

Commonwealth Partnership for Technology Management (CPTM) Quality & Standards Inclusion Initiative Network

Brief on

**Optimising the use of Data & Digital
Technology for Quality & Standards Inclusion
through Smart Partnership
adaptive flexibility**



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**2018 Brief from
CPTM Quality & Standards Inclusion NSBs Network
for DEVCO/ISO General Assembly**

Recommendations & Insights

In order to expand and integrate the NSBs strategic role in Optimising the use of Data & Digital Technology through Smart Partnership adaptive flexibility in the National, Regional, Global context, CPTM NSBs Network will undertake :

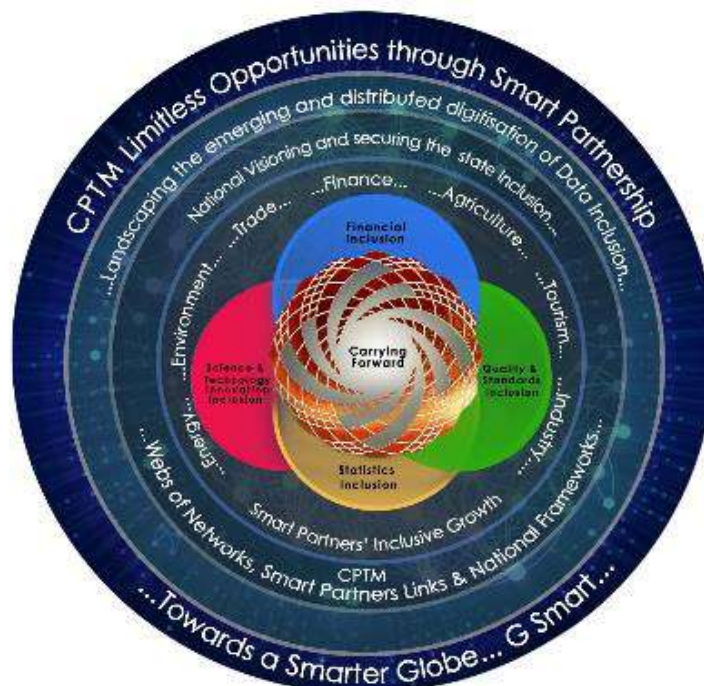
- **to participate**/contribute actively in the new CPTM Smart Partners' Integrated Initiative on '*Leveraging the Value of Data through Smart Partnership ... The Way Ahead... July 2018 ... June 2020...*'; **to adopt** the CPTM Smart Partnership adaptive framework alongside the Central Banks, National Statistics Offices invited to participate in the new Initiative;
- **to share** their experiences in developing and implementing new adaptive flexibility approaches in National Frameworks/Platforms for leveraging the value of standards and data;
- **to intensify** raising awareness on the strategic value of NSBs for applications of the Digital Landscape to further secure the NSBs financial sustainability and viable sustainable business models, alongside National standardisation strategies (supporting National Visions);
- **to engage** with and **assess** the potential advantages provided by FinTech developments, including Blockchain/Distributed Ledger Technology (DLT), Artificial Intelligence and Machine Learning; **to share** the knowledge on crypto-currency, the use of DLT; to continue to monitor applications of data technologies particularly those related to Trade (ie. provenance, supply chains), in addition to Finance Sector;
- **to interact** and **update** the Central Banks, and National Statistics Offices and relevant Government Organisations on the emerging ISO/IEC & ITU Standards related to FinTech and Data Technologies developments;
- **to continue** to forward as relevant executive briefs to Heads of Government, Commonwealth Finance Ministers and Commonwealth Trade Ministers on the critical need for increasing the strategic role of NSBs in support of leveraging the value of standards and data technologies enhancing the implementation of Inclusive Growth, in particular, Trade and Finance.

On behalf of

CPTM Quality & Standards NSBs Network

Dr Mihaela Y Smith PJN KMN, Chief Executive / Joint Dialogue Convener

September 2018, London



Optimising the use of Data & Digital Technology for Quality & Standards Inclusion through Smart Partnership adaptive flexibility

1. Background & Introduction

The 2018 CPTM Quality and Standards Inclusion Networks Brief to the 41st DEVCO/ISO/GA, Geneva, 24-28 September is continuing to reemphasise the 2017 Message about the critical need for enhancing the Strategic role of NSBs through Smart Partnership adaptive flexibility approaches in the Emerging Digital Landscape.

The 2018 CPTM DEVCO/ISO Brief consists of (i) an update on 2017/2018 activities of the CPTM NSBs Networks (including relevant insights from the 7th Central Bank Governors Think Tanking, July 2018 London); (ii) key signals related to Data and Digital Technologies; (iii) challenges and opportunities for the prospective role of standards in the development and application of Blockchain Technologies; (iv) invitation to participate in the new Initiative on Leveraging the Value of Data 2018/2020 new CPTM NSBs Network.

The CPTM Quality & Standards Network, initiated in 2010 and actively involved and contributing to the CPTM Smart Partnership Cooperative Framework in more than 27 countries in the Commonwealth, shares annually with ISO/DEVCO meetings, their work, outcomes and insights from its CPTM Think Tanking, Dialoguing and Networking ventures. **(SEE ANNEX)**

During 2017/18, CPTM NSBs Network continued to brief the Commonwealth Finance Ministers and Central Bank Governors (October 2018), as well as the Commonwealth Heads of Government Meeting, London, April 2018 **(SEE ANNEX)**. In particular, it is to be noted that the CPTM Report forwarded to each Head of Government/State recommended among others, the following:

.....(ii) **to note and commend** the pioneering CPTM Smart Partners' Strategic Inclusion Initiatives for development and growth and, in particular, **to support and adopt** the proposals emerging from CPTM's Inclusion Initiatives on: National Visioning and Security; Financial Inclusion and Adaptive Flexibility; Quality and Standards; Science, Technology and Innovation; National Statistics and Emerging Data and the Digital Landscape. These Initiatives are targeted towards sectors such as: industrialisation, trade, agriculture, manufacturing, tourism, environmental protection and climate change;

(iii) **to facilitate** Central Banks, National Standards Bodies (NSBs), National Statistics Offices (NSOs) and Science, Technology and Innovation Agencies (STIA) from Commonwealth countries **to develop and adopt** an inclusive National Smart Partnership Framework for integrated delivery of National Visions and Sustainable Development Goals (SDGs); **to encourage** Central Banks, NSBs, NSOs and STIAs **to leverage the value of data and to participate in developing emerging standards and regulations**;

(iv) **to consider** active participation of the Commonwealth countries in the CPTM Smart Partnership Inclusivity platform on the **"Leveraging the value of data for Commonwealth emerging economies"** **to be launched in 2018** and **to report** on the progress and effectiveness of its implementation by CHOGM 2020;.....

CPTM NSBs Network has been called upon to brief and assist the main leading Government Institutions and National Task Force, Central Banks and Private Sector on the ongoing developments in Blockchain and DLTs. NSBs Network has been kept regularly/weekly updated with briefs and expertise related to Digital Landscape by CPTM Smart Partners' Hub.

In particular, CPTM NSBs Network was encouraged to intensify their exposure to the current ongoing process of the development of new Standards for Blockchain/DLT since 2017, as potential Observers to the ISO/TC307. Ongoing briefings on the development would benefit NSBs in their national contexts where Blockchain/DLTs are already penetrating all the economic sectors from health, agriculture, industry, security and education.

CPTM NSBs Network is part of the CPTM Integrated Initiative on **"Leveraging the Value of Data through Smart Partnership - The Way Ahead, 2018-2020"** (SEE ANNEX), which focuses on emerging National Frameworks for **expanding** the implementation of the digital technologies in the relevant economic sectors (in addition to financial sector) for Inclusive Growth. CPTM Quality & Standards NSBs Network is expected to make relevant interventions mainly in Trade and Security in the national context.

2. CPTM Smart Partners Spotting Signals related to Data & Digital Technologies

The revolution in the use of Data which we are currently witnessing is driven by **advances in electronic and computer technology**, **Professor David Hand**, leading CPTM Adviser to the **Central Bank Governors' Think Tank** stated in June 2018, that there are three key aspects:

- the ability to capture Data at an unprecedented rate. This might be from automatic measuring instruments (e.g. sensor networks, traffic density monitors, weather stations, intensive care units, etc) or as a side effect of other exercises (e.g. supermarket transactions, hospital admissions, school tests, tax collection, etc). The terms **data shadow** and **data exhaust** have been coined to describe this side effect aspect.
- the ability to store vast quantities of Data.
- the ability to manipulate, process, and analyse vast quantities of Data in highly sophisticated ways to extract meaning.

Various classes of tools have been developed and are driving the revolution, including:

- **data-driven** models. These are models which are not based on any underlying theory about the mechanism generating the data, but rather are based merely on observed patterns and relationships in the data.
- **predictive tools**. These provide estimates of likely future values, of the likely values of new objects, and so on. Examples include statistical and machine learning tools for medical diagnosis, crime recidivism prediction, crime prevention, weather forecasting, and economic prediction.
- more elaborate methods, such as **deep learning**, **artificial intelligence**, and **text** and **image** processing.
- tools to cope with **unstructured** and **heterogeneous** data types. These are data which are not nicely formatted and complete rectangular tables of objects cross-classified by characteristics, but are situations in which the objects might have varying record lengths, or be images, signals, text, etc
- tools to **combine**, **link**, or **merge** data from different sources. The data might be of the same type (e.g. two or more databases) or of different types. Data linkage is a powerful strategy for revealing information about objects which would otherwise be undetectable. For example, data from supermarkets on food purchase behaviour could be linked with medical records to provide very strong epidemiological evidence about the benefits and risks of different diets.
- **data visualisation**, which has two main purposes: (i) discovery: the human brain is very effective at spotting patterns in visual representations, so methods of transforming masses of numbers to pictures can be very effective in leading to the identification of interesting or important features; (ii) communication: the old adage that a picture is worth a thousand words nicely conveys the power of communicating aspects of otherwise impenetrable data sets.
- **Secure multiparty computation**, in which it is possible to calculate summary statistics from a large number of people, without anyone learning their individual characteristics.

Above all one must recognise that Data Science and Data Technology does not stand still. Examples of cutting edge and new technologies are:

- Blockchain/DLT Technology, which permits the verification of data sources.
- encryption tools, which permit secure transactions, such as financial transactions.
- homomorphic computation, which permits calculations to be carried out on encrypted data.
- quantum computation, which permits vast numbers of calculations to be carried out in parallel.

