



Distributed Futures



An open source research programme for Smart Ledgers and new technologies

Get Smart About Scandals Past Lessons For Future Finance

Report Launch – Wednesday 7 March 2018,
London

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Get Smart About Scandals

Past Lessons For Future Finance

Professor Michael Mainelli
Executive Chairman, Z/Yen Group

Agenda

- | | |
|---------------|---|
| 08:45 – 09:00 | Registration |
| 09:00 – 09:30 | Introduction and Background
<i>Professor Michael Mainelli, Executive Chairman, Z/Yen Group</i> |
| 09:30 – 10:00 | Get Smart About Scandals: Report Walkthrough
<i>Professor Tim Connell & Bob McDowall</i> |
| 10:00 – 10:40 | Panel Discussion
Response
<i>Professor D'Maris Coffman, University College London</i> |
| 10.40 – 10:45 | Summary |
| 10:45 | Formal Close |



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The Z/zen Group



Distributed Futures Programme



We work in partnership with many stakeholders to learn together and build the vital infrastructure needed to make Smart Ledgers a success.

Our research is structured around four themes:

- ◆ Society
- ◆ Technology
- ◆ Economics
- ◆ Politics

And it's directed at four outcomes:

- ◆ Expanding frontiers
- ◆ Changing systems
- ◆ Delivering services
- ◆ Building communities

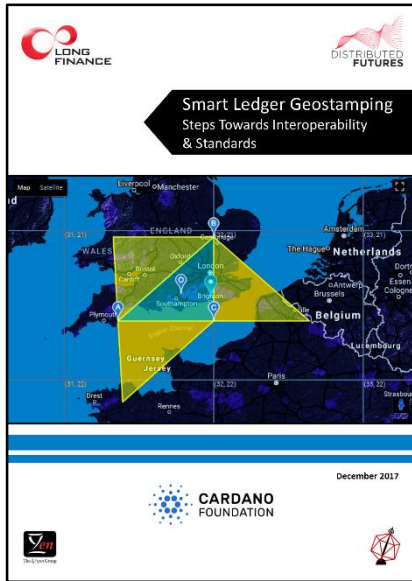
Terminology Evolving

- ◆ **ledger** – a record of transactions
- ◆ **distributed** – divided among several or many, in multiple locations
- ◆ **mutual** – shared in common, or owned by a community
- ◆ **mutual distributed ledger (MDL)** - a record of transactions shared in common and stored in multiple locations
- ◆ **mutual distributed ledger technology** – a technology that provides an immutable record of transactions shared in common and stored in multiple locations
- ◆ **blockchain** - “a transaction database shared by all nodes participating in a system based on the Bitcoin protocol”
- ◆ **smart ledger** – MDL with embedded, executable code

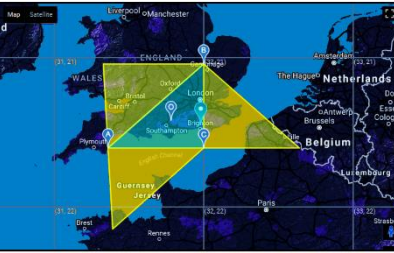
Smart Ledgers Hold Immense Promise

Area	Possible Applications
Financial instruments, records, models	Currency, private and public equities, certificates of deposit, bonds, derivatives, insurance policies, voting rights associated with financial instruments, commodities, derivatives, trading records, credit data, collateral management, client monies segregation, mortgage or loan records, crowd-funding, P2P lending, microfinance, (micro)charity donations, account portability, airmiles & corporate tokens, etc.
Public records	Land and property titles, vehicle registries, shipping registries, satellite registries, business license, business ownership/incorporation/dissolution records, regulatory records, criminal records, passport, birth/death certificates, voting ID, health and safety inspections, tax returns, building and other types of permits, court records, government/listed companies/civil society, accounts and annual reports, etc.
Private records	Contracts, ID, signature, will, trust, escrow, any other type of classifiable personal data (e.g. physical details, date of birth, taste) etc.
Semi-private/semi-public records	High school/university degrees and professional qualifications, grades, certifications, human resources records, medical records, accounting records, business transaction records, locational data, delivery records, genome and DNA, arbitration, genealogy trees, clinical trials, etc.
Physical keys	Key to home, hotel, office, car, locker, deposit box, mail box, Internet of Things, etc.
Intellectual property	Copyrights, licenses, patents, digital rights management of music, rights management of intellectual property such as patents or trademarks, proof of authenticity or authorship, etc.
Other records	Cultural, historical events, documentary (e.g. video, photos, audio), (big) data (weather, temperatures, traffic), SIM cards, archives, geostamping, etc.

