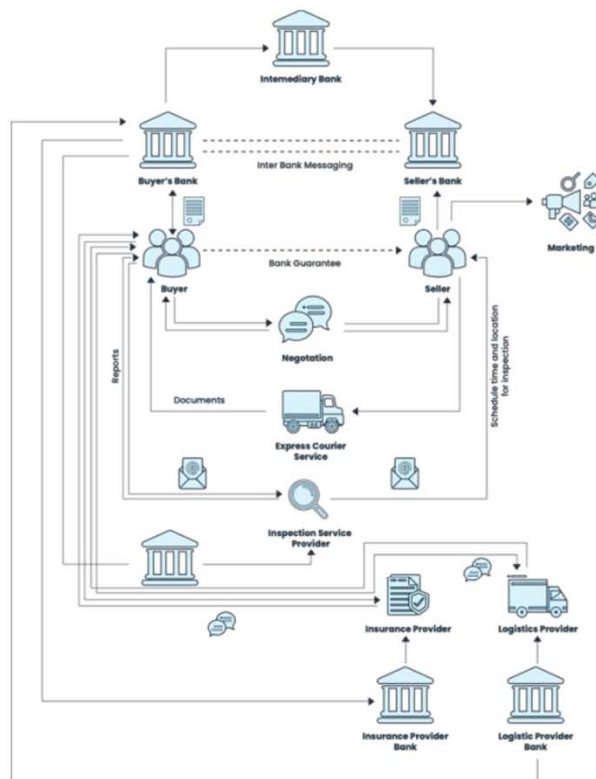
Simplifying Logistics for Cross Border Trade

Distichain Technology Automates Commerce Process Linking Users & Service Providers

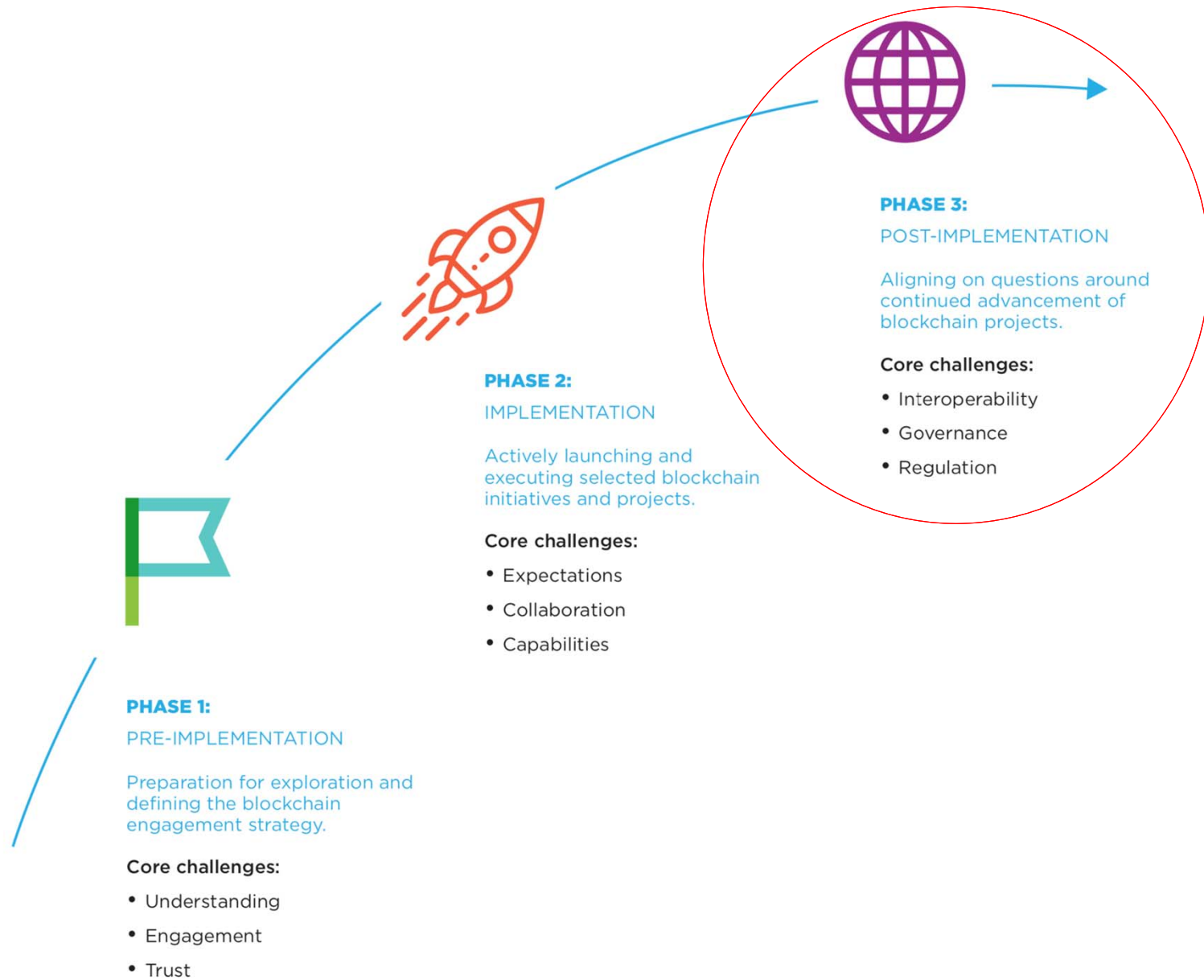Traditional B2B Commerce

Versus

Distichain

What is Area 2071?

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Dhonor Healthtech

Organ Donation Verification

Eradicating Organ Trafficking

RegLab

...is a test platform in a regulatory regime for FinTech participants to foster innovation within the UAE financial services market

Guidance on ICOs

...sets out the FSRA's regulatory approach to issuers seeking to raise funds through ICOs

ABU DHABI

Abu Dhabi Global Markets

(ADGM) initiatives

ADGM Digital Sandbox

...allows financial institutions and startups to collaborate on products and solutions in a digital platform environment

Hub71

... is an accelerator / incubator hosted by ADGM and supported by Mubadala, Microsoft and SoftBank