(SEE SMART PARTNERS READING TIPS)

Alan Bryden, former Secretary-General of ISO, CPTM Companion during the **Open House at the CPTM Hub in April 2018**, emphasised that Data in itself has no value if it cannot be exchanged or developed or enhanced – but that progress may happen using International Standards.

International standards therefore have the role of supporting the integrity and value of data, Alan tells us. In financial services, for example, your pin-code and international bank-account number (IBAN) represent the coming together of a large number of standards that all relate to ensuring their dependability and safe use. Standards are also critical in the exchange of manufacturing information between different organisations worldwide, codifying industrial parts and components. In the health sector, individuals' medical information is codified and personalised. Standards and their application leverage the value of data to improve manufacturing, trade, health, e-governance, financial inclusion and social transformation. Standards themselves drive and disseminate innovation and growth.

Alan also explained how blockchains are most useful for securing the supply chains rather than for application to regulatory areas. Immutable physical traceability of goods flowing to the marketplace can add enormous value for producers and suppliers. Botswana, for example, is closely involved in the application of blockchain technologies to its diamond-producing industry.

During the CPTM Open House week, April 2018, **Paul Ferris**, CEO of London-based Identity expert from the ObjecTech and Chairman of ISO TC307/WG02, updated Smart Partners on his work to enable individuals to own their identity, giving individuals – not the state or commercial organisations – the unique right to their own details, all based on solid trust.

We're using International Standards to underpin our new system, standards that will be launched in a month's time in their first meeting in London. These will provide a much more trustworthy store of data than exists at present. The system avoids creating 'ghettoes of identity' because it's a common system open to everyone, from the poorest to the wealthiest. An early application is the International Airport of Dubai, which plans to introduce the system and enable the removal of passport gates for incoming travellers.

Passport data is collecting at your departure point before you board the flight to Dubai, which gives Dubai authorities huge advantages in terms of managing aspects such as security. Standards are crucial for the trust framework on which this system depends.

Finally, an example of the emerging role of Standards in this context is within the Financial Sector where the **market conduct supervisors** have a very tough job; their work involves collecting **data** from disparate sources and undertaking complex analyses to identify & assess risks. They must determine compliance with rules that are often principles based, in addition to keeping pace with financial sector innovations and supervisory mandates that are evolving to cover not only banks, but also financial cooperatives, microfinance institutions and new FinTech companies (e.g. non bank e-money issuers and person-to- person lending platforms. Technology solutions for market conduct supervision have been developed and are already in use for:

- automated data collection;
- advanced data validation, analysis & visualisation;
- platform & data base integration;
- data management & storage

3. The Prospective Role of Standards in the Blockchain/DLT Landscape

In a recent Report commissioned by British Standards Institute (BSI) to RAND EUROPE and titled "Understanding the landscape of DLT/Blockchain", (https://www.rand.org/content/dam/rand/pubs/research_reports/RR2200/RR2223/RAND_RR2223.pdf) key main insights and observations were made in relation to: (i) potential role of Standards in supporting DLT/Blockchain; (ii) what sectors could benefit most from the advant of DLT/Bloackchain Standards to accelerate implementation of the technology and (iii) to identify key stakeholders that would need to work together on developing standards related to DLT/Blockchain. The following Extracts from the BSI report commissioned to RAND Europe are most relevant:

".... Assessing the challenges and opportunities in relation to DLT/ Blockchain

In order to understand the broader landscape of DLT/Blockchain technologies and the role that standards could play in its development and adoption, it is essential to understand the challenges faced by DLT/Blockchain in relation to development and adoption of the technology by markets and end-users, and in relation to governance and implementation; as well as the opportunities that the technology offers, including improvements to business practices, such as cost reduction at the operational level and increased resilience in transactional systems, and particular applications, such as digital identity management and smart contracts. **Table 1**-summarises the key observations with regard to these challenges and opportunities from the interviews and accelerated evidence assessment. (SEE SMART READING TIPS)

The prospective role of standards to support DLT/Blockchain

We have identified areas where standards could – to varying degrees – potentially overcome the challenges and could support innovation, growth and competitiveness in the DLT/Blockchain ecosystem:

- Standards could play an important role in ensuring interoperability between multiple DLT/Blockchain implementations and, in doing so, could help reduce the risk of a fragmented ecosystem;
- Using standards to establish a stronger consensus on consistent terminology and vocabulary could improve understanding of the technology and help progress the market;
- Establishing standards to address the security and resilience of, and the privacy and data governance concerns related to DLT/Blockchain could help create trust in the technology;
- Standards could play a role in digital identity management and foster end-user trust in the technology;
- There are potential opportunities for standards to play a role in sectors where provenance tracking is important;
- It may be too early to think about standards related to the technical aspects of DLT/Blockchain.....”

(See Figures 1 & 2, SMART READING TIPS)

4. Expanding and integrating the CPTM NSBs Network Activities in the National Digital Landscape

During 2018-2020 the CPTM NSB's Network will focus on the prospective strategic role of Standards in the ongoing development of Data and Blockchain Technologies, and particularly on the rapid penetration of their applications in trade, agricultural supply chains, national security, among others.

The agreed overall approach is outlined in the **“Leveraging the Value of Data through Smart Partnership-The Way Ahead, July 2018-June 2020, CPTM Smart Partners' Networks & Cooperative Framework” (SEE ANNEX).**

CPTM NSB's Network is inviting and willing to co-opt as many NSB's participants, as well as ISO's relevant Initiatives in the two years CPTM Cooperative Framework. CPTM will continue to engage and cooperate with ITU, OECD's new 'Going Digital Programme', as well as Commonwealth Finance Ministers and Central Bank Governors meetings, Commonwealth Trade Ministers, alongside, Private Sector involved in the Digital Landscape.

5. Recommendations/Insights from CPTM Quality & Standards Inclusion/NSBs

In order to expand and integrate the NSBs strategic role in **Optimising the use of Data & Digital Technology through Smart Partnership adaptive flexibility** in the National, Regional, Global context, CPTM NSBs Network will undertake :

- **to participate**/contribute actively in the new CPTM Smart Partners' Integrated Initiative on '*Leveraging the Value of Data through Smart Partnership ... The Way Ahead... July 2018 ... June 2020...*'; **to adopt** the CPTM Smart Partnership adaptive framework alongside the Central Banks, National Statistics Offices invited to participate in the new Initiative;
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Dr Mihaela Y Smith PJN KMN, Chief Executive / Joint Dialogue Convener

September 2018, London

SMART PARTNERS' READING TIPS





Insights & Glimpses
www.cptm.org/documents/governors2018.pdf



Recorded/Broadcasted Videos & Glimpses
www.cptm.org/governors2018.html

Inclusive Initiatives Networks
www.cptm.org/governors2018.html

Participants Profiles
www.cptm.org/governors2018.html

Smart Partners' Reading Tips
 THE FUTURE OF MONEY & CENTRAL BANKS; DIGITAL CURRENCIES
www.cptm.org/documents/future_of_money.pdf
 EMERGING REGULATORY APPROACH & LEGISLATIVE FRAMEWORKS TO FINTECH CRYPTO FINANCIAL ASSETS
www.cptm.org/documents/crypto_legislations.pdf
 BLOCKCHAIN, DLT & SMART LEDGERS
www.cptm.org/documents/blockchain_techonology.pdf
 DATA SCIENCE /ANALYTICS/VIZUALISATION/AI & MACHINE LEARNING
www.cptm.org/documents/datascience_machine_learning.pdf
 MEASURING MODERN ECONOMIES & DIGITAL SECTORS
www.cptm.org/documents/staistics_measuring.pdf
 RISE OF THE INTANGIBLE ECONOMY, NETWORKING & SCALING; PEOPLE & DISRUPTIVE TECHNOLOGIES
www.cptm.org/documents/intangible_economy.pdf

Relevant documents
 CPTM Activities Publications
www.cptm.org/documents/activitiespublications.pdf
 CPTM Governance Activities Publications
www.cptm.org/documents/governancepublication.pdf

Power Point Presentations
 Regulatory Approaches to Blockchain _ Dr Ganado_Malta
https://www.sugarsync.com/pf/D667256_92_8149186291
 Blockchain standards committee activities update_Emelie Bratt
https://www.sugarsync.com/pf/D667256_92_8149186207
 DLT - National Centre - CPTM_Mike Brookbanks
https://www.sugarsync.com/pf/D667256_92_8149186294
 ONS_Jonathan Athow
https://www.sugarsync.com/pf/D667256_92_8149186215
 TU-T FG DFC-28June2018 Mr Vijay Mauree_ITU
https://www.sugarsync.com/pf/D667256_92_8149186210
 Bringing data to life_Lyndsey Pereira-Brereton
https://www.sugarsync.com/pf/D667256_92_8149186222
 FinTech for smart partnerships Cordelia Kafetz
https://www.sugarsync.com/pf/D667256_92_8149186238
 Central-bankers_Alan Smith_Financial Times
https://www.sugarsync.com/pf/D667256_92_8149186368

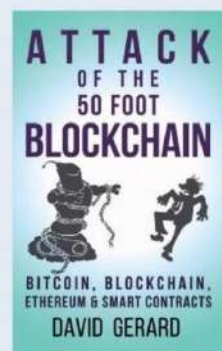
Leveraging the Value of Knowledge & Data through Smart Partnership 2018... 2020...
www.cptm.org/documents/smartpartnership2020.pdf

To download/access the full list of documents please logon to www.cptm.org/documents/links.pdf


CPTM
**CPTM Smart Partnership Financial Inclusion
Initiative Think Tanking on**

 Optimising the use of Data and Digital Technologies for
Financial Inclusion through Smart Partnership Adaptive Flexibility


BLOCKCHAIN, DLT & SMART LEDGERS



... Blockchain Technology Aims to Go Beyond the HypeBlockchain Technology Overview...
 ...Distributed ledger technologies for public good leadership, collaboration and innovation ...
 ... Does Your Supply Chain Need a Blockchain?... ...Get Smart About Scandals...
 ...Get Smart About Scandals... ...Netherlands Delivers National Blockchain Agenda...
 ... Smart Ledger Geostamping - Steps Towards Interoperability Standards...

To access/open/download, please log www.cptm.org/documents/blockchain_techonology.pdf


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DATA SCIENCE /ANALYTICS/VIZUALISATION/ AI & MACHINE LEARNING



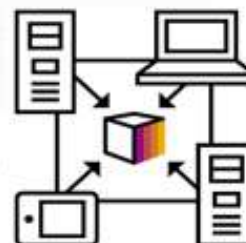
...Data and analytics innovation: Emerging Opportunities and ChallengesMetadata...
 ...The Data-Driven Manager: Make the Numbers Work for You... ...Data in the Digital Age...
 ... AI Will Not Replace Auditors, but Auditors Using AI Will Replace Those Not Using AI...
 ... Bitcoin could use more power than electric vehicles... ... Data, Everywhere, but let's just stop
 and think.. ...12 mind-blowing AI advances and 12 critical takeaways to put AI in perspective ...
 ...In China, Alibaba's data-hungry AI is controlling (and watching) cities....

