Opening Remarks
"Collaboration Unleashes the Benefits of Innovation"

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Welcome
Good afternoon, thank you all for joining us.

It's a pleasure to be in London today – a central hub of the fintech revolution – and to partner with CSFI to host this forum on innovation and disruptive technologies and how they will shape the post-trade ecosystem in the future.

From blockchain and cloud to advancements in artificial intelligence, cryptography, machine learning and data analytics, fintech is changing how financial services is practiced and delivered to the public.

These new innovations, coupled with the emergence of many, new non-traditional players, are reshaping the long-standing relationships between banks and their clients. And this is forcing incumbents to rethink operating models and strategies to remain competitive as well as prompting regulators to re-examine their approach.

However, there's an even more profound technological revolution occurring behind the scenes of financial services – in the back offices where trades are processed and the exchange of assets occur – that could have far-reaching implications on market structure, regulation and the management of systemic risk.

Because market infrastructures play a critical role in protecting the stability and integrity of the financial system, there are unique issues and considerations that must be taken into account regarding the implementation of new technologies.

Therefore, when it comes to the ability of technology to disrupt and innovate in the post-trade environment, the devil is in the details – and that's what we will be exploring throughout this forum.

Three Topics
So today I'd like to focus on three points:

- One, The Hype around, and reality of fintech innovation…
- Two, The Regulatory considerations of implementing fintech innovations…
- And, Three, Realizing the potential of innovation to strengthen financial services.

Point #1: Hype & Reality
Let me begin with my first point by looking at the state of disruptive technology today – and, in particular, the intersection of hype and reality.

Over a three month period this autumn, the Financial Times and the Wall Street Journal alone published more than 150 stories on blockchain. That's a lot of ink spilled on this topic, but coverage is slightly down from its highpoint earlier in the year. And not only are there fewer stories today, but the tone has also moderated, which reflects the prevailing attitudes and opinions in the industry today. The breathless coverage has been replaced by a more sober examination.

This does not mean people have changed their minds on the enormous potential of the technology. In fact, a recent survey by Deutsche Bank revealed that 87% of respondents said blockchain will have an impact on securities services – in line with surveys taken over the past year. But, we are seeing that when hype meets reality, reality wins. People are much more focused on the ways blockchain will truly be successful now.

This is consistent with how we've viewed the technology since we published our white paper on the topic in January. At DTCC, we believe distributed ledgers create a unique opportunity to re-imagine and modernize the industry's infrastructure to address long-standing operational challenges. However, there are a number of limitations to the technology that must be overcome before it can be integrated into existing legacy systems.

While it's relatively straight-forward to digitize a security, does the technology allow for the countless other processes that are required to trade, clear, transfer and service that asset? Just because you can do something faster or differently with new technology doesn't mean that it provides sufficient ROI or that the costs of migrating and integrating it into the existing infrastructure is the best course of action.

While blockchain holds enormous potential – and at DTCC we are exploring many applications of it – the industry needs to identify the areas where it would provide the greatest value in terms of risk and cost reduction.

This is true not just with distributed ledgers, but also across a number of other technologies, including big data analytics, AI, machine learning and cloud computing.

The cloud is one area where financial services may have been late to the game, but I believe we are on the cusp of a major inflection point. For many years, banks shunned using the cloud primarily on security and regulatory compliance concerns. However, as these issues have been addressed, financial institutions are aggressively developing cloud strategies – 61% according to a recent survey from the Cloud Security Alliance.

By moving applications from physical systems to virtual ones, firms can innovate, test, and succeed or fail faster without the need to buy, build and maintain expensive servers, storage and security structures. In other words, work can be done in the cloud at a fraction of the cost – a major incentive at a time when the industry is continuing to reduce expenses in a challenging economic environment.

Point #2: Regulatory Factor

Let me turn to my second point and speak about the role of regulation during this period of technological revolution because that partnership will be critical to our success.

To date, the signs from regulators are promising. We largely see a supportive attitude toward fintech in most regions of the world.

Whether it's the Financial Conduct Authority's Project Innovate and Innovation Hub here in the UK or the Monetary Authority of Singapore's FinTech Innovation Lab, these efforts encourage local fintech innovation and establish groups to support the development of strategies and regulation around the growing use of technology in financial services. We're pleased to have representatives from both organizations with us today.

These efforts are crucial because decisions about how to approach compliance become more complex when firms and activities subject to regulation begin to use new technologies. Just as post-trade firms are facing this period of technological transition, regulators, too, face fundamental questions.

