ISSA International Securities Services Association

ISSA Digital Identity and Onboarding Working Group

Defining the problem

August 2024

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Executive Summary

The International Securities Services Association (ISSA) is a global association that supports the Securities Services industry. ISSA's members include CSDs, custodians, technology companies and other firms who are actively involved in all aspects of the Securities Services value chain. By connecting its members and facilitating collaboration, ISSA provides the leadership necessary to drive change in the Securities Services industry. The focus is on finding progressive solutions to reduce risk and improve efficiency and effectiveness – from issuer through to investor – as well as on providing broader thought-leadership to help shape the future of the industry.

Onboarding is a complex process requiring multiple documents to be exchanged and validated. The legal and regulatory rules can vary between country and domiciles of both the institution onboarding and being onboarded. The requirements need to encompass many different objectives from Know-Your-Customer (KYC) and Anti-Money Laundering (AML) legislation to tax documentation, system access and cyber security. In addition, there are product, credit and country specific dimensions to onboarding.

A typical onboarding timeline varies by client relationship, the markets and products, as can be seen in the indicative diagram below. These estimates presume, of course, that the client returns the documentation in a timely manner. However, in a world where smartphone banking "apps" allow accounts for private individuals to be opened instantaneously this timeline of months is not good enough and does not meet client expectations.

