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ISO 20022 –
A new language, for better payments

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The financial services market is more dynamic than ever, with organisations offering compelling customer propositions anchored on 'invisible payments', and a raft of new strategic partnerships accelerating innovation. It's an exciting time!

At the centre of these opportunities and some of the challenges lies data – how it is interpreted into meaningful customer insight, or used to simplify customer experiences and ensure seamless interactions. This is where the ISO 20022 message standard comes in, and it is much more than just a 'payments' opportunity.

Customers don't want a 'payments experience', they don't even want to talk about payments. They want instantaneous, seamless, convenient and reliable movements of money.

This is not an easy thing to do, particularly in the highly regulated and security-critical context of financial services.

It's clear, though, that those who place customer experience and transaction journeys at the heart of their payment design are those more likely to understand the opportunities ISO enables.

So, what is ISO 20022?

ISO 20022 is the new language of payment messages, providing a richer array of customer data able to be shared in each 'package' of a payment transaction. It will dramatically enhance the richness of information with which customers communicate, transfer data, move funds and provide verification across the globe.

Why should organisations embrace it?

The simple answer is more data. The infrastructure and messaging used today don't align with the explosion in big data and the needs of consumers to know more specifics beyond 'how much, to where and by when'. As a bank or a business, imagine having, in one message package, the specifics of an entire shopping basket, the sustainability of the product set bought, associated insights such as time spent before completing the purchase, or even specific instructions, like 'when depositing these funds, please also inform the beneficiary that there will be another 3 payments tomorrow of a similar value'. ISO is data-rich, which should be music to the ears of customers and banks.

What's the problem with existing standards?

While current standards work for money movement, they just don't meet the needs of the modern, data-rich world. It is like Marie Curie explaining the discovery of radium and polonium through Morse code – the medium of communication is just wholly inadequate to express the richness of information to be shared.

The roadmap for change...

The ECB's PISA Framework defines a payment scheme as 'a set of formal, standardised and common rules enabling the transfer of value between end users by means of electronic payment instruments'. In the UK, if you transfer money to a friend via a mobile banking app, the chances are it will go through the Faster Payments Scheme. If you run a business, payroll will likely be distributed to employees through the BACS scheme, and any high-value transactions will go through the Bank of England's Real Time Gross Settlement (RTGS) system, CHAPS.

There are various schemes across the globe, most of which have committed to standardisation by aligning to the ISO 20022 standard. For example, the Bank of England's CHAPS RTGS migration to ISO 20022 expects 'like for like' or simply a replication of existing functionality using ISO 20022 in July 2022, with full use of ISO from February 2023, while the European Union's TARGET2 scheme will migrate to ISO 20022 in November 2022.

SWIFT has outlined a migration from the existing Message Type (MT) format to the ISO-ready MX formats by the end of 2022, while full decommissioning of MT messages is planned by 2025 – by this time, all players will need to learn the new language, embed it across their organisation, and then never use the old language again. **There is much to be done in a relatively short amount of time.**

The challenge of meeting the compliance deadlines should not be underestimated. MT messaging in particular is tightly woven into the fabric of the banking landscape. There are several lenses to consider compliance against:

- **Your people –** the language and meaning of legacy formats are ingrained in payments and cash management professionals, with significant training and education required to embrace ISO 20022.
- **The tech –** this will be a material challenge for any organisation with legacy downstream infrastructure associated with payments, trading, treasury and cash management platforms needing to be redesigned and how they interface with every aspect of an organisation considered. The larger the business, the more challenging the shift, albeit the more beneficial the uplift from eventually making the move, due to having more data to play with.
- **Your customers –** firstly, you will need to educate them on what has changed and why the data they see is richer and in a different format. Secondly, you'll need to manage expectations – once they know there is choice in what can be sent, they will want to choose and innovate with you. Are you ready to embrace a new way of working with customers where you innovate together?

The compliance journey

Compliance can mean different things for different organisations, and a distinction between the compliance 'minimum' and 'maximum' is often made.