To access/open/download www.cptm.org/documents/datascience_machine_learning.pdf

ISO/TC 307 structure

Reference	Title
ISO/TC 307/CAG 1	Convenors coordination group
ISO/TC 307/JWG 4	Joint ISO/TC 307 - ISO/IEC JTC 1/SC 27 WG: Blockchain and distributed ledger technologies and IT Security techniques
ISO/TC 307/SG 2	Use cases
ISO/TC 307/SG 6	Governance of blockchain and distributed ledger technology systems
ISO/TC 307/SG 7	Interoperability of blockchain and distributed ledger technology systems
ISO/TC 307/WG 1	Foundations
ISO/TC 307/WG 2	Security, privacy and identity
ISO/TC 307/WG 3	Smart contracts and their applications

Committee information including work progress of all projects
<https://www.iso.org/committee/6266604.html>



*Extracts from Dr Emelie Bratt, Lead Programme Manager,
 British Standards Institution - 28 June 2018*
https://www.sugarsync.com/pf/D667256_92_8149186207

ISO/TC 307 work programme

- ISO 22739 Blockchain and distributed ledger technologies -- Terminology
- ISO TR 23244 Blockchain and distributed ledger technologies -- Overview of privacy and personally identifiable information (PII) protection
- ISO TR 23245 Blockchain and distributed ledger technologies -- Security risks and vulnerabilities
- ISO TR 23246 Blockchain and distributed ledger technologies -- Overview of identity management using blockchain and distributed ledger technologies
- ISO 23257 Blockchain and distributed ledger technologies -- Reference architecture
- ISO TS 23258 Blockchain and distributed ledger technologies -- Taxonomy and Ontology
- ISO TS 23259 Blockchain and distributed ledger technologies -- Legally binding smart contracts
- ISO TR 23455 Blockchain and distributed ledger technologies -- Overview of and interactions between smart contracts in blockchain and distributed ledger technology systems
- ISO TR 23576 Blockchain and distributed ledger technologies -- Security of digital asset custodians
- ISO TR 23578 Blockchain and distributed ledger technologies -- Discovery issues related to interoperability

Australia in driving seat as global blockchain standards take shape

From the Financial Review Sep 9 2018 at 11:00 PM Updated Sep 9 2018 at 11:00 PM



Craig Dunn will address the Wangxiang Global Blockchain Summit in China this week on Australia's role chairing the International Standards Organisation Technical Committee 307 on Blockchain and Distributed Ledger Standards. Ryan Stuart

Westpac director Craig Dunn will tell China this week that more engagement from its technology leaders will help the global standards-setting process for blockchain, which Australia is leading, to create guidelines that will reduce the cost of deploying the emerging technology across the global economy.

An Austrade trade delegation arrived in China over the weekend ahead of this week's Wangxiang Global Blockchain Summit in Shanghai. Australia is chairing the International Standards Organisation (ISO) group developing standards for blockchain and distributed ledgers and Mr Dunn is chairing the work.

He told The Australian Financial Review ahead of a keynote address at the summit that "if you are going to have an international standard, given the significance of their work in blockchain, we need to have China involved".

China is deeply interested in the work of the so-called ISO "technical committee 307", which Australia chairs, given the potential for the new technology to create a new "internet of value". Proponents believe blockchain will underpin a significant amount of future global commerce and trade. Common technical and operating standards could reduce costs of developing the technology, by encouraging interoperability and market access while engendering trust in the new systems.

While China has clamped down on the cryptocurrency bitcoin and "initial coin offerings" (ICOs), which operate on blockchains, the technology itself [forms a part of the country's strategic thinking](#) and is being tested by Chinese tech giants including Alibaba, Baidu, JD and Tencent.

"The users of the technology should become key developers of the standard, because that means we will get a better standard that more people are likely to use. The more people that are involved, the better. It is a consensus process, and you need the players to get involved for the consensus to have any real meaning," said Mr Dunn.

While Standards Australia manages the standards development independently of government, in China, there is a close relationship between the state and creating standards.

"Australia's leadership in this global work being done to develop a global blockchain standard is respected by China, and there is an enormous amount of interest in how that will work," said barrister Philippa Ryan, a senior lecturer in law at UTS. "They appreciate it is Australia doing the work and know they can work with us, and will do it in a trusted way."

Russia, Germany and the United States are also closely monitoring Australia's ISO work. IBM, Microsoft, Azure, Oracle, Amazon Web Services, Google, Facebook and Salesforce have all this year announced they are working on aspects of blockchain. Meanwhile, 26 central banks are also exploring its use.

"This is a powerful technology and it is in the world's best interest for the input on standards to be as broad as possible. We want the people at the cutting edge, the leading developers and users of the technology, to be in the room, because of their expertise," Mr Dunn said.

Irony for libertarians

The idea of setting regulation and standards on blockchain is ironic given bitcoin was created as a system resistant to censorship and central control. However, it is broadly recognised that standards for the internet – such as for "TCP packet switching" – enabled the network to scale, operate across borders and work regardless of technology vendors. Similarly, cellular phone standards have allowed people to call each other regardless of location or operator.

The development of blockchain is still immature and the ISO recognises the dangers in setting standards for emerging technologies too early. Blockchain's myriad of current problems include concerns around performance, scalability, speed, limited interoperability, privacy and the lack of clarity around legal risk and governance.

"International standards can help address many of these challenges," Mr Dunn will tell the summit in China this week. They could reduce technical barriers to trade, lower switching costs for users, and their ability to lift competition and facilitate cross-border partnerships, he will say.

Given ISO standards typically take two to three years to finalise, Mr Dunn said "some time in 2020 a blockchain standard could be in place".

"We understand there is a danger finalising standards too early," he said.

"But the momentum around the technology is undeniable, so in some areas, a standard in the near term will be helpful."

The CEO of Standards Australia, Bronwyn Evans, said: "Australia was quick to identify not only the potential of blockchain, but the need for international standards. The buy-in from experts around the world, and their continued support and participation, has been key in the early days of blockchain, and will continue to be vital to the increased use of this technology.

Blockchain has the potential to completely transform the services we interact with every day. What started as a matter of public priority in Australia in 2016, has since evolved into global collaboration to unlock the significant benefits of this progressive technology."

The ISO blockchain standards committee has members from 50 countries. There are also observers from the Ethereum Enterprise Alliance, which had been formed by Microsoft, Intel and seven of the world's largest banks; the International Telecommunication Union and SWIFT, the global bank interbank payments network.

Australia's role chairing the ISO committee means the country is punching above its weight applying the technology. The World Bank last month [launched the world's first bond on a blockchain](#) developed by Commonwealth Bank. The ASX is preparing to use the technology [to settle and clear the Australian equities market](#). And the legal profession has [created the Australian National Blockchain to run smart contracts](#) governed by local rules.



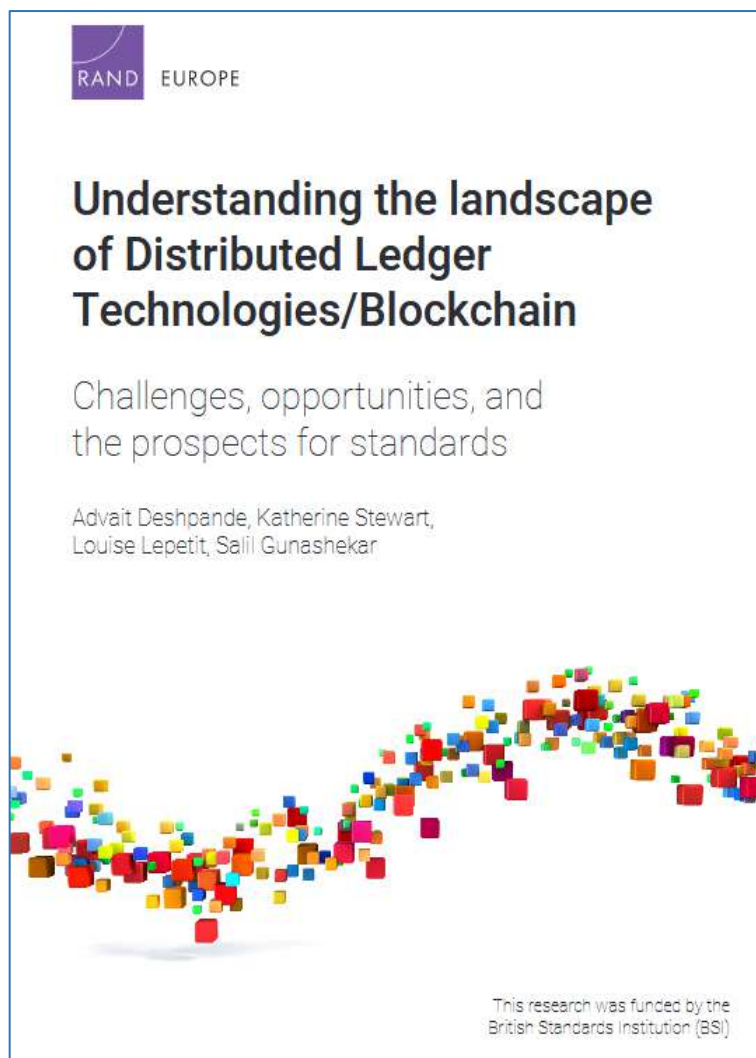
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https://www.sugarsync.com/pf/D667256_92_8372935046



<https://www.oecd.org/finance/financial-markets/OECD-Blockchain-Policy-Forum-2018-Agenda.pdf>

