



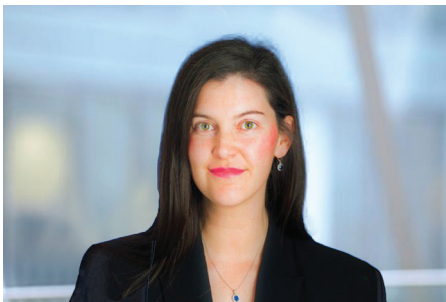
# IFRS Today

KPMG's podcast series on IFRS and financial reporting

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## EPISODE TRANSCRIPT

### Introducing blockchain and cryptocurrencies

#### Speakers

- Brian Fields
  - Emma Hunter
  - James Bowe (Host)
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#### Host

Hello and welcome to *IFRS Today*, KPMG's podcast series on IFRS and financial reporting.

In this podcast, we'll take a look at blockchain and cryptocurrencies – both topics generating a lot of noise in business circles...

Today I'm pleased to have with me two KPMG colleagues who both field great first-hand experience of the issues.

First up, we have Brian Fields – a partner in the US firm with particular expertise in accounting for cryptocurrencies. He's joined by Emma Hunter – who heads up the Financial Crime legal practice in the UK firm.

So, Brian and Emma – Thanks for joining us on *IFRS Today*...

#### Brian

Thanks, James. It's great to be here.

You know, stepping back, I look at blockchain as just one part of a broader wave of emerging technology – think about things like artificial intelligence and automation – with the capacity to profoundly impact all aspects of the financial reporting process.

If you look at blockchain in particular, it was originally developed to support bitcoin, which is now one of many cryptocurrencies. But I look at blockchain as about much more than just digital currency... blockchain the technology – independent of cryptocurrency – has the potential to impact all aspects of the financial reporting process, from preparing financial statements to auditing them and analysing financial information.

## Emma

Yes, I agree and let's break this down really simply. We often hear blockchain referred to as DLT or 'distributed ledger technology' and I think the explanation of what blockchain is is really right there in the name. It is a widely distributed, publicly available digital ledger that can record anything so, going back to your bitcoin example, it can record bitcoin transactions but it can also record smart contracts and really anything else that is put onto the blockchain.

Because the technology itself (or the DLT ledger) is decentralised, it means that no single individual or organisation maintains and controls it, and whilst you can have permission blockchain – which essentially means that you can restrict certain elements of the blockchain technology – essentially everyone can see a copy of the ledger, and it is quite immutable. And that means, really, that once something is on the blockchain it can't be changed, so people use that as an argument to say that it is very reliable because the information, once on the blockchain, can't be altered.

You don't have to take part in the maintenance of blockchain to use it. You can use it if you have a private digital key. So, to put this into context, and let's make it akin to a bank account, when you have a bank account you'll have your BSB number or your sort code – that's akin to your public digital key... something that everyone can see. But you also have a private digital key, which is a bit like a PIN number.

So, you can use your private digital key to carry out a transaction and that transaction will be recorded on the blockchain. No-one else can interfere with that transaction or take part in that transaction unless they've got your private digital key and we can only trace the transaction or see what's happened by looking at the public digital key.

## Brian

Yes, it is a very interesting way to transact and a novel way but it's some of those attributes you mention, Emma, that give bitcoin and other cryptocurrencies a real capacity for use by criminal organisations, and people who want to transact but keep their real identities hidden.

## Emma

Absolutely, and this is an area for great concern both for businesses and the regulators alike. You know, going back to that point of anonymity or really pseudonymity, let's again use bitcoin as an example – because it is the most commonly associated piece of technology when we are looking at the DLT.

If I want to purchase a bitcoin, I can essentially open a digital wallet and some digital wallet providers don't require any due diligence information about me, just an email address – and we all know I could have an email address like crazylawyer123@gmail.com, so that will not give any clues to my true identity and what's behind the transaction.

So whilst we can look at this in a wholly distributed ledger and it's recorded on the blockchain – and everyone can see that a transaction has happened – we're only able to see that transaction or trace that transaction to crazylawyer123@gmail.com.

It is definitely technology that's pushing the boundaries and raising questions around how we actually regulate this, what regulatory frameworks that already exist will apply, and what we need to put in place to ensure that it is effectively regulated and controlled.

## Brian

That's absolutely right, Emma. I do think about this technology as challenging norms and frameworks in many areas, both regulatory and otherwise...

So, for instance, while we can see a lot of risks in that bitcoin or cryptocurrency arena, some of those same attributes could be used by business in productive ways. If you think about traditional intermediaries – like banks, brokerages, insurance entities – they can see those capacities and they are investing money in blockchain research, because these kinds of decentralised ways of transacting and keeping information might have implications for their business models.

Really, you can think about blockchain like many other emerging technologies. For instance, artificial intelligence or even cloud computing. There is nothing inherently bad about the technology – it's all about how it's used and how it's secured.

## Emma

Yes absolutely, and I think another important thing to note here is that blockchain and cryptocurrency are not the same thing. Blockchain is just the technology that underpins cryptocurrency. It made its public debut at the same time that bitcoin did and they are inextricably linked – but you can have blockchain without cryptocurrency, whereas you can't have cryptocurrency without blockchain.

We are seeing various use cases for blockchain that have nothing to do with cryptocurrency – so turn your mind to supply chain management, for example, or verification. But it is fair to say that the tech isn't perfect and you hear a lot in the press about scalability issues, bottlenecks around processing speed, for example, and also how energy-intensive the technology is. I remember reading that in order to mine one bitcoin, you need the same amount of energy that is used by one US household for one and a half days. So that's quite energy-intensive...