There are opportunities to achieve a compliance minimum with ISO 20022 standards through translation services. Using SWIFT messaging as an example, a translator sits above legacy MT native infrastructure and translates all incoming MX messages into their unstructured and potentially truncated MT equivalents, for consumption downstream. On the other hand, a compliance maximum would require upgrading all internal systems to handle ISO 20022 formats natively. This results in a future-proofed end-to-end communication chain across front-to-back infrastructure. Clearly, there are ways to enrich MT with appended data both on inbound and outbound messages considering customer preference – it does sound a bit like Frankenstein's monster though – piecing together bits and bobs to create something functional.

Ultimately, compliance will be unique to your organisation. But some things are consistent when it comes to ISO 20022 – using a translation service, or sticking to a compliance minimum, over the long term will...

- limit your potential to innovate;
- result in a more clouded understanding of your customers and their data;
- prevent cost savings and efficiencies for your own business and those of your clients;
- create a cottage industry of data stitching, which will, in turn, create yet more reconciliation and opportunity for poorer customer experience.

In financial services, we've seen the notion of minimum and maximum play out several times before – most recently with application programming interfaces (APIs). Following the regulatory drive toward open data, financial intuitions have embraced APIs as a way of exchanging account information and initiating payments on behalf of customers. Some institutions have stopped at the regulatory requirements, while others have emerged as market leaders.

There's no doubt that a similar dynamic will play out with ISO 20022, but it's important to recognise that maximising the opportunity with ISO 20022 is a journey which your organisation should go on alongside your clients, as reflected in Figure 1. Becoming a market leader is a function of how quickly your organisation can begin on this journey.