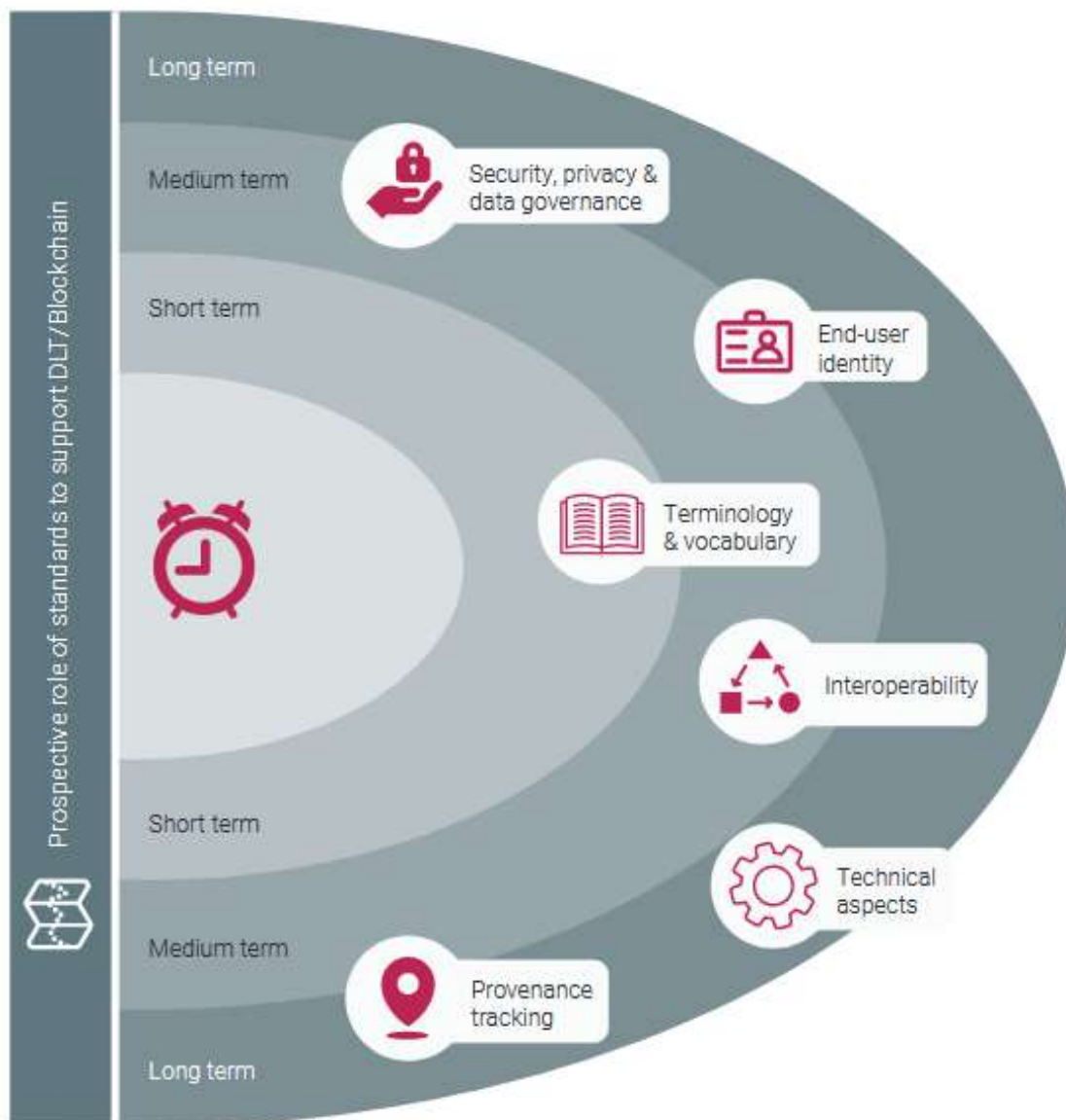


https://www.rand.org/content/dam/rand/pubs/research_reports/RR2200/RR2223/RAND_RR2223.pdf

Table 1: Key challenges and opportunities in relation to DLT/Blockchain

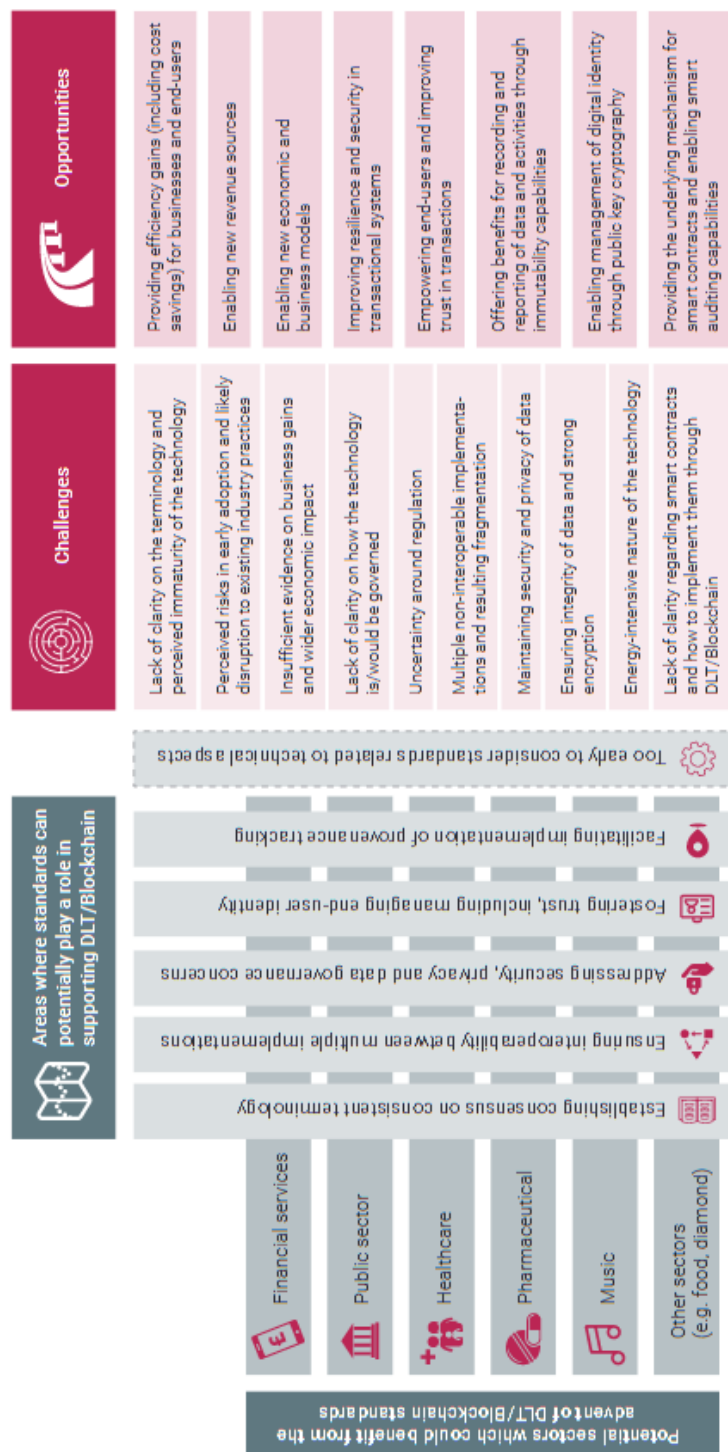
Challenges	<p>Insufficient clarity regarding and inconsistent understanding of the terminology, combined with the perception that DLT/Blockchain is an immature technology, poses challenges to wider adoption of DLT/Blockchain.</p> <p>The potential high costs of initial implementation, perceived risks associated with early adoption of DLT/Blockchain, and possibility of disrupting existing practices may pose significant challenges to businesses.</p> <p>The lack of clarity about the improvements the technology offers over existing solutions may delay its adoption by businesses. In the absence of widespread DLT/Blockchain adoption, the broader economic impact of the technology in the medium and long term is difficult to determine.</p> <p>Because of the nascent nature of the technology, there is a lack of clarity with regard to the governance of DLT/Blockchain systems.</p> <p>There is uncertainty related to the way current regulatory frameworks would apply to DLT/Blockchain and the changes that might be needed in the event of wider DLT/Blockchain adoption across sectors.</p> <p>The emergence of multiple non-interoperable DLT/Blockchain implementations could lead to a fragmented ecosystem and limit widespread adoption.</p> <p>Potential security vulnerabilities and concerns about data privacy are seen to be significant challenges, particularly if users are entrusting DLT/Blockchain solutions with personal data.</p> <p>Safeguarding data integrity and ensuring strong encryption mechanisms are perceived as key challenges to the wider adoption of DLT/Blockchain.</p> <p>The distributed nature of DLT/Blockchain systems and the need for increased computing power could potentially result in high energy consumption and associated costs.</p> <p>Key obstacles remain with respect to the legal enforceability of smart contracts, primarily related to the lack of clarity regarding the definition of smart contracts and how to implement them through DLT/Blockchain.</p>
Opportunities	<p>By automating processes and reducing the need for third-party intermediaries, DLT/Blockchain solutions have the potential to provide significant efficiency gains and cost savings for businesses and end-users.</p> <p>The adoption of DLT/Blockchain technologies could potentially enable new revenue sources for businesses.</p> <p>The growth of the DLT/Blockchain ecosystem could result in the creation of novel business and economic models, such as new forms of business collaboration and cryptocurrencies.</p> <p>The decentralised nature of DLT/Blockchain and the lack of a central point of failure could facilitate transactional systems to become more resilient and secure.</p> <p>DLT/Blockchain has the capability to empower users by putting them in control of their own information, and it has the potential to improve users' trust in carrying out transactions.</p> <p>The immutability of DLT/Blockchain transactions offers a number of benefits, including providing a clear audit trail and reducing the propensity for fraud.</p> <p>Depending on the use case, DLT/Blockchain could enable efficient and cost-effective management of digital identity through the use of public key cryptography.</p> <p>DLT/Blockchain technology could be used to implement the underlying mechanism for smart contracts and enable the use of smart auditing capabilities across different sectors.</p>

Figure 1: Areas where standards could potentially play a role in supporting DLT/Blockchain and an indication of the prospective timelines



Source: RAND Europe

Figure 2: Visualisation depicting (a) the areas where standards could play a role in supporting DLT/Blockchain, (b) the potential sectors that


 could benefit from the advent of DLT/Blockchain standards, and (c) the challenges and opportunities identified in relation to DLT/Blockchain⁴

Source: RAND Europe

4 Note: This visualisation provides a very high-level 'summary' of the analyses presented in the report. The DLT/Blockchain landscape is complex and varied; therefore, not all the areas for standards and not all the challenges and opportunities identified in our study will be applicable to all DLT/Blockchain designs and sectors.

