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The value of standards in the FX markets

By removing barriers to exchange, standards always increase the amount of business done. They cut costs, widen margins, expand opportunities and reduce risk. Standards lower the cost of doing business, increase returns on investment and reduce the risk of something going wrong. And it is hard to think of a market where standards can deliver more of these benefits than foreign exchange (FX).

Unfortunately, standards are not seen as the province of senior management in FX, even in operations. Instead, they are regarded as technical adjustments to business processes, best left to software engineers. This means their contribution to lifting the commercial and financial performance of participants in the FX markets is consistently under-estimated.

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Need for automation in the FX market

With more than 180 currencies in circulation around the world, the FX markets are naturally both global and fragmented. The range of participants in the FX markets is diverse too, including retail consumers, corporates, central banks, global banks, local banks, non-bank liquidity providers, prime brokers, trading venues, matching platforms, asset managers, hedge funds, FinTechs and others.

A market trading such high volumes and values every day, across a diverse range of participants in a variety of instruments, would be insupportable without generous levels of automation. Day-by-day trading must take place on the basis of documentation agreed with counterparties in advance, and on technology platforms that can capture, confirm and settle trades without manual intervention.

Yet the sheer volume of transactions makes automation of FX trades particularly challenging. Once trades are captured, efficient settlement depends on prompt and accurate confirmation of the terms of the trade between the counterparties and of details of the accounts through which the trade will be settled. With millions of confirmation messages being exchanged every trading day, discrepancies in even one per cent translates into tens of thousands of potential settlement failures every day.

The value of standards in mitigating this risk are obvious. Industry standard documents provide a ready-made basis for mutual agreements to trade, so trade capture systems can book the terms automatically. Standard confirmation messages then make it easy to identify discrepancies, while guaranteeing the secure and authenticated exchange and settlement of currencies.

Automation is a process not a destination

Even obvious benefits take time to capture and are challenging to retain as markets adapt and evolve. The FX markets are always attracting new entrants, which may not make use of standards immediately. The range of FX products extends continuously, so standards must be adapted to their existence and rate of adoption. Above all, regulations are imposed, changing the information that standards are expected to encompass.

The SWIFT MT 300 standard foreign exchange confirmation message was conceived in the 1980s. It was a time when foreign exchange was already traded on a global scale, but over the telephone against prices distributed by a single dominant vendor. Dealing desks at all the major banks effectively betted against each other on currency movements, using the telephone to issue purchase and sale orders.

Paper-based purchase and sale tickets, specifying the terms of trades agreed on the telephone, were completed by dealers and confirmed manually with the counterparty by the back office. It was because this process was inefficient and error-prone that SWIFT introduced the MT 300 message in the late 1980s to facilitate the automation of FX trade confirmations.

Adopted first by the banks, the use of MT 300s spread to asset managers and corporates. Today, in a much-changed FX marketplace characterised by trading and order management platforms on which asset managers and corporates and their agents – notably smaller banks and prime brokers – search for liquidity provided by large banks, MT 300s have adapted to a new *modus operandi*.

Most FX trading and order management platforms have developed services that confirm FX trades with liquidity providers on behalf of users via MT 300 messages. So do technology vendors that provide similar services. These help lower volume participants in the FX markets to automate the confirmation process, making it easier for higher volume liquidity providers to do business with them.

Use of MT 300 and MT 305 confirmation messages has grown steadily, to around 70-80 million a quarter between more than 10,000 direct and indirect counterparts, including corporates, investment managers and broker-dealers as well as banks. In FX spot transactions, forwards, non-deliverable forwards (NDFs), swaps and options, these message standards account for an estimated 75 per cent of all confirmations issued, making them the de facto method of confirming trades securely and automatically.

Constraints on automation

However, there are still plenty of FX market participants that confirm trades by email, fax and telephone. The costs they impose can be significant. A large bank active in a major market might have as many as 10,000 customers who do not confirm trades automatically. If each of those customers executes just two trades a week, that translates into 20,000 emails, faxes or telephone calls a week – in one country.