And we've all heard the joke about using bitcoin to order a pizza: By the time the transaction is validated, the pizza is going to be pretty cold and mouldy... So there are definitely limitations around speed and energy consumption and there are scalability efforts being put in place to try to circumvent those issues.

We've also had lots of problems with cryptocurrencies and a lot of that has hit the press and, yes, it has been exploited in financial crimes and so a lot of the 'bad rap' that is associated with blockchain has come from people not understanding the distinction between the two, that they are different and that blockchain technology can be quite separate from cryptocurrency. And we also should note that a lot of the issues around cryptocurrency have happened off-chain and arisen more due to human error or poor security around the transacting party themselves, as opposed to blockchain technology.

## James

Thanks, Emma. It's worth saying to listeners new to blockchain that some of the terminology surrounding the technology can be pretty arcane-sounding – take your nodes and miners for example... To help explain these and some others, we've pulled together a [brief glossary](#) that you can access on the webpage for this podcast. You can take a look at this later...

So, Brian, now that we've covered the overall concept of blockchain and cryptocurrencies, how would you say the accountancy profession is responding to its implications?

## Brian

Good question, James. The accounting for digital assets is certainly an emerging area and, like other areas, it challenges traditional boundaries.

So far, neither the FASB nor the IASB have provided specific accounting guidance on digital assets and I think it is fair to say that, as the technology continues to evolve, people are going to need to be thoughtful in thinking about what particular accounting standards govern assets that really the world has never seen.

## Emma

I'm interested to hear, Brian, your thoughts on 'tokenisation'. You know it's quite a trend at the moment – 'tokenisation' being where we digitise a representation of an asset or a right on the blockchain, and that's created so that it can be transferred. The most obvious examples being bitcoin and cryptocurrency but some non-cryptocurrency examples also include tokenisation of rights, which will give holders access rights to particular services or online platforms of information, for example.

How are companies accounting for such assets?

## Brian

I think that's a critical hook, actually, for thinking about the accounting. Really, that is the first question I ask when I am confronted with one of these new digital assets – which is, "What exactly has been tokenised?" What are the specific rights and obligations that are being conveyed in one of these transactions on the blockchain?

So, for instance if a physical object were tokenised and traded on a blockchain, I think the accounting would follow the accounting for that physical object. But with bitcoin (unlike a physical object or even an intangible financial instrument), ownership of the asset doesn't come with any specific rights to cash or specific rights to physical objects, so in many cases by default something like bitcoin or another plain vanilla cryptocurrency would fall under the accounting model for intangible assets. So, for example, IAS 38...

In contrast, if you look at other digital assets, such as coins in an initial coin offering (ICO), they may convey specific utility or financial characteristics and in those cases I would follow the accounting for those underlying rights and obligations.

At the end of the day, what's being tokenised will determine the accounting – and I would also note here that, depending on what's being tokenised, you might be subject to particular regulatory requirements. So, if what you are tokenising is deemed to be a security, that might expose you to the regulations around securities issuances...

## James

Thanks, Brian, that's really helpful... On that point, we'll be looking in more detail at the accounting implications in a later podcast...

## Emma

I think, at the moment, it's really important for our listeners to know that this is a really live, moving area, and there's a huge amount of excitement around cryptocurrencies but also around enterprise applications and blockchain tech itself – so the use cases for blockchain tech and especially in a financial reporting setting. I think this could really steer us towards levels of standardisation which were hard to achieve in the past.

## Brian

Absolutely, Emma, and some of the people who are most excited about blockchain envision a world where many of the things that are manual and very labour-intensive today are automated. So, for example, you might think about a securities settlement when a security is traded from one party to another. This goes through a very complicated process that can take several days.

Some blockchain proponents envision a world in which those securities may trade on a blockchain, and even more than that – where you start to layer in something called ‘smart contracts’ – some people envision a world in which a dividend to be paid on a stock would automatically get paid when a certain amount of earnings is registered for the company. So you can imagine a very automated world in which computers drive actions that have historically been performed by human beings.

## Emma

Yes – I think companies are really trying to figure out where blockchain and smart contract solutions can win out over traditional processes. That concept of a smart contract, which really boils down to ‘If this, then that...’ kind of automation of any kind of contract, is very appealing and companies are spending a lot of money trying to figure out how they can utilise the tech and the concepts.

The horizons really open up when we think about how other automation technologies can complement blockchain and how they might come together in an enterprise setting.

The new technologies are really quite disruptive. We are seeing it certainly disrupt many traditional business models and you have mentioned financial reporting and how important it is to stay vigilant. I think it’s certainly true for digital assets where it’s not always clear, as you mentioned before, how existing accounting and auditing frameworks will be applied. And I think once you start tokenising things, as you’ve expressed, that sounds like it’s a lot trickier.

## Brian

Absolutely. I think this is an area where traditional financial reporting people – like accountants, finance personnel, audit committees and auditors (both internal and external) – can play a really key role in assessing and addressing the risks that accompany innovation.

We’ll take a look at some of the more detailed questions around risk and governance and controls in our next podcast but at the highest level people involved in the financial markets need to pay close attention to developments in this space.

## Host

Thank you very much, Brian and Emma... That’s really set the scene but there’s clearly a lot more to think about in this area.

As mentioned, we’ll be returning to this topic in future episodes – specifically looking at risk and governance issues and, separately, in some more detail at the accounting implications of what we’ve talked about today.

So, for now, thank you all very much for taking the time to listen to this edition of *IFRS Today*. And look out for our next episode, which will be released in the coming weeks.