ANNEXES

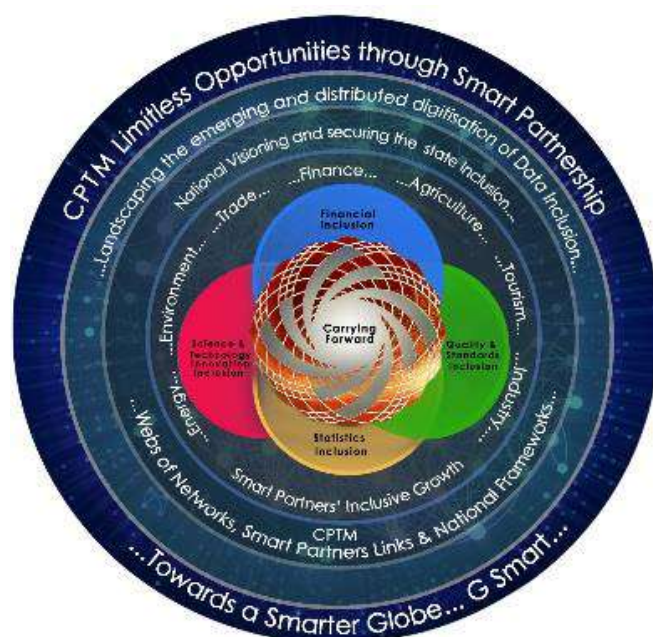


About the CPTM Quality & Standards Inclusion Initiative

CPTM Smart Partners Quality & Standards Inclusion was initiated in 2007 in Kuala Lumpur, prior to Smart Partnership International Dialogue in Zambia 2008 through a Workshop jointly organised by CPTM & Standards Malaysia. CPTM Quality & Standards Inclusion Initiative is reflected in the broad spectrum of participants and invitees to all the CPTM Smart Partners interactions Network. Since, they included **representatives from the various Smart Partners' Networking Webs/ Hubs and in particular the NSB's Chief Executives from:**

- **Southern, East & West Africa**, including the Botswana Bureau of Standards, the Standards and Quality Assurance Department of Lesotho, the Namibian Standards Institution, the Swaziland Standards Authority, the Standards Association of Zimbabwe, the Kenya Bureau of Standards, the Uganda National Bureau of Standards, the South African Bureau of Standards, the Rwanda Standards Board and TradeMark East Africa
- **Caribbean & North America**, CARICOM Regional Organisation for Standards and Quality (CROSQ) and its members from Antigua & Barbuda, Belize, Commonwealth of Dominica, Grenada, Republic of Haiti, Montserrat, Federation of St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Commonwealth of the Bahamas, Barbados, Co-operative Republic of Guyana, Jamaica, Republic of Suriname, Republic of Trinidad & Tobago, Canada
- **South East Asia/Pacific**, including Department of Standards Malaysia (Ministry of Science, Technology & Innovation), SPRING Singapore, New Zealand, Sri Lanka
- **West Asia/Mediterranean & Europe**, including BSI UK, Cyprus Organisation for Standardisation, Malta Competition and Consumer Affairs Authority, Smart Partnership Hub in Brussels, African, Caribbean, and Pacific Group of States (ACP)
- Secretariat in Brussels and leading members of the CPTM Smart Partnership Quality & Standards Inclusion Initiative.
- **International Organisations** such as **ISO, WTO and ITU**, among others...

Since 2010, a core group of CPTM Quality & Standards Initiative has actively progressed, monitored and adapted their highly successful Smart Partnership approach to the Emerging Digital Landscape, as part of the regular annual Think Tankings at the CPTM Smart Partners' Hub in London and Smart Partnership Dialogues, alongside Central Bank Governors and leading experts and private sector from the Data Analytics and Digital Technologies (eg. Distributed Ledger Technology/Bloackchain)





**Leveraging the Value of Data through
Smart Partnership
...The Way Ahead...**

July 2018 ... June 2020 ...
CPTM Smart Partners' Networks &
Cooperative Framework



Contents

- Leveraging the Value of Data “The Way Ahead (2018-2018)”
- Letter-Council of Patrons & Advisers, Chair of the Smart Partnership Movement, CPTM Fellows
- “The Way Ahead”-Introduction & Overall Objectives
- Outline of Indicative Costings
- Smart Partners' Invitation for “The Away Ahead (2018-2020)”
- Leading CPTM Webs of Inclusion Initiatives Networks



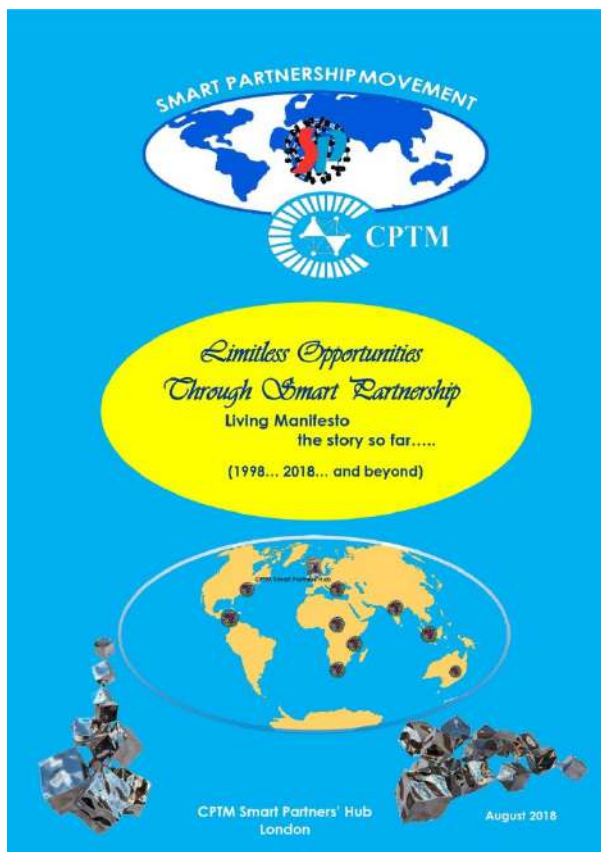


Leveraging the Value of Data through Smart Partnership... The Way Ahead... 2018-2020

... Everything is now different... ...And everything is the same...

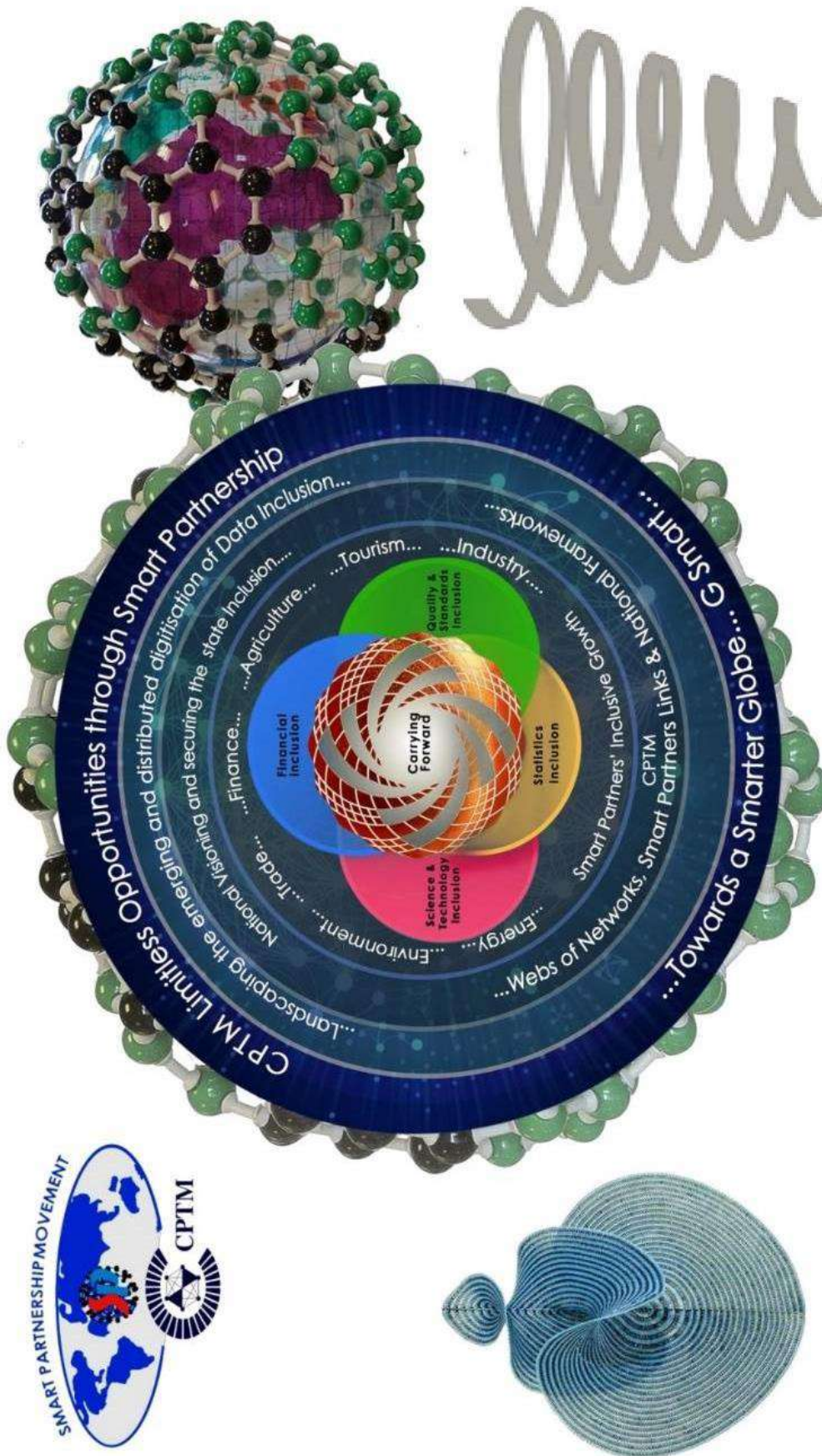
*From the start Smart Partnership Movement has been against Inequality
Smart Partners today focuses on anchoring, leveraging and liberating the
value of Data because Data is the entry point for understanding the nature
and dynamics of all structures and networks, in particular, it enables the
identifying of the pressure points necessary for ongoing change.*

*...There is no end point to Limitless Opportunities...
...with Data as the enabler for progress...*



Please log on to
www.cptm.org/documents/limitless2018.pdf

CPTM Smart Partners' ...



...Leveraging the value of Data and Knowledge through Smart Partnership
...The Way Ahead...