The constraints on efficiency are not confined to less efficient participants. New needs emerge, and old products develop. The SWIFT FX trade confirmation message set was extended over time to accommodate lower volume instruments (such as FX options and metals trades), new products (such as NDFs) and fresh requirements (such as rollovers and terminations). But there are always new instruments, products and requirements in the FX markets. See *example of Bilateral Netting in Appendix*.

To increase automation by adapting existing standards

Message standards must adapt to these new and developing instruments, products and requirements, which reflect changes in the demands made by regulators as well as in the behaviour of market participants. Recent experience proves that the Category 3 SWIFT messages used by the FX industry – of which the MT 300 is the largest – are sufficiently versatile to be adapted.

A benefit of this versatility is to reduce the cost of adaptation to new requirements for FX market participants. Any participants already using the existing confirmation messages benefit from their enlarged capabilities without needing to invest money in new technologies or time in the reorganisation of existing processes and procedures.

The adaptations are also market-wide, by definition, because they occur through the annual SWIFT Standards Releases. These keep message standards in line with developments in the FX industry by adding functionality to accommodate new demands from both market participants and regulators. Adaptations made in recent years have enabled varied new requirements, including compliance with new regulations, such as Dodd-Frank, EMIR and MIFID II; support for new derivatives instruments; and improvements in the quality of the data standards.

The 2019 Standards Release will see the removal of the free text option from fields used to identify the settlement parties in all MT 300 confirmation messages. This ambitious change, supported by the FX Market Practice Group (FXMPG) of experts hosted by SWIFT, will facilitate the automation of the matching process that enables an FX trade to be confirmed, saving counterparties time and money repairing data.

To increase automation through collaboration

These past and future adaptations show that SWIFT Standards Releases are not technical adjustments or solutions to software malfunctions best handled by engineers, but considered responses to demonstrable market needs. In fact, they are the final output of a formal process by which market participants at the local level make their needs known by requesting changes to existing message types or the addition of entirely new message types to the canon.

SWIFT Standards Releases are not unwanted modifications imposed on the industry. They are changes which originate from the industry, which are subject to screening by the industry, and which are adopted by a vote of the industry. *The full process is described in the Appendix*. Provided they are willing to get involved, and to vote, any participant in the FX markets can initiate a change to a message standard. By that means, individuals active in the FX markets can influence the process by which message standards are adapted to new business needs or modified to better meet existing ones.

In fact, the involvement of market participants is essential. SWIFT works to enable and encourage that collaboration. In addition to a formal consultation process for users to propose changes to existing message standards, the FX Market Practice Group (FXMPG) – which is made up of FX market participants from around the world – meets regularly.

The FXMPG publishes market practice guidelines¹ designed to promote the use of the existing standards and modify them in the light of changing needs.

¹ Market practice guidelines for Category 3 messages can be found in the user guide at mySWIFT: https://www2.swift.com/knowledgecentre/publications/us3u_20170720/2.0

Industry collaboration rather than regulation

Regulatory compulsion is no substitute for this process of consultation and collaboration, because regulation is not a force which is felt directly in the FX market. Though certain of its instruments – swaps, options and futures – are regulated as derivatives, much of the FX market is regulated indirectly only, through the banks and other organisations which trade FX. Even the FX Global Code, drawn up and published in May 2017 under the auspices of the central banks, is not a regulation but a list of best practices that amount to a code of conduct for market participants.

Likewise, regulation of the FX market rarely affects message standards directly. The origins of the MT 300 can be traced to a regulatory preference for trade matching and confirmation in the late 1980s and early 1990s², but it took decades of persistent consultation by SWIFT and collaboration with the industry for the message to become the confirmation method of first choice in the FX industry.

Similarly, the addition of UTIs to FX confirmation messages in the 2013 Standards Release, and of ISINs in the 2017 Standards Release, stemmed from regulatory requirements in Dodd Frank and EMIR, but their inclusion as fields in MT 300 messages ultimately reflected the operational convenience of market participants, not regulatory fiat.³ In other words, market participants were convinced of the benefits, and made the investment.