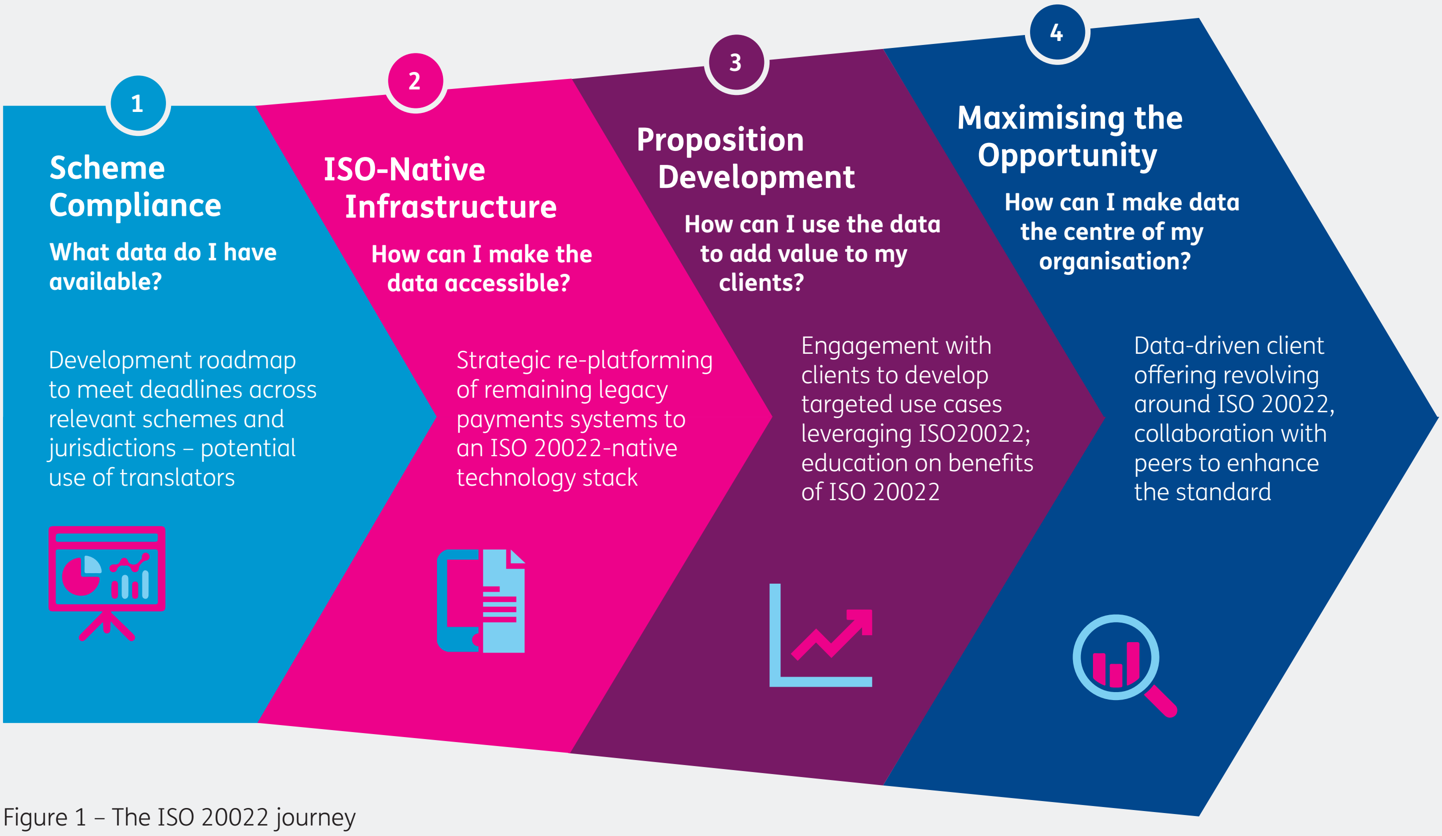

Figure 1 – The ISO 20022 journey

What are the real benefits of richer data?

There are sizable improvements on offer, from the conventional and well-documented aspects, such as improved straight-through processing and improved reconciliation, to those that are more nuanced but will ultimately help banks to really stand out in the payments space.

Today's payment journeys revolve around limited and fairly unstructured data, which drives a lot of wasted time, money and frustration for clients – borne out in the reconciliations space – an entire specialism based on the expectation payments will fail... and regularly at that. In turn, manual intervention usually results in non-standard interaction with the original payment message, causing a reduction in data quality and loss of information. Add to that the associated costs for financial institutions and clients in terms of people power AND delayed funds reaching their intended destination – it really does mount up! SWIFT estimates that 10% of payments require manual intervention bank side, delaying the crediting of funds to clients. Consider the total value of payments exchanged each second and therefore the impacts to businesses when 10% of that value arrives late.

Enter ISO 20022. The standard enables payments to carry 10x more data in a structured and consistent format. The fact that it is a *standard* means all parties across a payments chain will use and understand the same data fields and structure, creating more consistency, harmonisation and interoperability. ISO 20022 will therefore reduce the frequency of manual intervention resulting in improved straight-through processing (STP). When it does go wrong, and it will, more data means increased speed of resolution, accelerating the release of funds to clients for those payments that do go wrong.

Going into a little more detail, there are specific fields in the ISO 20022 standard that will help with automated reconciliation, including the use of a legal entity identifier (LEI) with an associated database to ensure a consistent way of identifying debtors and creditors associated with each payment – helping to route transactions to the right place. Through one LEI code in a payment message, users can look up data points such as an entity's official name and registered address to help 'plug the gap' for when clients forget to input the information on execution. Additionally, having more fields for remittance means less truncation and less free-form text – additional fields provide the opportunity for additional matching criteria to ensure a transaction has settled as intended. A clear example is more fields for external reference codes within a SWIFT message – typically MT has three to four system reference codes, but when a transaction has passed through multiple internal processing steps, it may need to have many more to tie the transaction back across a large estate.

By creating a common language and model for payments data, ISO 20022 significantly improves the quality of data across the payment's ecosystem. Richer, structured, meaningful data will enable new client experiences, while improving compliance and efficiency.

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Steven Pairman, Head of Cash Product, Europe at Standard Chartered

standard chartered

The widespread introduction of ISO 20022 messaging across the payments industry will provide enormous benefits for companies across multiple sectors. **Structured data will enable much more automation of processing and sanctions checking**, but will also pave the way for the introduction of many **new data-enabled products and services**.