Towards a Smarter Globe..... Towards Smarter Nations
"Leveraging the Value of Knowledge and Data for Socio Economic Transformation: The Smart Partnership Way" – 2018-2022



**COUNCIL OF PATRONS & ADVISERS
SMART PARTNERSHIP MOVEMENT**

HE Yoweri Kaguta Museveni

President of Uganda
CPTM Fellow & Companion
Chair, Smart Partnership Movement
Co-Founder CPTM Fellows
Endowment Fund

SOUTHERN AFRICA DIALOGUES (SAID)

Angola
Botswana (SAID 1997)
Democratic Republic of Congo
Lesotho (Global 2005)
Madagascar
Malawi
Mauritius
Mozambique (Global 2000)
Namibia (SAID 1998)
Seychelles
South Africa (Global 2014/15 deferred)
Swaziland (Global 2003)
Zambia (Global 2008)
Zimbabwe (SAID 1999)

EAST AFRICA DIALOGUES (EAID)

Burundi
Kenya
Rwanda
Tanzania (Global 2013)
Uganda (Global 2009 & 2001)

WEST AFRICA DIALOGUES

Through Ghana

CARIBBEAN DIALOGUES (BID)

Through Barbados
(BID 1999, 1996)

SOUTH EAST ASIA DIALOGUES (LID)

LANGKAWI INTERNATIONAL DIALOGUE
Through Malaysia
(Global 2015 tbc, 2011, 2007, 2004, 2002,
2000, 1999, 1997 1996, 1995)

Tan Sri Datuk Dr Omar Abdul Rahman
Chairman CPTM/Board
CPTM Fellow, Malaysia

Dr Mihaela Y. Smith PJN KMN
Chief Executive, CPTM
JOINT DIALOGUE CONVENER
Smart Partnership Movement

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Email: smart.partnership@cptm.org
Website: www.cptm.org

July 2018

Dear Members of the Council of Patrons & Advisers,
Chair of the Smart Partnership Movement,
CPTM Fellows,

Re Leveraging the Value of Knowledge and Data for Socio Economic Transformation

On behalf of CPTM Chairman and leading Smart Partners' Inclusive Initiatives, I have the honour to invite you to take part in the CPTM Integrated Cooperative Framework on **Leveraging the Value of Knowledge of Data** (July 2018 – June 2020).

Smart Partnership Movement, facilitated by CPTM, is a distinct, practical and effective **cooperative "win-win" platform**, together with Smart Partnership Dialogue mechanisms, which have emerged since 1995 from the interactions of Members of the Council of Patrons & Advisers such as **Malaysia, Botswana, Namibia, Uganda, Zambia, Zimbabwe, Mozambique, Tanzania, Lesotho, Swaziland and Barbados**.

CPTM Smart Partners' Inclusion Initiatives are strategically targeted towards growth opportunities in sectors such as: industrialisation, trade, agriculture, manufacturing, tourism, services, environmental protection and climate change. **Smart Partners' Initiatives** emerged as an implementation of the Global 2013 Dar es Salaam Dialogue on **"Leveraging Technology for Socio Economic Transformation"** and they are as follows: **National Visioning and Security; Financial Inclusion and Adaptive Flexibility; Quality and Standards; Science, Technology and Innovation; National Statistics and Emerging Digital Landscape**.

The CPTM Initiatives' overall objectives are:

- **to facilitate** Central Banks, National Standards Bodies (NSBs), National Statistics Offices (NSOs) and Science, Technology and Innovation Agencies (STIA) from Smart Partnership Movement countries
- **to develop and adopt** an inclusive **National Smart Partnership Framework** for integrated delivery of National Visions and Sustainable Development Goals (SDGs);
- **to support** Central Banks, NSBs, NSOs and STIAs to **leverage the value of data including participation in emerging new standards and regulations and new measures for economic statistics through CPTM Cooperative Framework (2018-2020)**

...2/-

CPTM SMART PARTNERSHIP DIALOGUE™

The April 2018 CPTM Report to the **pre-CHOGM Foreign Ministers' Meeting** urged the Commonwealth Heads of Government **"to consider active participation of the Commonwealth countries in the CPTM Smart Partnership Inclusivity platform on the *"Leveraging the value of data for Commonwealth emerging economies"* to be launched in 2018 and to report on the progress and effectiveness of its implementation by CHOGM 2020"**.

The **Overall Strategy Outline** of the CPTM Smart Partners' Inclusion Initiatives (2018 – 2020) together with the active **Networks participants, timeline and indicative costs** is included in **this document for your consideration alongside the "Insights & Glimpses from the 7th Central Bank Governors' Think Tanking"**. In addition, CPTM will continue to engage and provide briefs to **Commonwealth Finance Ministers and Central Bank Governors** Annual Meetings in 2018 and 2019, **International Organisation for Standardisation (ISO) / DEVCO Annual General Assembly, International Telecommunication Union (ITU)**, as well as to regional organisations such as **Southern African Development Coordination Conference (SADCC), CARICOM**, among others.

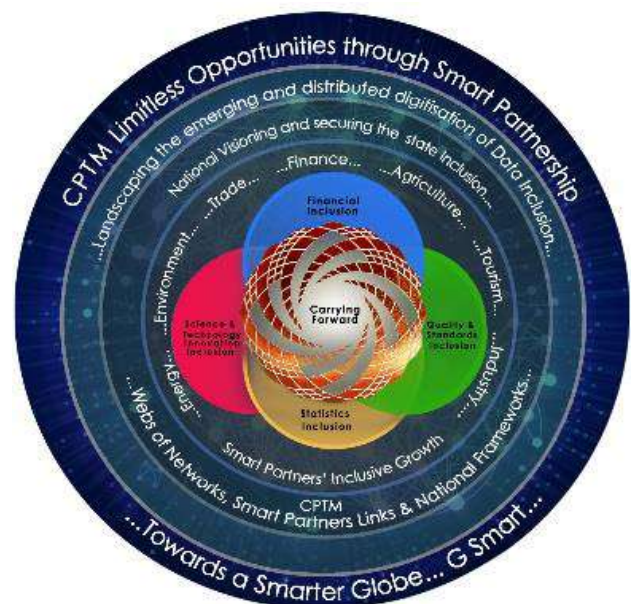
CPTM Smart Partners' Inclusion Networks of the Smart Partnership Movement are eager to **implement the Cooperative Framework of Activities (July 2018 – June 2020)** in the national and regional context. CPTM Smart Partners are also looking forward to the Council of Patrons and Advisers to jointly organise the next Smart Partnership Dialogue and thank to the Chair of the Smart Partnership Movement for continued support, since Global 2013, Dar es Salaam Dialogue,

Yours sincerely
On behalf of the Joint Executive Group



Dr Mihaela Y. Smith, PJN, KMN
Chief Executive, CPTM
Joint Dialogue Convener, Smart Partnership Movement

Please note that this document needs to be read in conjunction with the digital version
(www.cptm.org/documents/governors2018.pdf).



CPTM Smart Partners' Inclusive Initiatives

CPTM SMART PARTNERSHIP DIALOGUE™

**Leveraging the value of knowledge and data
for emerging economies in the Commonwealth and beyond
through the CPTM Smart Partners' Inclusion Initiatives
2018 - 2020**

Introduction and overall objectives

The CPTM Smart Partnership Inclusive Framework as an Initiative for the common future of the Commonwealth is a CPTM proposal on “**Leveraging the value of knowledge and data for emerging economies in the Commonwealth and beyond**”.

The CPTM Cooperative Framework includes the CPTM Smart Partners' Network in action focused on issues in development and current trends affecting development and building capacity (see **CPTM Activities Publications - Feb 2018**).

The Framework is based on the cooperation of the CPTM “networks of networks” which has evolved since 2013 as an implementation following the Global Smart Partnership International Dialogue in Dar es Salaam. This Initiative focuses on:

- National Visioning and Securing the State Inclusion
- Financial Inclusion and Adaptive Flexibility
- Quality and Standards Inclusion
- Science and Technology Inclusion
- Data and Statistics Inclusion
- Emerging Data and Digital Landscape Inclusion

The **overall objective** is to develop, understand and to share the emerging digital landscape, as relevant to national priorities such as agriculture, trade, industrialisation, manufacturing, energy and environment. The **specific objectives** are related to **building capacity** for Central Banks, National Standards Bodies (NSBs), National Statistics Offices (NSOs) and Science, Technology and Innovation Agencies (STIAs) from Commonwealth countries and **to develop and adopt** an inclusive National Smart Partnership Framework for integrated delivery of National Visions and Sustainable Development Goals (SDGs).

The CPTM Smart Partnership Inclusive Framework is aimed at securing a common future as an open source initiative from the emerging Commonwealth economies and for the participation of all Commonwealth countries.

CPTM overall strategy, participants, timeline and indicative costs

The CPTM Overall Strategy is based on the ongoing work done through **Inclusive Growth Initiatives** led by the CPTM Web of the **interconnected Networks**, using the Smart Partnership approach, as reflected in the following main background documents (see www.cptm.org):

- Global 2013 Smart Partnership International Dialogue “Leveraging Technology for Africa’s Socio- Economic Transformation - The Smart Partnership Way” (Dar es Salaam)

- Smart Partners' Think Tanking Sessions (Dec 2014, 2015, 2016), the CPTM Smart Partners' Hub, London
- Briefings to CHOGM 2015 (Malta) and regular updates to Heads of Government; Briefings to Commonwealth Finance Ministers Meetings/Central Bank Governors (2014, 2015, 2016); and Briefings to International Standards Organisation (ISO) (2014, 2015, 2016)
- CPTM Smart Partners' Cooperative Framework of Activities, November 2016/2017 (per country/per Initiative)
- CPTM Smart Partners' Inclusion Initiatives and Activities 2018/20

Participants/Networks (initial Countries/Institutions) (see **Leading CPTM Webs of Inclusion Initiatives Networks**):

- Countries participating per Initiative – approx. **Financial Inclusion** (led by Central Banks, 10-12); **Quality & Standards** (led by National Bureau of Standards, 20-22); **Data & Statistics** (led by National Statistics Officers, 10-12); **Science, Technology & Innovation** (led by science advisers or equivalents, 20-22); **National Visioning for Securing the State** (led by offices of Heads of State/Government or National Planning, 20); **Emerging Digital Landscape** (led by FinTech Companies, eGov Units or equivalents, 10-12);
- Initial/current Countries with clusters of (almost) all Initiatives active – Tanzania, Uganda, Namibia, Swaziland, Cameroon, Rwanda, Malaysia, UK, Cyprus, Lesotho, Seychelles, St Lucia;
- Countries/Institutions with 1 or more Initiatives active – Caribbean (15 countries-Quality & Standards & Financial Inclusion), Kenya, Mozambique, Malawi, Zambia, Malta, Mauritius, Sri Lanka, Singapore, India, New Zealand, Australia, Canada, Guyana, Barbados, Antigua & Barbuda