Distributed Futures Research



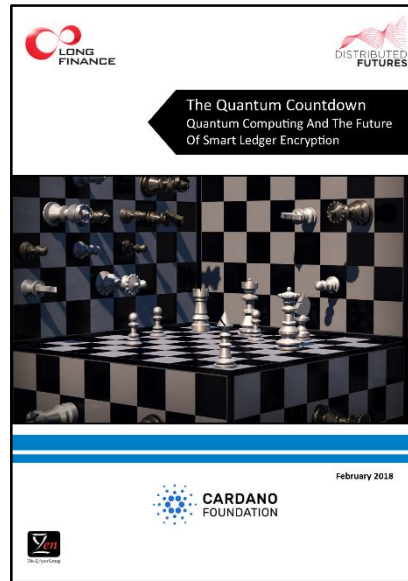


Smart Ledger Geostamping
Steps Towards Interoperability & Standards




December 2017

CARDANO FOUNDATION



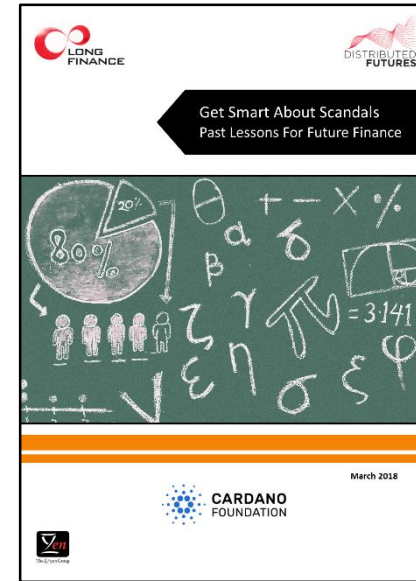




The Quantum Countdown
Quantum Computing And The Future Of Smart Ledger Encryption

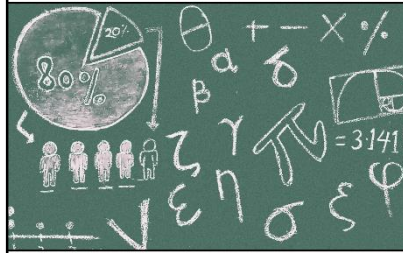


February 2018

CARDANO FOUNDATION



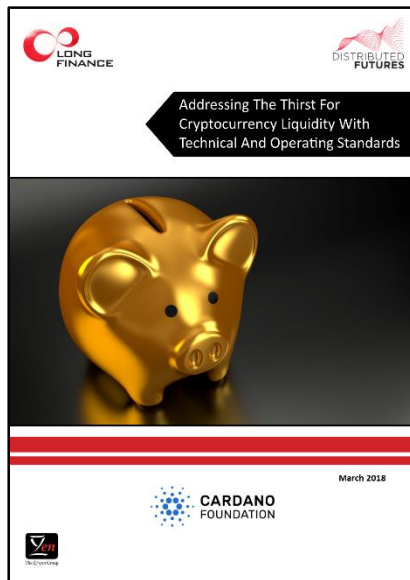




Get Smart About Scandals
Past Lessons For Future Finance




March 2018

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




Addressing The Thirst For Cryptocurrency Liquidity With Technical And Operating Standards



