What do driverless cars, 5G mobile networks and artificial intelligence have in common?

They are all technologies that are predicted to flourish within the next decade. These are great innovations that will transform how we do our jobs, commute to and from work, and communicate. What’s missing? The bold predictions for how derivatives markets will trade. That changes now.

At today’s first ever ISDA Technology & Standards Conference, we’re going to have a conversation about the future of derivatives trading, and how we will transform our market to make it more efficient, more automated, and integrated with cutting-edge technology such as distributed ledger.

I want to start by highlighting something we believe will help open the door to that future – the ISDA Common Domain Model (CDM). I’ll begin by describing what the CDM is, and why we think it’s essential for new technologies like cloud, distributed ledger and artificial intelligence (AI) to realize their full potential. I’ll explain why ISDA is the perfect organization to deliver the CDM, and why now is the right time for the whole industry to get involved.

So, let’s start by playing a short video.

I hope that video provided a high-level explanation of what the CDM is, and what it is designed to do.

Every person sitting here today, whatever their role in the derivatives market – trading or clearing, buy side or sell side, trade reporting or trade execution – is linked together by infrastructure. These are the basic, vital processes that our market relies on – the pipework that connects everything together.

We have to admit that this infrastructure is no longer fit for purpose. Yes, our markets are safer and more resilient since the crisis as a result of regulatory reform. But, as the video showed, the underlying process of managing a trade through its life is complex, disjointed and manually intensive.
I’m going to set out three reasons why we need to take the next step and transform this market so it remains fit for purpose for the future. The first is the need for standardization. Second is timing – I’ll make a case for why we need to move now, building on the reforms that are already under way. The third element is ISDA’s role in this market, and how we can bring the derivatives community together to forge consensus.

**Step 1: Standards**

The first step on this journey begins with standards – specifically, data and process standards that form the foundation of how we execute trades, manage risk and meet regulatory requirements.

Our market was built to suit a very different world – a bilateral world, where data and derivatives know-how were a big competitive advantage. A world where the most sophisticated forms of communication were still paper, fax and phone.

In this world, it made sense for each firm to build and maintain its own processes, definitions and data. As each new asset class, product or function emerged, new systems and conventions were bolted on top of what went before.

The result is a lack of commonality in how trade events are described, defined and documented. Everyday processes and actions are often represented in different ways at different firms. For example, a maturity extension might be represented as a change to an existing transaction at one firm, but a new trade at another.

These types of niggly differences require a constant back and forth of checking and reconciliation. That’s complex, resource intensive and expensive.

The layering on of new regulatory requirements like clearing, reporting and margining has added to the complexity and cost. The market has had to take a tactical approach to compliance, building new infrastructure to meet the next deadline, then the next, then the next. There’s been little time to think through how the whole process can best work together.

This cannot continue. We have to start designing infrastructure that is scalable and fit for the 21st century.

We’ve spent a lot of time thinking about these issues at ISDA. Just over a year ago, we published a [whitepaper that looked at the challenges the market faces](#), and set out some possible answers. It seemed obvious that greater automation was the key. Emerging technologies such as the cloud, distributed ledger and smart contracts seemed to offer the potential to achieve much greater efficiency.

We started off looking at critical functions and specific asset classes. But it quickly became clear that a broader, more ambitious approach was needed. In order for the market to attain greater efficiency and to realize the potential of new technologies, we need to address the very foundations of the market – the processes and definitions that had been developed firm-by-firm and platform-by-platform over time.
That’s where the CDM comes in. As the video explained, its intention is to create a standard blueprint for events and actions that occur throughout the lifecycle of a trade. It will essentially set out the very fabric of the market – how derivatives are traded and managed across the lifecycle, and how each step in the process is represented.

This will bring order and commonality to the execution and post-trade management of derivatives transactions. That alone will cut down on the need for constant reconciliation between counterparties. But it also paves the way for much broader take up of technology.

Make no mistake – this is a hugely ambitious and complex project. But we’ve made good progress so far.