April/December 2018	<ul style="list-style-type: none"> • Initiation of the Implementation of CPTM Inclusive Strategy/Programme on Leveraging the value of data • Smart Partnership International Dialogue/Think Tanking (Uganda)
January /December 2019	<ul style="list-style-type: none"> • Implementation of CPTM Inclusive Strategy/ Programme on Leveraging the value of data • Smart Partnership International Dialogue/Think Tanking
January 2019/June 2020	<ul style="list-style-type: none"> • Implementation of CPTM Inclusive Strategy/ Programme on Leveraging the value of data • Smart Partnership International Dialogue/Think Tanking • CPTM Report to the 2020 pre-CHOGM of Foreign Ministers Meeting (Malaysia)



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 http://www.cptm.org

CPTM Leveraging Value of Data Through Smart Partnership

Plan July 2018 to June 2020

Outline of Indicative Costings per Year 'July 2018 - June 2019

Indicative costing for participants for CPTM inclusive initiative network
 It is envisage that the following activities will take place in:

A	3 Think Tanking Sessions per year (Regarding value of data at CPTM Smartpartners Hub in London) There will be 6 people attendance over an average of 3 days costing £24,300 per session plus 33% of Networking costs)	£ 147,675
B	5 Country Activities per year (Re-national frameworks for leveraging data in 10 countries 2 Caribbean, 6 Africa & 2 Asia) There will be 6 people attendance over an average of 3 days costing £24,300 per session plus 67% of Networking costs	£ 273,315
	Total per 10 Countries per year (per country per year £42,099) (per month £3,508.25)	£ 420,990

Notes

1 Support to participants on going weekly updates per year

Weekly update tailored to participants for participant countries (reading tips, webcast/access to CPTM network). Also on going full time expertise
 Networking costs is 30% of total CPTM operational costs -

2 CPTM SmartPartners Hub in London Operational costs per year **£ 755,300**

3 Operational cost is time spent by CPTM staff in preparing, running and subsequently documenting the Think Tanking session.

4 There are CPTM Smart Partners and in-house full time expertise for specialise topics on Countries/Think Tanking Advice ; at market place this would cost £102k (£425 per day x 20 days per month over 1 year)

£ 647,580

Report on 'Towards a Common Future' – 16-30 April 2018

RECOMMENDATIONS FOR THE WAY FORWARD

The Commonwealth Partnership for Technology Management Limited (CPTM) was established as a separate legal entity, to serve Commonwealth countries, pursuant to a decision taken at the Commonwealth Heads of Government meeting in New Zealand in 1995. CPTM was formed as a company limited by guarantee in England, to act as a Commonwealth cooperative organisation, comprising Commonwealth Governments, the Private/Public Sector, and Networking professionals. The Commonwealth Secretary-General appoints a Liaison Officer. The 2018 CPTM Report is prepared in accordance to the decision of CHOGM 2005, in the Malta Communiqué (i.e. 98. Heads of Government decided that..... CPTM should report to the pre-CHOGM Foreign Ministers Meeting on a biennial basis).

The 2018 CPTM Report to the pre-CHOGM Foreign Ministers' Meeting underlines the continuing importance and relevance of CPTM and its Smart Partnership approach in providing a unique and cost-efficient platform to enable Commonwealth Governments to encourage its Inclusion Initiatives for socio-economic transformation in the Commonwealth, particularly in relation to CHOGM 2018 priority areas, i.e. a more sustainable future, a fairer future, a more secure future and a more prosperous future. The current and future CPTM cooperative framework of activities contributes to these priority areas, translated into an overarching objective of a harmonious, prosperous and sustainable Commonwealth.

On behalf of CPTM Members (Governments, Private/Public Sector and Networking) CPTM Board would be grateful for the pre-CHOGM Foreign Ministers' Meeting to take forward the following Recommendations for consideration of CHOGM 2018:

- (i) ***to recognise and support*** CPTM's unique, practical and effective Commonwealth platform, together with Smart Partnership Dialogue mechanisms, which have emerged since 1995, from the interactions of Commonwealth countries such as **Malaysia, Botswana, Namibia, Uganda, Zambia, Mozambique, Tanzania, Lesotho, Swaziland and Barbados;**
- (ii) ***to note and commend*** the pioneering CPTM Smart Partners' Strategic Inclusion Initiatives for development and growth and, in particular, ***to support and adopt*** the proposals emerging from CPTM's Inclusion Initiatives on: National Visioning and Security; Financial Inclusion and Adaptive Flexibility; Quality and Standards; Science, Technology and Innovation; National Statistics and Emerging Data and the Digital Landscape. These Initiatives are targeted towards sectors such as: industrialisation, trade, agriculture, manufacturing, tourism, environmental protection and climate change;



- (iii) *to facilitate* Central Banks, National Standards Bodies (NSBs), National Statistics Offices (NSOs) and Science, Technology and Innovation Agencies (STIA) from Commonwealth countries **to develop and adopt** an inclusive National Smart Partnership Framework for integrated delivery of National Visions and Sustainable Development Goals (SDGs); **to encourage** Central Banks, NSBs, NSOs and STIAs **to leverage the value of data and to participate in developing emerging standards and regulations;**
- (iv) **to consider** active participation of the Commonwealth countries in the CPTM Smart Partnership Inclusivity platform on the “**Leveraging the value of data for Commonwealth emerging economies**” **to be launched in 2018 and to report on the progress and effectiveness of its implementation by CHOGM 2020;**
- (v) **to urge** Commonwealth Heads of Government **to consider** their continuing support for CPTM’s delivery of advisory services and to strengthen and upgrade the facilities/capabilities of CPTM, so that it can expand and extend its services to Commonwealth countries; **to reaffirm** their commitment to CPTM cooperative governance and finance as mandated by CHOGM in 1995;
- (vi) **to note and thank Commonwealth Governments**, who supported the delivery of CPTM Activities through voluntary Financial Contributions, as envisaged at CHOGM 1995 (such as Governments of **Uganda, Malaysia, Namibia, Botswana, Cyprus, Swaziland, Lesotho, Cameroon, Seychelles, Bahamas and Barbados;** alongside Public/Private Sector Bodies such as **UK Bureau of Standards, Central Banks of Uganda, Swaziland and Zambia, and Hydraform of South Africa**); **to urge** Commonwealth Governments **to pledge** stable Annual Government Financial Contributions to CPTM and **to consider** participating in the **CPTM Endowment Fund**, set up for maintaining the continuity of CPTM, i.e. by covering ongoing **operating costs**.
- (vii) **to endorse and commend** the achievements of CPTM since CHOGM 1995; **to thank** CPTM Members, (i.e. Commonwealth Governments, Public/Private Sector, and Networking professionals), for their outstanding, innovative and highly effective delivery and sharing of advisory services 2016-2018; **to note and encourage** CPTM’s continued adherence to Commonwealth principles and values, promoted through the CPTM smart partnership dialogue and inclusive approach towards leveraging technology for socio-economic transformation.



Smart Partners' Invitation for CPTM Inclusion Initiatives for "The Way Ahead" 2018-2020

To open/download "Highlights & Glimpses", please log on to
www.cptm.org/documents/governors2018.pdf

Speaking directly to the countless people throughout the Commonwealth and beyond who embrace the Smart Partnership Movement, CPTM Chief Executive and Joint Dialogue Convener Dr Mihaela Smith today uses the medium of the webcast to support the launch of a fresh Joint Initiative to help inspire Smart Partners to grasp the significant opportunities identified in the last few years and in particular by the July 2018 Think Tanking event led by Central Bank Governors here at the Movement's CPTM Library Hub.



[To watch/listen Part 1 click here](#)

Mihaela explains how this Initiative is summarised in the Smart Partnership's new hybrid document: **INSIGHTS** and **GLIMPSES**. This opens the window on ways in which to gain full leverage of the value of knowledge and data within nations and regions worldwide and relates particularly to the July 2018 to June 2020 timescale.

"This is not so much a document, explains Mihaela, but more a hybrid collation gained from glimpses of Smart Partners talking and interacting during the three days last month during which Central Bank Governors gathered together alongside Leaders of broad range of National Bodies including Statistics offices and Standards Bureaux."

"Here the Governors are sharing their Financial Inclusion experiences and ideas with all those who are part of CPTM countries networks in Africa, the Caribbean and Asia (Malaysia) through the interaction with the help of the Emerging Digital Landscape network in particular.

"The relevance of today's release of **INSIGHTS** and **GLIMPSES** is that today also marks the initiation of an integrated phase of carrying-forward / supporting Smart Partners' networks that interact with each other, all working around the common denominator of Leveraging the Value of Knowledge and Data."

"The CPTM Smart Partnership Movement is not only **leveraging the value of data**, but also **liberating the value of data**, adds Mihaela."

"So the significance of the release of this hybrid compilation of **real-time interactions** is that there's now a new phase of going beyond simply leveraging the value of data to the ability to liberate its value, as well.

“Today we’re alerting you that the framework for the next two years of interactions of Smart Partners, engaged as we are in different initiatives, can be guided as to what is meant by liberating and leveraging the value of data and real time, not just in the in the fields of academia and the financial sector but for us all, in an integrated manner.

“We want to emphasise the fact that there is actually a completely different way of carrying forward the potential benefits of the latest data/digital technology, and if you want to see how this can happen you will need to watch and listen to these **INSIGHTS** and **GLIMPSES**.”

Impact of Data through Smart Partners’ Think Tanking – “Spotting Signals for Tomorrow”

In the second of her four webcasts marking the launch of the Smart Partnership Movement’s new two-year programme based on the hybrid ‘Insights and Glimpses’ compilation, Mihaela emphasises the relevance of this new phase in the Movement’s focus on CPTM Smart Partners’ Integrated Inclusion Initiatives aimed at empowering the leverage of the value of data for socio-economic transformation.



[To watch/listen Part 2 click here](#)

“Now I’ll look at the very specific aspects of the Initiatives as captured in **INSIGHTS** and **GLIMPSES** and hopefully we can progress between now and 2020,” explains Mihaela.

In particular, **three** of these aspects are: (i) taking forward the signals and the seeding of ideas and actions from the recent Central Bank Governors’ interactions with National Statistics Offices and National Standards Bureaux; (ii) how the Smart Partners Movement’s inclusive growth Initiatives for the next two years could contribute to overall national economic transformation in countries that are part of the Movement; and (iii) to determine the best ways in which various Smart Partners’ Hubs and national frameworks can engage in the Cooperative Smart Partnership framework.

“**INSIGHTS** and **GLIMPSES**’ provides hybrid background something not available usually,” Mihaela continues. “If you wish to experience real-time interactions with Central Bank Governors and Chief Executives and Leading figures in National Statistics Offices, National Bureaux of Standards, Leading individuals in digital businesses, Leading Academics in Data Science and so on then you will be trying to use this particular set of references with **Webcasts ‘as they happened’** – an interaction of Smart Partners and other individuals who’ve been invited to be there. This is particularly valuable right now, when things need to happen in a speedy mode at national levels.