March 2018

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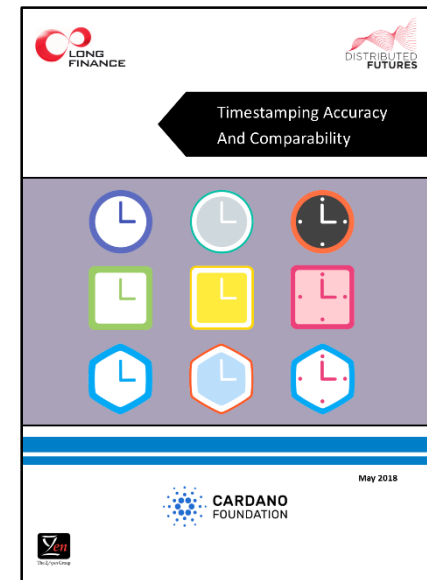

The Economic Impact Of Smart Ledgers On World Trade




April 2018

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Timestamping Accuracy And Comparability



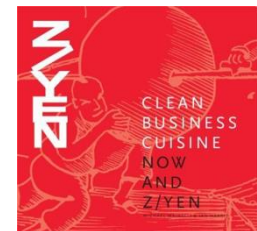
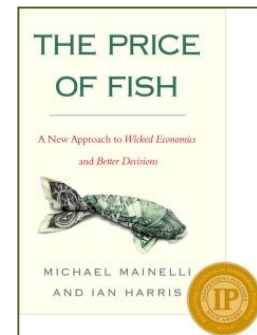
May 2018