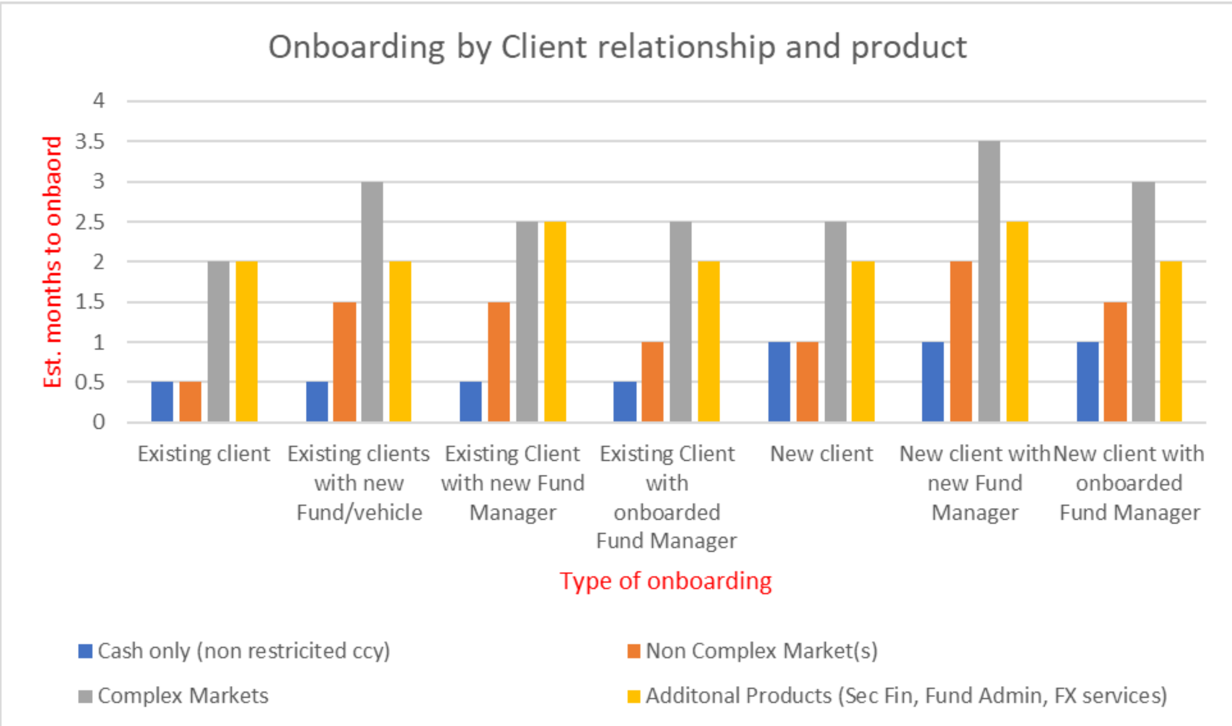

FIGURE 1: INDICATIVE ONBOARDING TIMES BY CLIENT AND PRODUCT

*Est. months to onboard – Indicative timelines based on qualitative analysis (interviews, experiences, and anecdotal descriptions), and includes a level of back and forth, on requirements gathering, between the service provider and the clients and/ or the fund manager. It should be noted that for complex markets tax approval can take significantly longer, particularly in certain emerging markets.

It is worth noting at this juncture that the problem is long standing – no two institutions appear to approach the topic in quite the same way and previous mutualization solutions have not been as successful as hoped. It is recognised that some of the points raised appear to be less important than others. However, the experience of the Working Group shows something that looks like a straightforward challenge is likely, on deeper inspection, to be challenging if not impossible to overcome.

Other high level working group observations:

- Individual firms can, and do, improve their own processes but few firms are satisfied with the outcome in terms of client services, efficiency or speed
- Clients i.e. the Asset Owners and Investment Managers own their own data and rightly want data sovereignty i.e. both control and privacy. This in particular relates to Ultimate Beneficial Owner (UBO) information
- Both the onboarding and onboarded entities desire a better set of transparent processes
- Regulators have delegated accountability to the Onboarders for policing KYC and AML, but without the legal and regulatory tools available to a nation state
- Failures to adequately police onboarding have been materially punished but "adequacy" has not been fully defined
- Regulations are not always written in the same format / structure, resulting in the interpretation of such regulations (between jurisdictions) being more complex than required
- Some data is available in the public domain for clients and therefore clients are reluctant to provide the data again on a bilateral basis. They would rather that their counterpart consumed the data directly form the publicly available sources. There are some constraints to this solution:
    - Is the resource unique, up to date and explicit, especially for similarly named entities which may make the data inaccurate?
    - Is the data up to date and vouched for by the entity being on boarded?
    - While having the data available publicly is helpful, this often means internal operations teams need to be trained on how to access this data from multiple websites (e.g. different corporate registries, regulators globally), resulting again in an inefficient process

Clients are often frustrated as the "same information" is requested at multiple points, sometimes by multiple parties, over an extended time horizon. They then want to trade the same product in a new market and are asked for the same information, again. This occurs often as the time lag from account opening to entering a new market may mean that all the original documentation is now too old to be used for the new market.

Securities Services providers (CSDs and custodians, both global and local), work hard to succeed in the complex area of onboarding, in part because failures of the onboarding processes in the early 2000s led to significant fines. However, more importantly, getting the onboarding right allows a greater level of automation and fewer errors in their processes.

In many cases Investment Managers and Asset Owners feel that the burden placed upon them is greater than the societal value of the requirements. Many banks rank the risk of onboarding a particular counterpart but regardless of this ranking they are still obligated to revalidate the information at set periods, so even a low-risk firm is asked for information every three years.

The ISSA Digital Identity and Onboarding Working Group (WG) believes there are a few elements which could lead to an improvement. However, this improvement is unlikely to be achieved instantaneously. These elements include:

- **All legal persons (entities, funds, trusts and individuals) having a government issued "Verified Identity" which has undergone government sponsored KYC**
  The speed and ability of the Indian CSDs (NSDL and CSDL) to onboard retail investors is a good example of this in practice. There are some countries which have already instated similar solutions and the government also allows Banks to access government databases (marriage, birth records etc.) to help with digital identity (as an example: www.bankid.cz/en)

- **Adoption of Digital Signatures as Standard**

There should be acceptance – and adoption - throughout all markets of digital signatures, without further need of notarization, apostille etc.

- **High levels of automation for exchange and tracking of documentation**

This approach should be between Securities Services providers and their clients and also with fiscal agents, tax offices etc. If possible, these exchanges should conform to an ISO standard, which the WG expect will require substantive changes in behaviour across multiple users to facilitate the information sharing.