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Tim Decker, Senior Payments Product Manager, Lloyds Banking Group

Combating financial crime

It will enable financial institutions and their clients to maintain compliance, saving potentially heavy fines in the process. In 2019, the United States Office of Foreign Assets Control (OFAC) fined companies nearly US$1.3 billion for breaching international sanctions or enabling money laundering. Unstructured and incomplete data can make it more difficult for sanctions-screening processes to identify offending transactions, while a high percentage of 'false positives' can divert attention and focus away from where it is needed. LEI codes along with structured address fields are two examples of how ISO 20022 will help sanctions-screening processes single out offending transactions and prevent them at source, whilst allowing institutions to better tune their ruleset to identify criminal activity in the finance ecosystem.

Increased visibility on *why* customers are making payments

Billions of transactions are processed by banks across the world each day, without any context on what the payment is for. Forrester's research claims that the future of banking will be 'invisible, connected, insights-driven, and purposeful'. Without data, it's impossible to understand what to offer your clients, and when. Banks that emerge as winners over the next decade will be those that embrace data to offer timely value-added services to their customers.

ISO 20022 provides the first step toward this with the introduction of payment purpose codes for cross-border transactions, such as 'FCIN – Fee Collection and Interest' and 'BONU – Bonus Payment', enabling banks to start understanding *why* their clients are transacting, if the behaviour is normal and then how they can make their lives easier.

ISO-enabled propositions

Standardisation and harmonisation in payments will accelerate innovation by making things easier and more consistent. Beyond business efficiency, ISO 20022 opens up a world of exciting new payments propositions that are ready to be explored. The move from the current ISO 20022 v3 standards to the even richer v9 standards will open up even more opportunities.

Here are six client-specific examples, but this barely scratches the surface of the potential of ISO 20022:

1 Gig economy disbursements

The last decade has been dominated by the growth of the gig economy, from the rise of Uber and Deliveroo through to creative services such as Fiverr and even legal services like Rocket Lawyer. Alongside this, we've seen the development of bespoke banking services to freelance workers, such as Lili, Joust, and Oxygen. ISO 20022 could play a key role in the sector moving forward, by including additional information alongside each disbursement, including hours worked, services provided, breakdown of shifts – and maybe even additional 'rewards' such as loyalty points alongside the principal payment.

2 Sustainability data

There is an increasing regulatory drive for banks to make climate-related disclosures. The Bank of England's 2021 Biennial Exploratory Scenario focuses on climate risk, while the EBA has recently announced Regulatory Technical Standards for Environmental, Social, and Governance disclosures. In a world where the carbon footprint of almost any product or service can be reasonably estimated, and the means of exchange for that good and service is almost always electronic payments, sustainability metrics could eventually be embedded into payment messages. The payment data could then be aggregated, enabling unique transaction-level climate reporting, with exciting new metrics such as 'average CO2 per transaction'. You could start to model how sustainable a customer truly is, as almost every human interaction nowadays results in an electronic transfer of funds.

3 Basket data

Arguably, the success of any organisation can be attributed to how well they know their customers. ISO 20022 will enable additional context to be associated with each transaction, creating an opportunity for banks to better understand the behaviours and needs of their clients – this will enable development of customer profiles, segmentation, and even the identification of trends. By leveraging basket data, if you know your customer has started spending money on a pram, nappies and baby toys, then you can approach them with child savings accounts and life insurance products.

From a business perspective, understanding a customer's spending habits can enable automated and more targeted management of loyalty programmes and cashback offers, potentially improving metrics such as revenue per customer and cart abandonment rate.

4 Request to pay and payment netting

Request to pay innovations will allow corporates greater control over how they receive funds from their customers. They will be able to provide richer data to their customers, allowing them to automatically initiate payments with the correct data and avoiding errors and enabling easier reconciliation with the inclusion of an invoice reference.

Even richer use cases are available to corporates to streamline more complex payment requests, such as the combination of multiple invoices within the same request as well as itemised breakdowns of invoices. ISO 20022 can enable this transfer of rich data back to the requestor, providing greater flexibility for their customers to 'pay for what they used' and streamline reconciliations, knowing exactly what might be outstanding and why it was not paid. This may also dramatically reduce the volume of payments transactions to be processed, further reducing costs and the likelihood of errors.

5 Closed-loop interactions

ISO 20022 messaging will be the format banks use to talk to one another, but will likely become the standard structure for closed-loop interactions, which is where the opportunities really take off.