CARDANO FOUNDATION

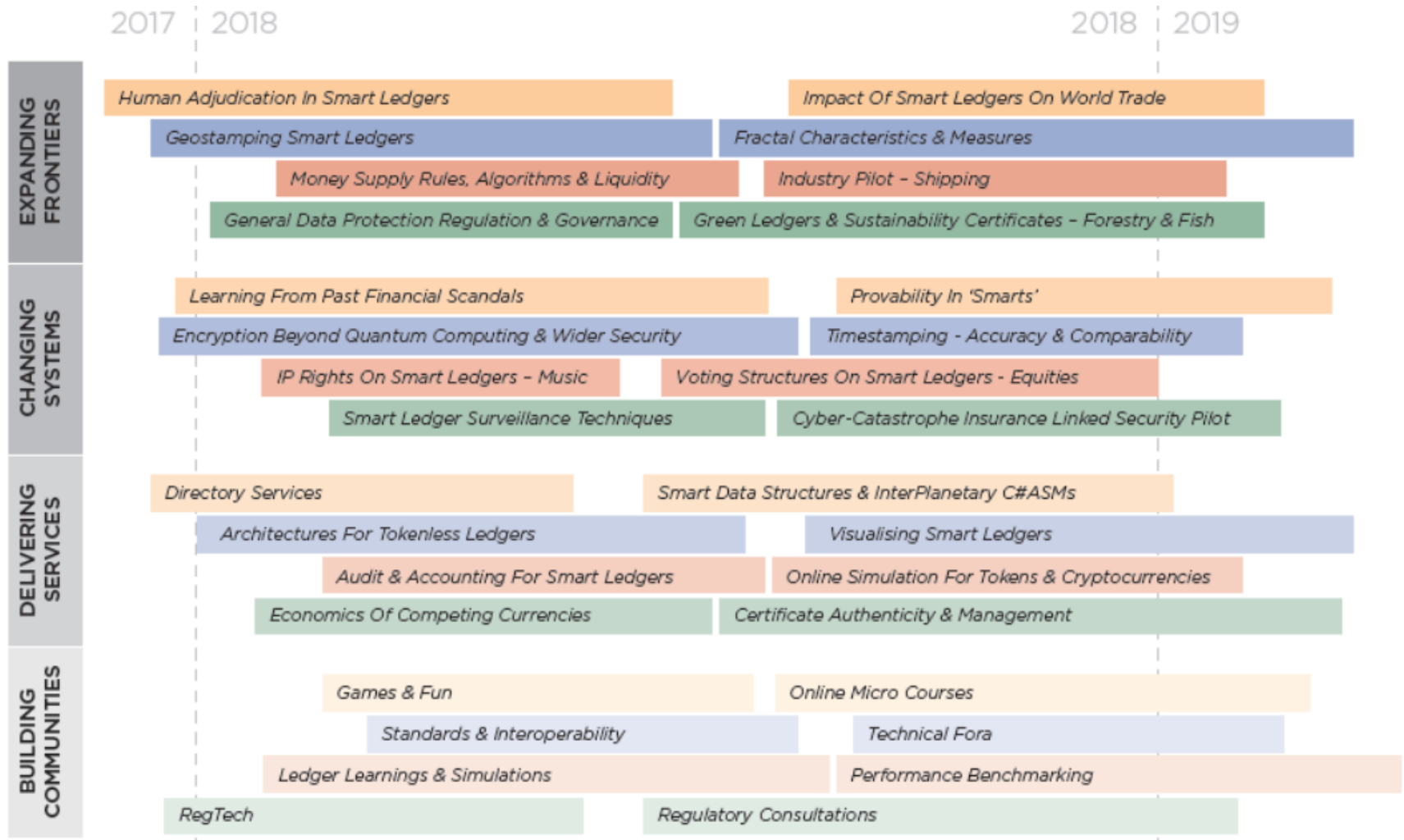





- ◆ Special – City of London’s leading commercial think-tank
- ◆ Services – projects, strategy, expertise on demand, coaching, research, analytics, modern systems
- ◆ Sectors – technology, finance, voluntary, professional services, outsourcing
 - Independent Publisher Book Awards Finance, Investment & Economics Gold Prize 2012 for *The Price of Fish*
 - British Computer Society IT Director of the Year 2004 for PropheZy and VizZy
 - DTI Smart Award 2003 for PropheZy
 - Sunday Times Book of the Week, *Clean Business Cuisine*
 - £1.9M Foresight Challenge Award for Financial Laboratory visualising financial risk 1997



Distributed Futures - Timeline



Foreword By The Lord Mayor



The Lord Mayor's CIVIC Plan to restore trust in the City and the industries that work there, is much to be welcomed and deserves every support. Five principles have been put forward, using the mnemonic CIVIC:

- ◆ **C**ompetence and skills - doing what you do well;
- ◆ **I**ntegrity - being honest, straightforward and reliable;
- ◆ **V**alue to society - recognising and meeting wider societal needs;
- ◆ **I**nterests of others - respecting the interests of customers, employees and investors;
- ◆ **C**lear communication - being transparent, responsive and accountable.