- **Clear, approved standards of what is acceptable for each type of legal person**

Standards should preferably be agreed multi-nationally. The aim would be that any client could create a single "Onboarding Package" to cover the onboarding requirements of any, and all, Securities Services provider(s) for the markets in which they want to operate.

We invite any institution – ISSA member or not – to comment on the report, and to inform us of any challenges that the WG have not highlighted so that the next report can holistically address all the issues.

Report Objectives

The primary objectives of this report are as follows:

- To set out the challenges of onboarding - rather than address the solutions – which will be addressed in the second report
- To provide an objective set of insights on the different factors that affect onboarding, and which create the observed complexity
- To capture the challenges and opportunities within the onboarding lifecycle
- To create a market dialogue about the problems; and
- To create a framework for the second report "Solutions"

The aim for the WG's second report will be to propose industry standards and best practices, covering both what is acceptable and needed from a digital identity, to enable Securities Services providers to efficiently and effectively onboard institutional clients. These practices and standards should reduce costs, client friction and risks. These standards may require changes to legal or regulatory frameworks within a local jurisdiction. It is the conjecture of the WG that adoption of the standards will enable further digitization of markets.

Target Audience

The report is aimed at Securities Services participants including market intermediaries such as Custodians and Brokers, Asset Managers, Investment Managers, Issuers, Market Infrastructures, Third-Party Providers (such as technology providers and outsourcers), other industry associations and governments and regulators.

Working Group Participation / ISSA Reviews and Approval

The approach taken, and terms of reference used, were approved by the ISSA Operating Committee prior to the WG's initiation, namely:

- the WG comprised the members of the Digital Identity and Onboarding WG, who were all ISSA members

- inputs and insights were sought from other external parties. However, the report was reviewed and approved by the ISSA membership only and no external party's approval was sought when publishing this report, in line with ISSA practices
- the report was approved by the ISSA Board and the ISSA Operating Committee prior to publication

Acknowledgements

This report is the result of efforts by a team of experts drawn from ISSA, that participated in the Digital Identity and Onboarding Working Group. This included Operating Committee members and other ISSA member firms. The names of firms that have participated in creating this report, are provided in the Appendices. The ISSA Executive Board wishes to thank the WG members for their contributions as well as their firms for having enabled their participation.

1 Background

ISSA's Digital Identity and Onboarding Working Group (WG) was initiated as a result of discussions at the 2022 Symposium. ISSA Members highlighted that institutional client onboarding processes were inefficient and costly and should provide a much better experience for both the clients being onboarded and the institutions doing the onboarding. This is particularly pertinent now given overall advances in digital capability and the examples of Digital Identity adoption in other parts of the financial services industry (e.g. ID Union in Germany for Trade Finance).

Whilst it was recognized that there had been several attempts to find solutions for this problem - some of which had invested substantial sums - the WG participants' research showed that the problem had not been solved. Amongst these attempts there had also been several efforts led by other associations. ISSA is keen to understand the solutions identified so far and partner where these associations could see mutual benefits through a collaborative approach.

This report will explore the reasons that onboarding is inefficient, what underlies the complexity and why previous attempts to solve the issue have not been as successful as expected.

To help provide context, the WG participants undertook a series of interviews to understand how firms manage their onboarding today as the base case, then built the picture of the state of onboarding from these interviews and discussions at the WG.

A second report in the series will set out possible ways to make future efforts more successful. The accurate identification of the underlying issues from the interviews outlined above will be key in driving any best practice guidance and recommendations for change.

2 What do we mean by Onboarding?

Onboarding involves a complex set of interlinked processes. There are multiple manifestations of “onboarding” within Securities Services providers depending on the type and size of business as well as the products, markets and services in scope. In the WG’s analysis, the decision was taken to include Anti-Money Laundering (AML) and Sanctions Screening processes as part of the due diligence activities. During the WG’s research it has been identified that often there is often a compartmentalized nature to onboarding within organizations.

