

What we learned in 2016

**Welcome to the December 2016 edition of
MI Forum magazine on-line.**

We learned a lot in 2016. By talking to colleagues, clients, consultants, commentators and competitors, we gained dozens of useful insights into our industry, and we thought we would round off the year by sharing them with you.

We have divided our learnings into 12 themes.

Best wishes and looking forward to 2017!

Cyber-security is the #1 issue

1. Non-similar, off-network third sites are an important source of cyber-security, but the costs of running separate technology means third sites must focus first on critical infrastructure such as Real Time Gross Settlement (RTGS) systems.
2. Regulators say resuming critical operations within two hours of a successful cyber-attack is an expectation, not an aspiration.
3. Focussing on the two hour recovery period for critical operations risks loss of data captured and stored during normal operations, which complicates post-event reconciliation.
4. Any agreed set of cyber-security rules should avoid being overly prescriptive, since this creates the risk of a (counter-productive) box-ticking exercise.
5. Financial market infrastructures (FMIs) should pool experience and intelligence about cyber-threats sooner, faster and more extensively, even though this is inevitably constrained by concern about liability for financial losses occasioned by successful cyber-attacks.
6. In response to the cyber-security challenge, SWIFT is working together with its community on a dedicated Customer Security Programme (CSP), which is designed to reinforce the security of the global banking system.
7. The CSP programme includes the introduction of mandatory security controls, new services to prevent and detect fraudulent activity, and community-wide information-sharing initiatives to prepare, exchange and avoid future attacks.

Distributed Ledger Technology (DLT)

1. As systemically important entities, financial market infrastructures (FMIs) are bound to be cautious about moving too rapidly off their existing technology platforms.
2. Financial market infrastructures (FMIs) must explore whether distributed ledger technology (DLT) can help them cut costs when expenses are rising elsewhere (notably regulatory compliance).
3. Because of their governance structure, FMIs of all kinds are touted as natural gatekeepers to permissioned DLT networks.
4. Use cases explored by FMIs include equity, bond, repo and swap settlement, and margin management, corporate actions processing and proxy voting.
5. Central banks, including the European Central Bank (ECB), the Bank of England and the Bank of Japan, are exploring the potential of DLT to transform monetary policy operations in general and real-time gross settlement (RTGS) in particular, and central securities depositories (CSDs) such as Euroclear and the National Securities Depository (NSD) in Russia are either evaluating or deploying the new technology.
6. DLT networks have the potential to fragment the financial services industry unless common standards such as ISO 20022 are developed and made available to enable their participants to inter-operate and connect to legacy technologies.

Integrating European infrastructure

1. 2017 will see decisive steps by the European Central Bank (ECB) to create a single European clearing and settlement platform for cash, securities and collateral.
2. The European Central Bank (ECB) will amalgamate its payments (TARGET2, or T2) and securities (TARGET2-Securities, or T2S) settlement infrastructures with the aim to offer users a single point of entry for cash and securities services.
3. As payments markets evolve, the ECB has expressed concern that new services should not be developed domestically, at the expense of inter-operability across Europe.
4. The ECB has set up the European Retail Payments Board (ERPb) to launch an instant payments solution in the Single Euro Payments Area (SEPA) by November 2017.
5. The ECB is investigating the feasibility of creating a centralised real-time payments settlement service alongside T2, settling retail transactions on a gross basis in central bank money.
6. The ECB is also considering the establishment of a common collateral management service for the Euro-system of central banks, to facilitate collateral movements across borders.