Get Smart About Scandals

Past Lessons For Future Finance

Tim Connell & Bob McDowall

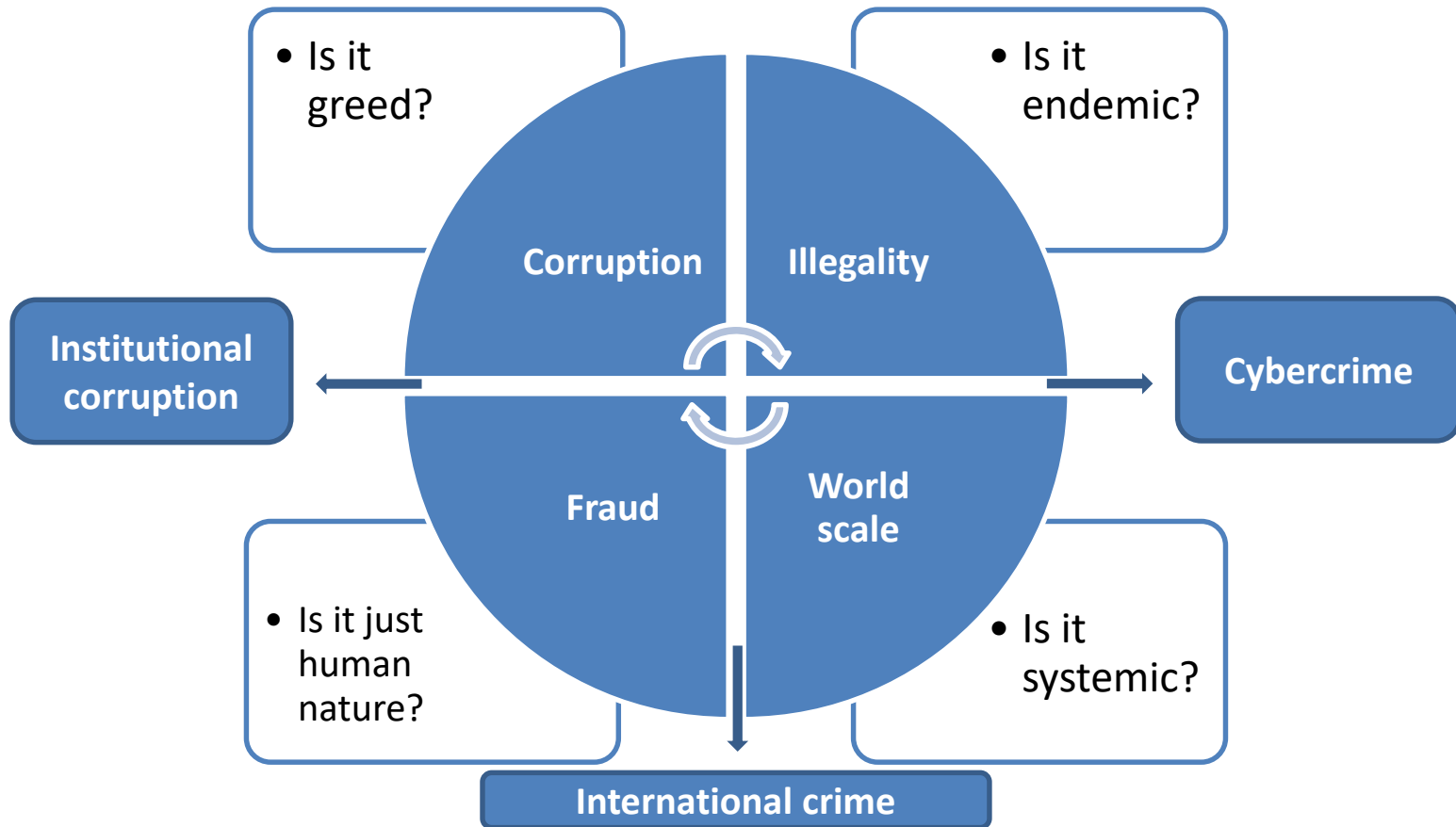
Authors



Scandals: Approach

- ◆ Workshop
- ◆ Historical Context
- ◆ Scandals: How To Identify Them – And How To Stop Them
- ◆ Vehicles For Fraudulent Behaviour
- ◆ Corrupt Practices And Procedures
- ◆ Bubble, Booms And Busts
- ◆ The Good Guys: Scandals And How To Avoid Them
- ◆ The Future Direction And Dynamics Of Financial Scandals
- ◆ Conclusions & Recommendations

The Past



Is it just inevitable?

“Cooking the books”

“Fingers in the till”

“Looking the other way”

“Snouts in the trough”

“Bubble & bust mania”

The Present....