**Step 2: Timing**

I’ll now turn to timing. We’ve spent the past eight years developing and implementing a whole new regulatory paradigm. Today, clearing, compression, margining and reporting are all common. Many firms have simply been focused on meeting the evolving regulatory mandates, but now we’re at the end of the end of the implementation effort, we can take a comprehensive view across the market and think about the future.

Cost is a factor. Today’s infrastructure is not optimized for efficiency – far from it. It is a series of disconnected processes that have been bolted together. A whole host of legacy systems are constantly at work to meet the disjointed regulatory requirements across multiple jurisdictions. This system is in no way optimized for cost efficiency or prepared for scalable solutions.

Technology is already being used for certain specific functions in the derivatives market. But without common process and data standards, we’ll just end up with a shinier version of the current disjointed infrastructure. It’ll be a bit like bolting a Ferrari body to chassis and engine of an old beat-up jeep. The new sleek body means it’ll reduce drag and run more efficiently. But at the end of the day, it’s just an old jeep.

A common set of data and process standards would mean these technologies could potentially operate across firms, platforms and jurisdictions. That’s when we’ll really see the benefits of automation.

We know this may be a daunting prospect. What we’re talking about here is a fundamental overhaul of the way banks, investors and technology vendors reflect trade processes within their systems. This will take time, resource and upfront investment. And that’s not an easy case to make at any time, least of all when margins are being squeezed.

But the question is, can we afford not to do this?

Post-trade costs now make up a large slug of investment bank expenditure – between 15% and 20%, according to Boston Consulting Group. Across the industry, sales and trading IT budgets in fixed income, credit and commodities have nearly doubled since 2012.
This is a big drain on resources, and it comes at a time of rising capital requirements, tighter margins and volatile profitability. That’s unlikely to change any time soon. In fact, new capital requirements like the Fundamental Review of the Trading Book will require banks to put aside even more capital.

Banks are therefore under significant pressure to become more efficient – they can’t afford to have any drag from unnecessary cost burdens.

**Step 3: Bringing the Industry Together**

Just last month, we published a [conceptual design definition for CDM version 1.0](#). We’ve received very useful feedback from right across the market so far, and we’ll continue to engage with the industry right through the process. As a next step, we’ve [also issued an RFQ for the development of a digital version of the CDM](#). As part of that, we expect to have a version that firms can use to run proof of concepts in the early part of next year.

ISDA is well set to lead this work. We have over 900 member organizations from all corners of the market and all parts of the globe. We have the right blend of technical and legal knowledge to grapple with this problem, and a strong track record of delivering solutions for the market based on cooperation and consensus.

For over three decades, we have helped set standards in derivatives trading and risk management through the ISDA Master Agreement, the Credit Support Annex, the definitions booklets and countless protocols. Having set the legal and documentation standards that have helped drive market growth, we now want to reset the foundations for the next 30 years.

The line-up we have assembled for today’s panels and keynote speeches shows the importance of this topic. The CDM was also recognized as a [bold initiative in a recent report by the House of Lords](#).

I’ve spent my remarks setting out the challenges and describing how we propose to deal with them. There is no doubt that lots of hard work will be required in the months and years ahead. But there is also no doubt that this is an incredibly exciting time to work in our markets. We stand on the edge of a technological revolution.

Across many fields and industries, preparations are under way for technology that until recently belonged in the pages of science fiction – commercial drones, self-driving cars, quantum computing, artificial intelligence.

We have to make our preparations too. The benefits of future technology won’t magically arrive if we just sit on our hands and wait. We are at a critical juncture. As an association, we are committed to engaging with stakeholders and seeking input from innovators. We are committed to developing solutions that will help make our markets more efficient, more automated and more scalable.
That's why the CDM is so important. We don’t know if our industry will adopt distributed ledger, smart contracts, AI or the cloud. Or all of the above.

We do know we need standards to realize the potential of these technologies. This is a critical step towards greater efficiency and lower costs for all of us.

Thank you.