At its most basic level, regulators need to answer the question of what is being regulated. Is it technology, data, assets, people, all of them or a combination? If what sits between the two sides of a transaction is no longer a company but simply a piece of technology, what and who do you regulate?

There is also a delicate balancing act that supervisors need to achieve when dealing with innovation. On the one hand, rules must facilitate and support technological advancement, but, on the other hand, those goals should not swallow other important policy objectives such as risk mitigation, resiliency and transparency. Determining the tipping point in that balance is one of those key questions regulators must grapple with.

For example, if you look at a major innovator like Facebook, they mine and monetize user data to an extent that no one has ever done before, yet they are one of the most admired companies in the world and their market cap is about $340 billion. Now imagine if a bank did the same thing. The management team would probably be in jail and the stock would be in freefall.

As you can see, there are many issues and questions that need to be addressed, which makes it incumbent upon the industry and fintech firms to engage with regulators and maintain an ongoing dialogue with them. The more we share information and knowledge, the easier the path will be to implementing new technologies.

Point #3: Realizing the Potential

Now that we've talked about separating hype from reality and the importance of addressing regulatory issues, let's focus on how we can realize the potential of these new technologies.

We know that, generally speaking, the infrastructure underpinning the global markets is reliable, efficient and cost effective. However, we also know that because of the way it was developed over the course of decades, often piecemeal, it is overly complex and siloed. As a result, there are tremendous opportunities before us.

There are three interrelated components to making the most of those opportunities:

- One, we need to separate where development of the technology benefits an individual firm vs where it is in the best interest of the industry.
- Two, we need to encourage and support industry-wide collaboration
- And three, we need to establish strong standards and governance

Let's start with the importance of identifying initiatives that support the industry broadly instead of providing an individual firm a competitive advantage. This is not new. It was around when DTC was formed in the 1970s to centralize and computerize record keeping to solve the "Paperwork Crisis."

You can still see it today in the way competition is focused at the trade and execution layer while the post-trade focus is on cost, efficiency and safety for the good of the industry, and often as a utility function.

Much of the real promise of fintech in post-trade, its potential to help modernize those processes, stems from what it can do for the industry as a whole rather than simply the competitive advantage of a single firm.

As we look to take advantage of that promise, it will require collaboration.

So, let's talk about industry-wide collaboration when it comes to fintech. While there certainly have been many individual firms exploring fintech opportunities for a competitive advantage, we have also seen tremendous cooperation. Our Proof of Concepts in repo and CDS are examples of truly collaborative efforts with fintech firms, banks and other key industry participants.

The need to avoid duplicative approaches to similar industry challenges and the importance of collaboration was also crucial forming the Hyperledger Project, a consortium promoting open source development for stakeholders looking to advance blockchain technology. As an active participant, we believe that the basic building blocks of this technology should be open source and not individually owned, which is the core mission of the Hyperledger Project.

Therefore, let me finish by saying something about setting standards and governance. This is crucial to realizing the potential of fintech as there is some really great technology being developed that can provide a solution to our needs, or it could provide 12 solutions. So addressing this question of developing common standards in post-trade is critical and why we took the unprecedented step of joining the open-source HyperLedger Project.

As we rewrite key aspects of post-trade market structure, the industry—and regulators—need to consider who will establish and govern the standards that will guide us.

This is critical for governance, because governance is not just about standards. Governance includes business rules and those may not always be as precise as necessary for computers to execute on human intentions without unintended consequences. We must be able to ensure that a fully automated market heading for a cliff has someone to hit the kill switch.

We believe existing, regulated and trusted central authorities are well positioned to play a leading role in introducing those standards, their governance and technology to support those fintech implementations. This includes setting standards for participant's access for permissions, roles and responsibilities; ensuring participants are compliant with regulations and developing sound risk-management, resiliency, and recovery procedures to address operational risks in the new solutions.

These are more of the devils in the details, but we are well underway in working together, collaboratively and for the good of the industry as a whole, to address them.

Conclusion

As I conclude, let me reinforce three points:

One, when hype and reality collide, reality ultimately wins.

Two, regulators will face many challenging questions as the pace of technological change quickens, but we have a responsibility to engage early and often with regulators to share knowledge and information.

Three, to fully realize the potential of new technologies, the industry must develop and agree to certain organizing principles around collaboration, governance and standards..

I consider myself very fortunate to lead DTCC at this unique moment in time. There has never been a better time to work in the post-trade space, and, by partnering with our colleagues across the industry, I am determined to make the most of it.

As this dialogue continues, events like today's forum will help to bring greater clarity to these issues, spark debate and forge consensus.

Thank you again for joining us today.