Legal Sanctions, fear of detection

Reputational
damage

Shares
collapse

Financial
restitution

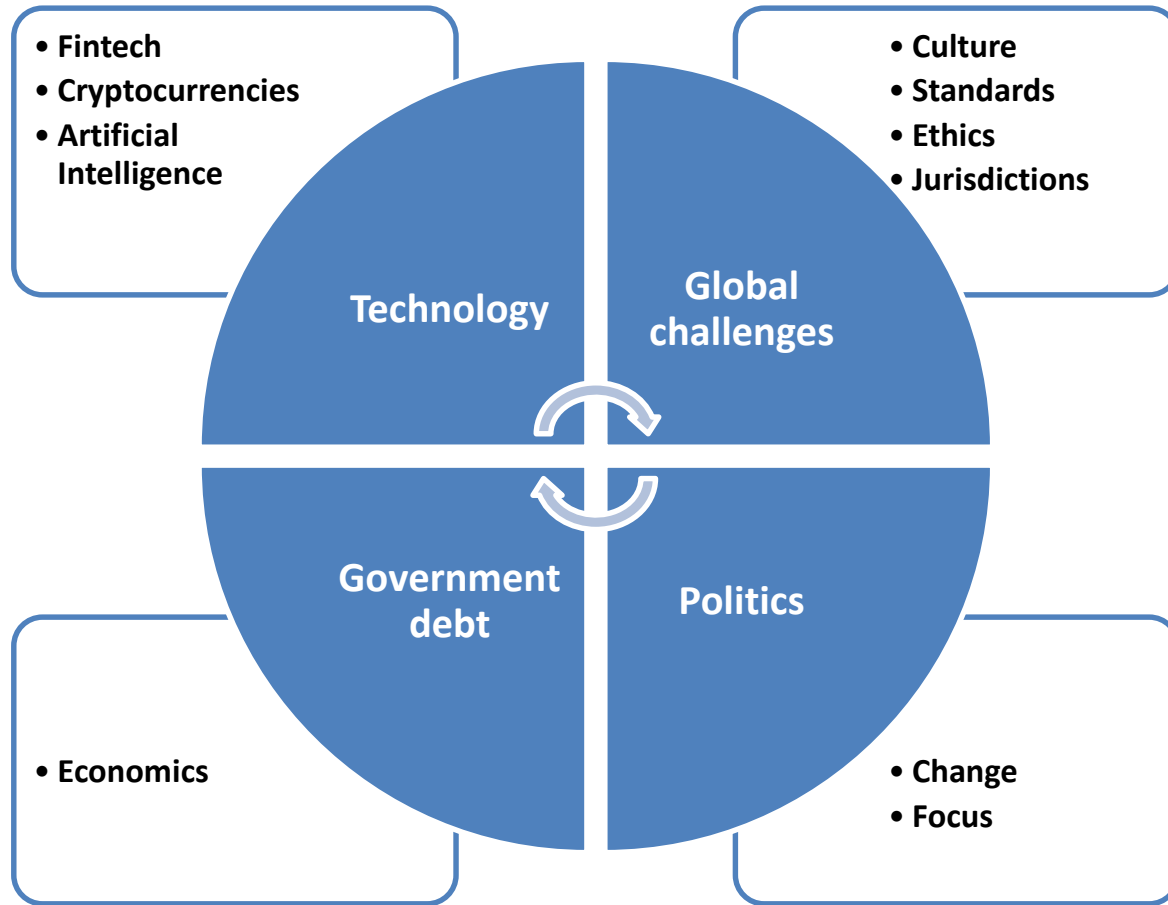
Fines

Sanctions

Company
failure

Jail!

The Future...?



Recommendations: For discussion.....

Policy

Procedures

Structures

Training

Scandals: Conclusions

1. There is too much detailed regulation
2. Regulations are too complex to detect or prevent financial scandals
3. One size of regulation does not fit all
4. Although current forms of sanction for violation of financial regulation are severe, they don't seem to deter scandals
5. Adherence is paid to the forms and processes of regulation as much as the substance
6. Advances in globalisation present complexity and conflicts across jurisdictions arising from differences of business culture and ethics
7. Major financial centres have to develop their own specific agents of change to address financial scandals

Recommendations - Policy

Encourage professional and commercial agencies working to maintain ethical standards to collaborate more closely in order to maximise effort and reduce costs while replicating their initiatives at international level for closer co-operation.

Review the financial regulatory and compliance procedures which have been implemented since the financial crisis of 2008 to gauge their effectiveness.

Anticipate improper or illegal responses to new commercial developments, electronic advances and changes in the law through the application of risk management skills and technologies.