“How much would this hybrid document cost if you could buy it? But you cannot purchase it! There’s a lot of trust embedded within, a lot of intellectual equity, in this way of gaining access to Smart Partners who can help you navigate the way ahead.”

Mihaela outlines the extent to which Central Bank Governors in the nations involved in the recent Think Tanking have been reflecting on Financial Technology (FinTech) advances under discussion, including gaining better understanding of the risks and opportunities of emerging crypto-currencies.

“The main discussion that followed Central Bank Governors’ reflections on the status of Financial Inclusion in their countries, centred on three main issues for “Spotting Signals for Tomorrow” (i) Accelerating, Learning and Innovating; (ii) Leveraging, Measuring and Navigating; and (iii) Liberating the value of Data.

“I suggest you start by watching and listening to Professor David Hand, CPTM Adviser to the Central Bank Governors in the last years, who very clearly sets out the scene in relation to why data has a value – and how to liberate, that is make useable, the value of data. He makes the point that this takes place in an accelerated way because of the advances in computer technologies. I highly recommend that if you want to know why crypto-assets companies are evolving you can gain ways to understand why data is such a critical component for countries large and small.”

“By 2020 it will be a matter of course that Blockchain Technologies will be coming in to almost every aspect of life, Mihaela adds”.

Therefore the 2018 - 2020 timeframe of the Smart Partners’ Cooperative Framework is essentially critical for any national context to pick up the applications of Blockchain Technology (DLT) alongside Artificial Intelligence & Machine Learning technologies and their implications. Here you can hear from the horse’s mouth about how the issues of Blockchain Technology have been raised in any national initiative by involving Central Banks and Blockchain Technologists, Bureaux of Standards and National Statistics teams working together. Developments beyond Blockchain Technology (DLT) are already the seeds of what has been evolving. Machine Learning and Artificial Intelligence come in to this, too.

“The main focus – the major preoccupation and effort – that will be required is not so much about the technology, but about the **co-operative models that bring new legislative frameworks**, new regulatory frameworks, with them. These need to be designed in each national context with relation to the very rapid penetration of distributed ledger technologies, crypto-assets and so on, in any country. **This area is one of the main seeds that has been sown for the next two years**, the need to take forward new regulatory frameworks by 2020.” We thank Max Ganado, leading lawyer in Malta, who enlightened and shared their experience with Governors and Smart Partners.

Economic transformation means **new measures** have to be devised to understand the benefits of the unstoppable progress of Financial Technologies applications, Mihaela emphasises.

As example of these new measures is evident in the **UK**, where for example the steps the nation’s **Office of National Statistics** is taking to understand and embrace these new data technologies – and the opportunities they bring – and the experience its staff are ready to share with their colleagues in other nations promise widespread benefits for knowledge over the next two years.

One of the major benefits of data analytics is ‘Data Visualisation’, a novel approach that has been shared among the Smart Partnership Movement by expert **Dr Alan Smith of the Financial Times UK**. Data Visualisation can reach out in terms of beginning conversations and spreading understanding, explains Mihaela. The Bank of England also has a new Data Visualisation unit, the work of which has also been shared with Smart Partners. “This all helps with the leveraging of the value of data.”

Mihaela also emphasises the value of the CPTM Smart Partners' Hub in London, which is able – probably daily – to pick up signals from Smart Partners worldwide and from their interactions.

“At the Central Bank Governors’ recent Think Tanking we talked about ‘anchoring’ all these various signals for the next two years, requesting the CPTM Smart Partners’ Hub to help carry forward Initiatives as actively as possible.

“To help in this effort, **three integrated Think Tanking Activities** per year (and six over 2 years) point of reference will take place, very much part and parcel of carrying forward this two-year focused Overall Strategy. These will probably take place at the CPTM Smart Partners’ Hub, as a neutral and strategically placed, and they will be focused on those issues of technology development that relate to our initiative, in 2018 and 2019, and probably another in 2019-2020.

“These will pick up on interactions at national levels, looking at about 10 national frameworks.”

“The **Joint Executive Group** of the Smart Partnership Movement request that in addition to these activities at **least one or two Smart Partnership Dialogues**, focused on leveraging the value of data, should take place. This focused and consistent approach is essential to ensure there’s a big jump in socio-economic transformation, focusing on country activities and based on taking forward our recent progress in leveraging the value of data.”

Smart Partners’ 2018 – 2020 Inclusion Initiatives – a distinct and progressive approach



(In her third webcast) Mihaela reminds us **how the new CPTM Smart Partnership Cooperative Initiative** addressing the August 2018 to July 2020 time-frame has as its background the Think Tanking activities of June this year and the CPTM Open House, April 2018, led by Governors of Central Banks on the topics of financial inclusion and adaptive flexibility.

[To watch/listen Part 3 click here](#)

“We agreed that I will talk **about the difference your engagement** in this Smart Partners’ Joint initiative, your involvement in it, **can make**,” Mihaela begins.

“Both daily and weekly the Smart Partners’ Hub in London will continue sharing and alerting Smart Partners, particularly on signals in relation to the very major issues that are taking shape and that produce both positive and negative impacts. So the Smart Partnership Movement and ongoing Think Tanking, the Smart Partnership International Dialogues Framework and national interactions on the value of data gain a global relevance.”

Highlighting a few selected signals as weekly Reading Tips, Mihaela flags-up recent insights from Australia about the new Kangaroo Bond – an experiment in Blockchain technology suitability for major government financial initiatives – and information about crypto-currency regulations emerging in Africa, plus insights on the emergence of Artificial Intelligence and Machine Learning and background to the news the US is to appoint a national Science Advisor.

“In the past five years it has emerged that Limitless Opportunities can be aimed at,” Mihaela adds. “They’re connected to the ability of the networks within a country to focus on key insights and signals, relevant both inside and outside each country and based on Smart Partnership engagement and vision.

“The aim of our overall Smart Partnership Integrated Initiative is to create capability for task-forcing, in addition to country-level efforts, to pick up and spot signals that need to be introduced within national institutions and raised at national strategic level for securing the state.”

New innovative legislation is required at national level to provide effective leverage of the value of data, be it in relation to crypto-currencies or new mandates for National Statistics offices or Standards Bureaux.

Addressing practicalities, Mihaela foresees **three gatherings of Think Tanking activities in the first year** at the CPTM Smart Partners’ Hub in London per year (six for two years) in the next two years.

“These will be key Inclusion Initiatives with key individuals leading them. At least 10, or I hope 15, countries will be requiring at least one interaction in the country itself, against the background of these Think Tanking activities. Groups of Leading Networkers will monitor the progress on the various issues related to data. This will provide learning within countries and sharing with other countries.”

Research by Smart Partners has shown that countries can become fully involved with this Joint Initiative for a nominal cost each of around US\$3500 per month – and estimates indicate each would gain at least tenfold in value from such an investment.

“Young people particularly will provide the engine for this Joint Initiative, leveraging resources and capability. Limitless opportunities clearly are available.”

Limitless Opportunities through Smart Partnership – Living Manifesto – the Story so far....

Mihaela uses her fourth webcast to convey the last part of the introduction of the new integrated Smart Partners’ Initiative for effectively leveraging the value of knowledge and data.

“This Joint Initiative is driven by distinct Smart Partners’ Networks of Inclusion related to the Leaders of Quality and Standards organisations, Central Bank Governors, National Standards and



[To watch/listen click here](#)

Statistics offices and experts in the emerging digital landscape and the new type of private sector in the digital technology businesses,” Mihaela explains.

This makes the Smart Partnership way of doing things very different, continues Mihaela. “It adds value to one another in a different way and because of this Smart Partners have been able to interact in a different way, in a strategic independent mode, for example in data technology.”

Mihaela relates today’s opportunities to those articulated in the 1998 Smart Partnership publication ‘Limitless Opportunities’, which effectively became the Manifesto of the Smart Partnership Movement.

“With updates, ‘Limitless Opportunities’ has evolved into a Living ‘story so far’. Leveraging the value of data and knowledge made us aware that there’s a need to state that the foundation of Smart Partnership, which makes all the difference, are the Limitless Opportunities available through Smart Partnership.

“Leveraging the value of knowledge and data will only take place if there’s an ongoing feeding into the practice and experiences of the Smart Partnership Manifesto. So, we’re re-issuing the document with the addition of references to **Pushing the Limits relating to current issues, concerns, opportunities, strategic risks and so on stemming from the impact of data.**

“There are imperatives for socio-economic transformation that relate to interdependence and interconnectivity and, even more so, to trust. The new update of the “Living Manifesto” also incorporates Reflections from Tun Dr Mahathir, Prime Minister of Malaysia, showing how Smart Partnership in government makes a huge difference in so many ways.”

To illustrate the Manifesto’s validity today Mihaela reads selected excerpts from its Forward, emphasising how in this **Living Manifesto** ensures **new concepts and dynamics** are always to the fore.

“Why not be part of this ongoing emerging future for Smart Partnership interactions on leveraging the value of data?” Mihaela asks viewers.

“You are very welcome to be part of this ongoing Living story, an unrivalled story of Smart Partners who are aiming towards Limitless Opportunities – meaning ‘no limits’ for the next 20 years and beyond!”

Leading CPTM Webs of Inclusion Initiatives Networks September 2018



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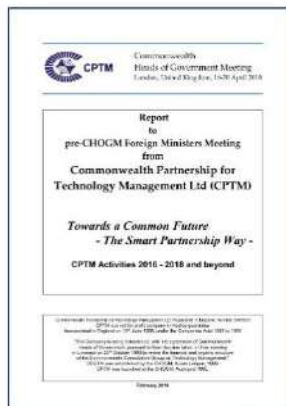
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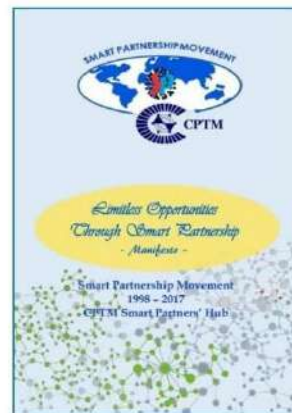
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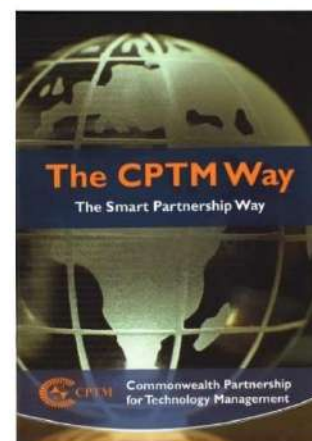
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