The journey to a single payments platform

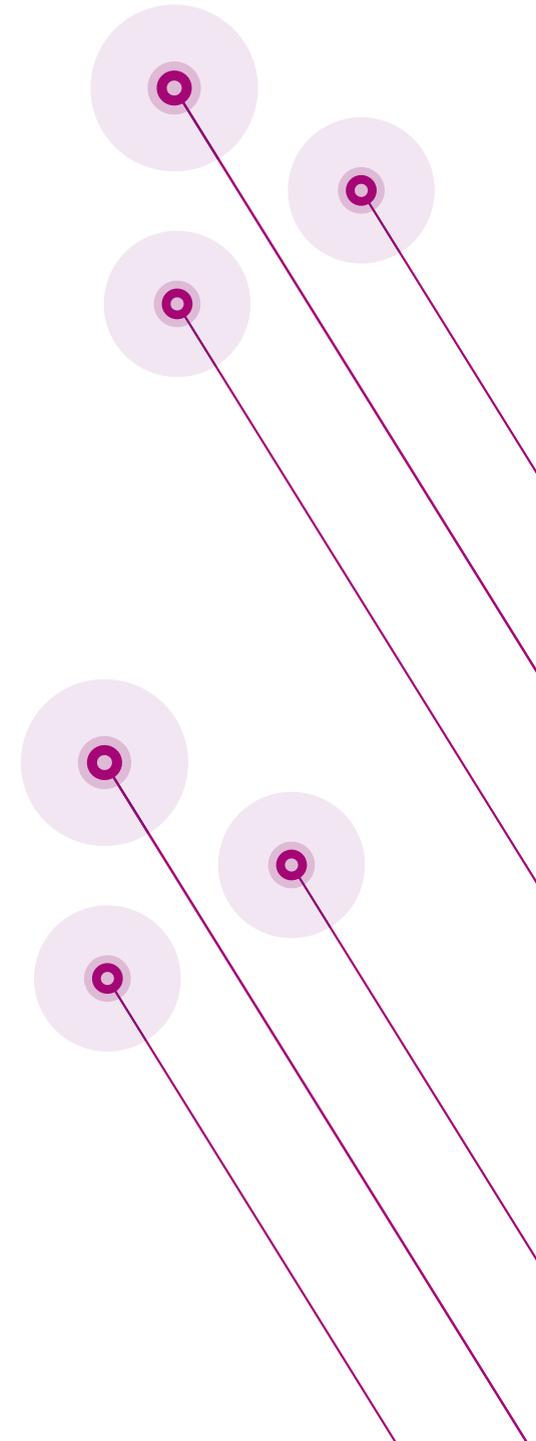
1. At some point, the payments industry must migrate from a plethora of ageing and expensive systems and schemes to a single platform to process all payments.
2. A single payment *experience* for customers (based on seamless system inter-operability, comparable to mobile telephony) is a more probable future than a single payments platform.
3. To deliver that experience, adoption of standards such as ISO 20022 are essential, because they enable disparate systems to inter-operate with each other.
4. Real-time Gross Settlement (RTGS) platforms are expected to be more robust and resilient than ever, and reliance on a single platform increases vulnerability to disruption by hackers, fraudsters, terrorists and hostile states.
5. Regulators dislike the fragmentation of payments systems and schemes as it hampers competition by introducing barriers to entry for new service providers.

The business case for real-time payments

1. Change is necessary because regulators insist that financial market infrastructures (FMIs) offer access to non-banks, both to foster competition and to forestall a shadow payments industry developing.
2. Any bank that wants to retain a large share of payments has to continue to change and innovate rapidly, or be overtaken by nimbler non-banks.
3. The benefits of real-time payments include increased customer satisfaction through value added services and a faster user experience.
4. Moving funds in real-time obliges banks to conduct anti-fraud analysis of transactions as they occur in real-time (which is an area in which payments banks could learn from their colleagues in the credit card industry).
5. Settling transactions 24/7, 365 days a year presents technical and liquidity challenges separate from real-time payment, but they must be overcome if customer expectations are to be met.
6. The customer service demands of being available continuously set a severe test for the prevailing culture at existing payments service providers (especially banks).

T2S will be complete in September 2017

1. With the last waves of migration to TARGET2-Securities (T2S) in February and September 2017, central securities depositories (CSDs), international central securities depositories (ICSDs) and custodians will change the way they operate in Europe.
2. Central securities depositories (CSDs) and custodians will be most directly affected by TARGET2-Securities (T2S), and both will adapt and/or extend their service offerings to remain competitive, by re-defining their value proposition and forming new partnerships.
3. Some CSDs will continue to expand into asset servicing, but they will also exploit new opportunities in collateral management and additional asset classes - by developing investor or issuer CSD activities at a regional or pan-European level, for example.
4. New pieces of regulation, such as the Central Securities Depositories Regulation (CSD-R) present CSDs with the opportunity to change the way they operate across Europe, as well as defining the measures they must take to ensure settlement efficiency.
5. So far, most CSDs and most customers of custodians (whether investors, banks, brokers or issuers) have adopted a "wait and see" approach, but this will give way to a more active approach in 2017.
6. Account segregation, which is already in place in the Nordic markets, remains a live issue around the world, and will remain so in 2017.



Europe and Capital Markets Union (CMU)

1. Though the Post-Trade Forum might achieve a private sector consensus on reform, real progress requires a consensus among the public authorities as well.
2. TARGET2-Securities (T2S) and the Central Securities Depositories Regulation (CSD-R) will help clear some of the 15 operational barriers to a single European capital market identified in the Giovannini reports of 2001 and 2003, but leave tax and securities law issues untouched.
3. An important reason why many of the Giovannini barriers have survived is because financial institutions have protected their clients from the malign effects.
4. On the other hand, the Giovannini barriers have also persisted because financial intermediaries make a living from helping clients endure or circumvent them.
5. Public consensus requires a collective act of political will by the European Council and the European Parliament to sell the benefits to their constituents, and deliver concrete agreements.
6. Some regulations (such as the consumption of eligible collateral by central clearing of OTC derivatives and reduced capital allocations to collateralised exposures) make CMU harder to achieve.