There is no reason to expect regulators to accelerate or replace the patient work of consultation and collaboration in persuading the FX industry of the benefits of greater standardisation and automation. Though central banks have indicated that widespread failure to adopt the FX Global Code would prompt them to reconsider their decision not to regulate the FX industry directly, even they accept that this is not desirable and is probably not even practicable.

Where the ISO 20022 Standard fits in

Likewise, there is no case for compelling the FX industry to adopt a new standard for the digital exchange of information in financial markets, even though it is better adapted to the age of the Internet: ISO 20022. Although financial market infrastructures (FMIs) are adopting the standard enthusiastically, and users of SWIFT payments messages will actually be obliged to migrate to ISO 20022 between 2021 and 2025, with their counterparts in the securities industry following suit once voluntary adoption is widespread, there are no plans to migrate the FX market for the foreseeable future.

The 2018 consultation on the timing and method of migration to ISO 20022 found that the FX industry saw no compelling case to move to the new standard.⁴ FX market participants believe existing standards are adequate to present needs and that the adoption of the new technologies the ISO 20022 standard can support is too remote to warrant immediate change.

Although their systems will have to support the payment legs of FX transactions on ISO 20022 from 2021, while FX trade confirmations continue to use the MT 300 message standard, the business case for running both on ISO 20022 has yet to be made. Unlike the payments industry, where demands from the industry cannot be met by the existing standard, the status quo in the FX industry is not inconvenient. Migrating all MT 300 messages on to ISO 20022, on the other hand, would be complicated and expensive, and the return on the investment uncertain.

That said, the long-term advantages of the ISO 20022 standard apply to FX markets as readily as they do to the payments and securities markets. ISO 20022 is an open standard, uncontrolled by any commercial interest; automates interaction and interoperability between asset classes and financial market infrastructures (FMIs); can convey more information than existing standards; and is usable with any technology.

Only when the FX industry is convinced these benefits are realisable can the migration to ISO 20022 begin. SWIFT is well placed to support the migration, not just because of its work on the migration of the payments industry, but because it is already carrying ISO 20022 messages for CLS, the FX settlement risk management utility. The governing bodies of the FIX messages used in FX trading and of the FpML messages used mainly for reporting FX swaps to trade repositories, are also both committed to an eventual transition to ISO 20022.

² The 1988 Group of Thirty (G3) report, *Clearance and Settlement Systems in the World's Securities Markets*, recommended all trades were matched by trade plus one day (T+1) and that buy-side counterparts be added to the confirmation system (Recommendation 2). Recommendation 5 of the G30 report of 2003, *Global Clearing and Settlement: A Plan of Action*, page 8, read: "Automate and standardise institutional trade matching"

³ This is not true of other message types. For example, the addition of fields to MT 202 payments messages to include details of the beneficiary of a payment flowed directly from a Financial Action Task Force (FATF) requirement. Similarly, Category 5 messages were extended to accommodate a MiFID II requirement to explain how investment research purchases are paid for.

⁴ 83 per cent of all respondents, and 80 per cent of the top 50 SWIFT users, agreed with the statement that "there is no industry driver requiring the Category 3 and 6 messages to move to ISO 20022 standards in a similar timeframe to the one being proposed in other business domains." See SWIFT, *SWIFT ISO 20022 Migration Study – Summary of responses*, 16 August 2018.

Conclusion

For now, existing message standards work well for the FX industry. They are driving the high levels of automation it is achieving today. In fact, the volume of business the FX industry transacts would be impossible without standardisation. Standards are also adapting successfully to keep pace with commercial, operational and regulatory changes affecting the FX markets.

Yet it would be a mistake for the FX industry to be complacent. The scope to lift operational, commercial and financial performance further and higher, through more and better use of standards, remains immense. A series of mandatory steps taken by SWIFT Standards Releases have proved it is possible for FX market participants to capture an ever-growing proportion of that potential value. None of the obstacles to capturing all of it is insuperable.

The key to effective further enhancement of the standards is collaboration by the industry to identify operational bottlenecks, inefficiencies and manual processes, and to agree on mechanisms for improvement. Whilst SWIFT itself implements changes to the message standards, input and authority to do so come from the industry.