**Competence and skills;
Integrity;
Value to Society;
Interests of others;
Clear Communication.**

Recommendations - Procedures

More legal powers are probably unnecessary but current procedures and red tape are time consuming and frustrating. Fewer but more robust processes are needed for compliance in such a way that they can be embedded into operating functions rather than being seen as an irritating “box-ticking” exercise.

Review best working processes so they may be applied to the fast moving changes within professional services.

Strengthen identity and verification checks on new enterprises.

Competence and skills;
Integrity;
Value to Society;
Interests of others;
Clear Communication.

Recommendations - Structures

Recognise and reinforce the City of London by reference to its global financial reputation but understand that ethical attitudes, legal structures and commercial processes can vary across jurisdictions, which follow different political structures and business processes.

Draw on a wider range of skills and resources to pursue e-criminals with support from commercial and law enforcement agencies. These subject area specialists would be recruited, trained and supervised.

Establish projects in commercial, professional and higher educational institutions to review, consolidate and implement developments and changes in corporate governance.

**Competence and skills;
Integrity;
Value to Society;
Interests of others;
Clear Communication.**

Recommendations - Training

Review and develop programmes for teaching ethics as well as establishing operating procedures to combat fraud in the training curricula of commercial, professional and higher education institutions.

Revise Continuous Professional Development programmes through commercial, professional and higher educational institutions. Ensure that development programmes address current issues and requirements and provide financial and other resources for training staff and provide SMEs with tax relief on financial costs for both individuals and the companies for whom they work.

Encourage research into new technologies with acknowledged business application opportunities to ensure they meet security and operating standards. Where necessary, set out how external oversight might be applied.

**Competence and skills;
Integrity;
Value to Society;
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Clear Communication.**

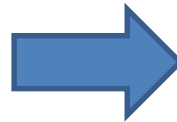
Get Smart About Scandals

Past Lessons For Future Finance

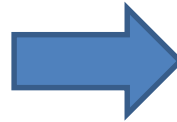
Panel Discussion

Scandals: For Discussion

1. **There is too much detailed regulation**
2. **Regulations are too complex to detect or prevent financial scandals**
3. **One size of regulation does not fit all**
4. **Although current forms of sanction for violation of financial regulation are severe, they don't seem to deter scandals**
5. **Adherence is paid to the forms and processes of regulation as much as the substance**
6. **Advances in globalisation present complexity and conflicts across jurisdictions arising from differences of business culture and ethics**
7. **Major financial centres have to develop their own specific agents of change to address financial scandals**



This may all appear obvious but, if that is the case, why have they not been addressed?



Is the industry so swamped by a plethora of detailed regulations, processes and procedure that it is unable to think with clarity?

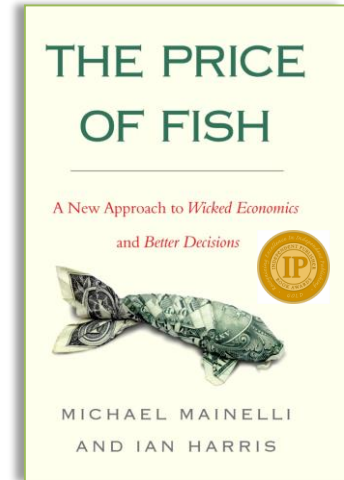
Scandals: For Discussion

- ◆ It is difficult to “future proof” recommendations. Despite the conclusions and recommendations, will the industry and those who provide regulatory oversight continue to play catch-up over financial scandals?
- ◆ How many recommendations require cross-jurisdiction co-operation to be effective?
- ◆ To what extent is effective cross-jurisdiction co-operation effective?
- ◆ Do cross cultural differences provide a fundamental barrier to effective global co-operation on addressing scandals?
- ◆ Oversight of technology and code to prevent /limit financial scandals in future?
- ◆ Equipping the City of London to lead the way

When Would We Know Our Commerce Is Working?



“Get a big picture grip on the details.”
Chao Kli Ning



Thank you!