Cross-currency inter-operability between payments platforms

1. The principal obstacle to inter-operability across borders between domestic real-time payments (RTPs) platforms is an enforceable cross-border legal framework for settlement finality, dispute resolution and liability.
2. The second major obstacle to direct cross-border links between domestic real-time payments (RTPs) platforms is the fact currencies have to be exchanged, which necessitates correspondent banks.
3. The continuing involvement of correspondent banks means inter-operability of RTPs is feasible only if inter-bank settlement is synchronised in real-time.
4. Inter-operability between RTPs will oblige banks to extend their Know Your Client (KYC), anti-money laundering (AML) and sanctions screening tests, which will be unaffordable for smaller banks.
5. In the long term, correspondent banks remain vulnerable to disintermediation by new entrants that open accounts at multiple payments infrastructures, and which can settle in central bank money.

Even Distributed Ledger Technology needs business standards

1. Distributed ledger technology (DLT) does not render the ISO 20022 standard obsolete - in fact, DLT solutions need business standards such as ISO 20022 if they are to inter-operate successfully with one another, and with existing financial market infrastructures (FMIs).
2. Around 200 financial market infrastructures (FMIs) now send and receive messages that use the ISO 20022 standard, or plan to in the near future, but there are too many variants to maximise inter-operability.
3. 29 FMIs have now signed the ISO 20022 Harmonisation Charter orchestrated by SWIFT, committing themselves to reduce the number of variations and so increase inter-operability.
4. Adoption of ISO 20022 is good for users of FMIs because they do not have to build and maintain bespoke implementations for the market infrastructures they access around the world.
5. Distributed ledger technology (DLT), because it dispenses with many of the information exchanges associated with a transaction, requires a different approach to using ISO 20022.
6. ISO 20022 may provide an efficient means of encoding information in the smart contracts which underpin transactional activity in DLT networks.

CSDs for fund settlement? Data matters

1. The settlement infrastructure that supports the funds industry still needs to be improved so that it is efficient, cost-effective and reliable.
 2. The issue, custody and settlement of mutual funds in national central securities depositories (CSDs) is taking off in many countries, complementing the funds platforms provided by the international central securities depositories (ICSDs) – these developments challenge the transfer agency model.
 3. One option for transfer agents looking for a strategy to survive a wholesale shift to settlement of fund transactions in CSDs is to become CSD account operators on behalf of fund managers.
 4. The European Central Bank (ECB) has not abandoned the idea of settling mutual fund trades in central bank money via TARGET2-Securities (T2S).
1. Reporting under the second iteration of the Markets in Financial Instruments Directive (MIFID II) will have a larger impact on the data management services of financial market infrastructures (FMIs) than the European Market Infrastructure Regulation (EMIR).
 2. Reporting requirements now span all classes of asset and instruments, from straightforward equity transactions to the most complex derivative trades, so the data sets that have to be monitored, collected, normalised, analysed and understood are enormous.
 3. Regulation has created an opportunity for financial market infrastructures (FMIs) to become repositories of regulatory information, and to act as regulatory reporting agents on behalf of users.
 4. The scope for FMIs to become data utilities, and so reduce the duplication of data and data storage, is reduced by the reluctance of utilities to assume liability for errors and omissions.
 5. The real value of data to FMIs lies in its potential to identify and propose to clients new transactions they may then execute on their behalf.
 6. Improvements to data quality are impossible without improvements to the standardisation of data exchanges throughout the transaction lifecycle, from issuance to final settlement.
 7. Distributed ledger technology (DLT) may change data management models because it makes it possible to disseminate data in real-time in a synchronised, secure and controlled way.

Change in foreign exchange

1. The contraction of trading volumes in the foreign exchange (FX) markets, as banks have reduced currency trading in the wake of increased regulatory costs and market manipulation scandals, has had a knock-on impact on settlement systems.
2. Intensification of the regulation of foreign exchange (FX) derivatives through measures such as the Dodd Frank Act and the European Market Infrastructure Regulation (EMIR) has reduced the appetite to trade highly-customised instruments.
3. The chaotic discrepancies in derivatives regulation between jurisdictions needs to be addressed by global regulators.
4. Regulators should use machine learning and artificial intelligence to mine the data collected by the trade repositories for insights into risk in the FX derivatives markets.
5. A fundamental review of the entire post-trade chain in the FX markets needs to be undertaken to address rising operational costs and risks.
6. Firms that trade FX are exploring how distributed ledger technology (DLT) might be used to reduce costs and speed up post-trade processing - to the point of achieving real-time settlement.
7. DLT is one of the technologies that CLS is looking at to support its proposed bi-lateral netting service for FX transactions settled outside CLS.

Editor

Dominic Hobson
dominichobson@dominichobson.com

Head of Market Infrastructures, SWIFT

Juliette Kennel
juliette.kennel@swift.com

Design

Bim Hjortronsteen
bimhjortronsteen@gmail.com

Publisher

SWIFT
Avenue Adèle 1
B-1310 La Hulpe
Tel: +32 2 655 31 11
Fax: +32 2 655 32 26
SWIFT BIC: SWHQ BE BB
<http://www.swift.com/>

Disclaimer

SWIFT publishes MI Forum Magazine for information purposes only. Any personal views expressed in MI Forum Magazine are the contributors' own and do not necessarily reflect the views of SWIFT or its members.
SWIFT © 2016. All rights reserved.