2.1 Onboarding Scope

The definition of onboarding can cover many aspects and processes that turn a potential client into a client who is set up and authorized to trade a product in a market. For example, the potential client may have to provide documentation to the groups that perform:

1. Know-Your-Customers (KYC)
2. Internal account opening i.e. within the securities service provider
3. External account opening i.e. with the securities services provider’s providers – the Subcustodians
4. Credit Risk Management
5. Product specific documentation such as:
    a. Stock Borrow Loan Documentation
    b. Collateral Documentation
6. System access
7. Cyber Security
8. Tax Documentation

This variety of functions that comprise the “onboarding” process makes defining the scope of onboarding a complex task. The institutional client does not necessarily interact with all the teams directly and often faces off to a single point of contact within the Securities Services provider performing the onboarding.

Further complexity is raised if the institutional client wants to trade more or different products in different markets. These may require different documentation than that which has been collected previously. (See Appendix One for a typical Institutional Clients being onboarded to a Securities Services provider). Onboarding is also not a singular task which when completed once, is over. Many regulators require periodic checks to ensure client or business characteristics have not changed in the intervening year(s).

If an institutional client wants to trade in different markets, then the required level of documentation may vary by both the market structure – omnibus or segregated – and the Global Custodian’s access to that market – direct or indirect.

2.2 Account Onboarding at the CSD Level

There are several potential access routes between the end institutional client and the CSD holding the assets. These are described in the diagram and following paragraphs.