Your active participation in the standards process can enable improvements not just for your organisation, but for the global FX market.

If you would like to get involved in the evolution of message standards in the FX industry, there are several ways.

You can see and comment informally on change requests before they are baked into a Standards Release, at www.swift.com/mystandards. This facility is available to anyone with an email address which is linked to a BIC on www.swift.com. If you would like to be involved in the governance of MT standards, please contact the chair of the National User Group (NUG) in your country. Find out how NUGs work: https://www.swift.com/about-us/community/nmgs_nugs?tl=en#topic-tabs-menu. If you do not know who that is, contact the standards team at SWIFT by email at SWIFT.chairperson@SWIFT.com. If you would like to get involved in the development and evolution of ISO 20022 standards, the best place to start is www.iso20022.org, where a full listing of development submissions and change requests is published, along with details of the submitting organisations.

And if you need SWIFT expertise and resources to implement message standards in an internal project then please contact your SWIFT relationship manager or raise a case with SWIFT Support on <https://www.swift.com/contact-us/support>

2011 Standards Release

Market participants previously told counterparties about changes to their Standing Settlement Instructions (SSIs) – essentially, the bank and the account into which payments for different instruments in different currencies should usually be made – through a free text message. Inevitably, they frequently contained mistakes, and it was in any case impossible for recipients to process messages containing free text automatically. The structured format of the new MT 670 SSI one-to-many broadcast update message reduces the scope for error and increases the proportion of messages that can be processed automatically.

2012 Standards Release

To help market participants automate the bilateral netting of their FX transactions, the MT 370 message was introduced. It is used to notify counterparts of the netted position in spot, NDF and options transactions, and includes settlement information for the relevant currency.

2013 Standards Release

New fields were added to confirmation messages to help FX market participants comply with new regulatory reporting obligations under the Dodd Frank Act (which came into effect in 2012) and the European Market Infrastructure Regulation (EMIR, which came into effect in 2014). One new field enables OTC derivative counterparties to include the Unique Transaction Identifier (UTI) they use to report transactions to trade repositories.

2015 Standards Release

At the request of the Global FX Division of the Global Financial Markets Association (GFMA) ten new exotic FX instruments were added to the Category 3 messages to increase the level of automated confirmations between counterparties using them. The instruments, whose structure was standardised by the International Swaps and Derivatives Association (ISDA) shortly beforehand, included physically fixed deliverable options, knock-in knock-out barrier options, multiple window barrier options, discrete barrier options, both discrete and multi-currency binary/digital/no-touch barrier options and average rate and strike forwards and options.

2017 Standards Release

Market practice guidelines were published to facilitate the automation of the manual processes by which FX options are closed-out by the mutual consent of the counterparties and non-deliverable options (NDOs) are exercised. To improve the way that NDFs are confirmed, free format fields were replaced by structured messages. A field was also added to allow confirmation messages to include the International Securities Identification Number (ISIN) of each instrument being traded. This enables users to comply with the Markets in Financial Instruments Directive (MiFID II) requirement to include ISINs in reports to both regulators and clients.

2018 Standards Release

With MiFID II implemented from 3 January 2018, a series of modifications to confirmation messages were introduced to automate the process by which banks and brokers comply with their obligation under Article 59 of the directive to report full details of FX trades to clients.

The bilateral netting process requires standardisation

At present, FX market participants are netting trades with each other on a bilateral basis through the use of faxes, spreadsheets and emails. This creates obvious operational risks and inefficiencies. If FX market counterparts instead made greater use of the MT 370 message introduced in the 2012 Standards Release, they could automate the bilateral netting process, reducing both risks and costs.

The benefits of an automated bilateral netting message are obvious: it cuts manual processing costs as well as reducing settlement risk by shrinking counterparty exposures. And those benefits are enlarged by network effects. Realising their value for one counterparty ultimately helps realise the value of the same benefits for all of its counterparties that choose to adopt the same message standard.