If you can agree what each field means within the closed loop, then the optionality on the fields grows immeasurably – you could have a link embedded into a payment message which routes the recipient to an invoice and also provides a link to subsequently pay for the invoice all in one message. You could create unique tracking references within the closed loop for status updating or even send on loyalty points alongside the monetary value – consider part payment in points and cash all in the same transaction.

6 Why did my salary change AGAIN this month?

Because your tax code did.

Oh, but I had no idea my tax code had changed again without logging in to six different places.

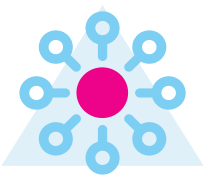
Well, next time, we'll send you last month's tax code, this month's tax code, last month's salary, and this month's salary... and a link to the government tax website all in one payment message.

Wouldn't that be perfect? In summary, more data always results in more opportunity; the key is to find those nuggets that really make a difference to customers.

Are you going to make the move?

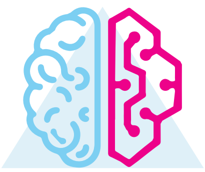
In truth, you don't really have a choice. If you are a business or a bank, the move to ISO 20022 is inevitable – but we would recommend you embrace it as an exciting opportunity and not as an affliction.

So what are the salient points to take forward?

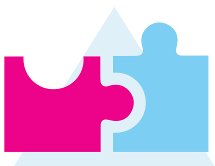


Maximising the benefits from ISO 20022 is a marathon, not a sprint – the priority should be meeting scheme deadlines, but this pursuit cannot limit or detract from innovation further down the line. Akin to the API market, leaders and laggards will emerge; to avoid being a laggard, embrace an open mindset now.

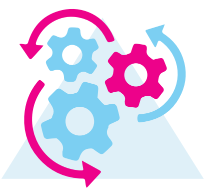
To maximise potential opportunities, everyone needs to speak the same language – for the standard to work, a network effect will be key. But don't wait until everyone else is fluent or you risk having to adapt to the language rather than shaping the language to suit you.



Education is key – you need to engage with your customers to ensure they understand the benefits of ISO 20022. Banks, businesses and the broader payments ecosystem will need to work hand in hand to define mutually beneficial ISO-enabled use cases.



A balance will be required between collaboration and competition – ISO 20022 as a standard should be evolved alongside the community, while proprietary innovations will also emerge between banks and clients.



Interoperability will be key – on a journey to achieve full ISO 20022, there will be a need to operate both legacy and ISO-enabled standards concurrently, and the means of flowing between the two will matter.

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Pay.UK – next-generation standard for UK retail payments

Transforming UK retail payments to operate on the ISO 20022 standard is a once-in-a-generation opportunity in terms of investment and modernisation for our retail payment systems. Our vision is simple: it must **enable benefits for all, through new data-driven services for payments**. We are passionate about getting it right and welcome collaboration with Baringa and other industry stakeholders, as standards are deeply collaborative. This report sets out the need to **keep challenging ourselves, to think continuously about the clarity of the outcome and how standards will benefit the entire payments process end to end, not just for clearing and settlement**.

A clear focus in this report, which aligns with the vision of Pay.UK, is on scenarios and the benefits to the end user.

At Pay.UK we welcome Baringa bringing to life the innovation opportunities, looking across the payments ecosystem end to end, and considering the needs of customers and end users. Standards are a platform for collaboration, and we hope that this report will help to raise awareness of this potential. As we continue to work with Baringa, and other industry partners, we want **to assure the payments ecosystem that the design choices that we make, in our role as a standards authority, will embrace the strategic opportunity to transform UK retail payments powered by enhanced data standards**.

ISO 20022 is a transformative opportunity for your organisation.

Give Baringa a call to discuss how we can help you on your ISO 20022 journey.

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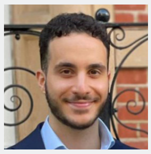

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About Baringa Partners

Baringa Partners is an independent business and technology consultancy. We help businesses run more effectively, navigate shifts and reach new markets.

We use our industry insights, ideas and pragmatism to help each client improve their business.

Collaboration is central to our strategy and culture, ensuring we attract the brightest and the best. And it's why clients love working with us.

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