It is impossible for any vendor to initiate this virtuous circle. Even a service offered by a third party implies expenditure by market participants to interface with it. The market participants must be convinced of the need to change their systems, and the accompanying processes and procedures, and that depends on a high degree of confidence that network effects will not only cover the cost of the investment but increase its value. The key to securing that confidence is collaboration.

The Standards approval process

They are submitted by participants to the National User Group (NUG) in the country where they operate by 1 June every year. NUGs must by 1 June every year submit suggestions for review – and acceptance or rejection – by the Treasury Maintenance Working Group (TMWG). Made up of representatives of the ten countries whose participants generate and carry the most messages, the TMWG meets every August.

TMWG meetings tend to favour changes whose benefits outweigh costs and which will be useful to market participants on a global scale. However, acceptance of the changes approved by the TMWG is also subject to the approval of the users by ballot at the country level, with the voting weighted in favour of the heaviest users. Any change which attracts the support of at least 60 per cent of the electorate is forwarded to SWIFT for implementation

Barriers to automation

The FX industry needs to increase its rate of automation – and adjustments to message standards are an important means of clearing obstacles to higher rates of automation in the post-trade processing of FX transactions. Obstacles will never disappear entirely. There is in principle no end to automation through adaptation. But some obstacles are harder to clear than others.

The first is inertia. This means more than individuals failing to get involved in the process of changing message standards. Experience shows that, if a change is not mandatory, adoption tends to be unenthusiastic, because change is not costless. Databases have to be amended. The systems that generate outgoing confirmation messages, and read incoming ones, have to be modified. Both must be tested before deployment.

This has consequences. The addition or persistence of a manual work-around or a free text field in a confirmation message, for example, minimises immediate inconvenience. But it remains easy to share incorrect data or use a free text field carelessly, exacerbating an obstacle to automation. Yet even the replacement of manual processes by structured data fields cannot clear the obstacle if use of the standard is voluntary, adoption is limited and volumes remain low.

Increasing the rate of adoption and growing the volume and value of confirmation messages requires potential users to be convinced of the benefits and to collaborate with each other to make adoption as painless as possible. After all, budgets are limited. In every financial institution, demands for investment always outweigh the funds available, and compliance with regulations, and maintenance of existing systems, tend to have first claim. To secure funds, additional use-cases for confirmation messages must offer the prospect of a substantial return.

Naturally, this becomes progressively harder to achieve. As automation through adaptive standardisation extends beyond large and liquid participants and instruments, the marginal cost of adding one more instrument or use-case draws closer to the marginal return. In the most exotic FX options, for example, even a global bank may need to confirm no more than ten trades a week with ten counterparties. The temptation to stick to manual processing is commensurately strong.

But this is not a strong argument for resisting the investment. Even in low volume instances, network effects can apply, amplifying the return on the investment in automation. As early adopters find more counterparts can exchange confirmations automatically through the use of the standard, the use of the instrument as well as the standard increases. The alternative, of maintaining the status quo, condemns the industry to increased rates of error and higher costs in perpetuity.



About SWIFT

SWIFT is a global member owned cooperative and the world's leading provider of secure financial messaging services.

We provide our community with a platform for messaging and standards for communicating, and we offer products and services to facilitate access and integration, identification, analysis and regulatory compliance.

Our messaging platform, products and services connect more than 11,000 banking and securities organisations, market infrastructures and corporate customers in more than 200 countries and territories. While SWIFT does not hold funds or manage accounts on behalf of customers, we enable our global community of users to communicate securely, exchanging standardised financial messages in a reliable way, thereby supporting global and local financial flows, as well as trade and commerce all around the world.

As their trusted provider, we relentlessly pursue operational excellence; we support our community in addressing cyber threats; and we continually seek ways to lower costs, reduce risks and eliminate operational inefficiencies. Our products and services support our community's access and integration, business intelligence, reference data and financial crime compliance needs. SWIFT also brings the financial community together – at global, regional and local levels – to shape market practice, define standards and debate issues of mutual interest or concern.

Headquartered in Belgium, SWIFT's international governance and oversight reinforces the neutral, global character of its cooperative structure. SWIFT's international office network ensures an active presence in all the major global financial centres.

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