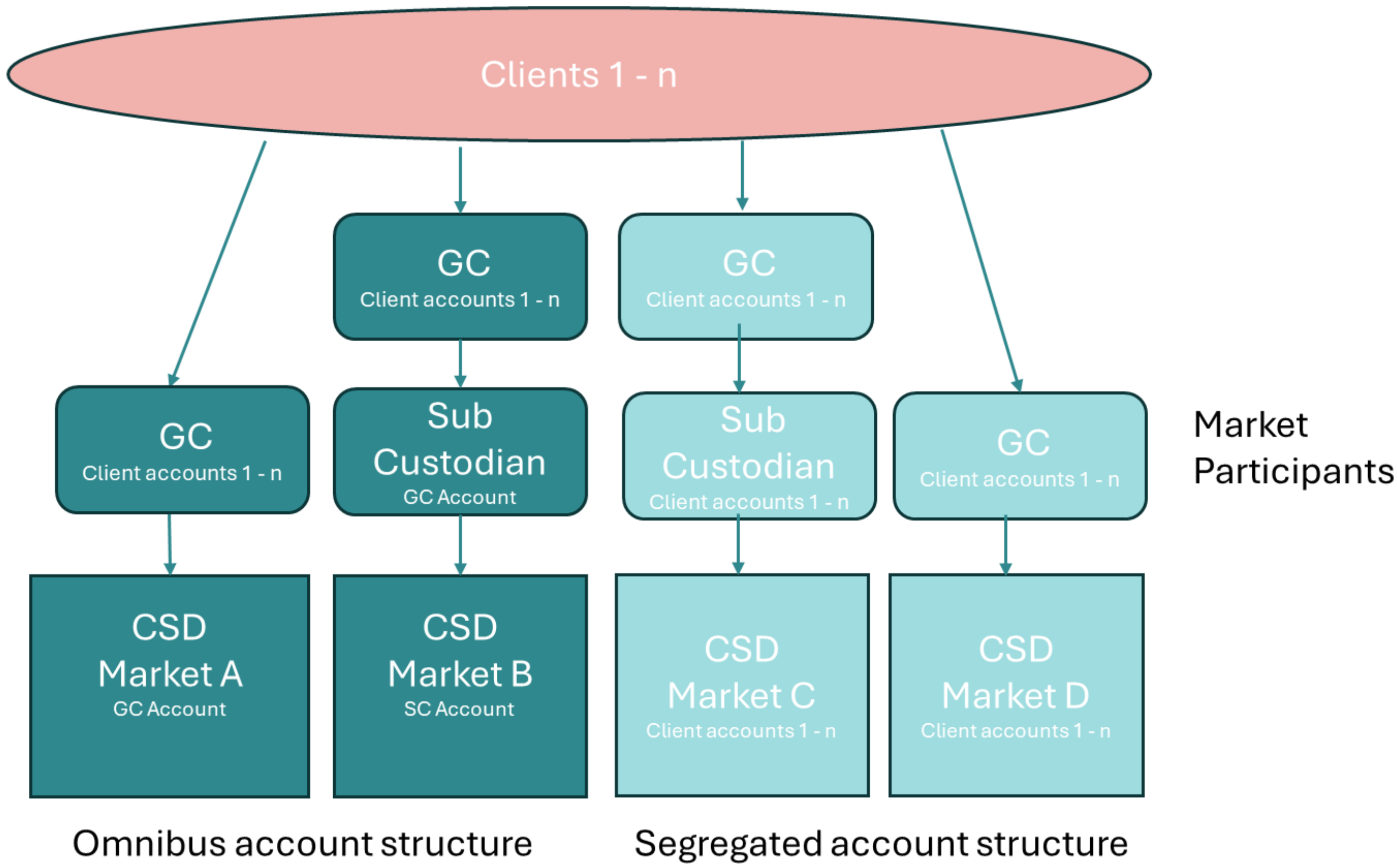

FIGURE 2 POSSIBLE CLIENT ACCOUNT STRUCTURES THROUGH THE VALUE CHAIN

2.2.1 Account Onboarding at the CSD Level – Omnibus Account Model (Left hand side of Figure 2)

A Securities Services provider can use a Subcustodian in the market, or the Securities Services provider acts as the Subcustodian in the market themselves. The WG participants have spoken to only a few CSDs, but it appears clear that when the account structure at the CSD is an omnibus structure the CSD does not perform any additional onboarding or due diligence on the institutional clients. In these cases, Market Participants i.e. the securities service provider who is a member of the CSD, are duty bound to perform functions like KYC, sanctions screening, or other due diligence when onboarding institutional clients in these markets. However, in addition to regulatory or legal penalties for inadequate onboarding there is likely also to be a severe sanction from the CSD for failing to follow the rule book.

The CSDs qualify the Market Participants, which means that they have reviewed the Participant’s ability to perform all necessary due diligence for any client whose assets may be held in the Participant’s omnibus account in that market. In one market, South Africa, that allows both Omnibus Accounts and Segregated Accounts, both account types need to be managed or “sponsored” by a vetted Participant. It is through this structure of ensuring that the Participants have adequate controls to apply the local regulations properly that the CSD does not need to perform any additional due diligence on the underlying investors.

2.2.2 Account Onboarding at the CSD Level – Segregated Account Model (Right hand side of Figure 2)

There are some markets where the standard process requires a segregated account at the CSD for each institutional client. If this is the case the name of the institutional client will be on the account at the CSD, and the assets will be segregated from the custodians' other client and propriety holdings within the CSD's records, and also in the Subcustodian's records.

For example, the Republic of Korea has this requirement (although these rules are under review). Currently, there is some due diligence performed by Korean Securities Depository (KSD) on segregated accounts opened for Asset Managers. They presently require the Asset Managers to either apply to become an eligible investor in South Korea, either by obtaining an IRC number, or they can now be registered with their LEI (for a legal entity) or a passport number (for an individual). To control the risk associated with the limited due diligence performed there is the potential for significant fines for opening accounts that are not in the name of the beneficial owner.

3 Why is Onboarding complex?

The original hypothesis of the WG was that onboarding should consist of data that could easily be shared in a consistent fashion across multiple, unrelated entities (notwithstanding privacy implications) and used multiple times. This was presumably the same assumption that formed the business case for the mutualization projects, such as KYC.com and others. The WG investigation proved that this was an incorrect assumption.

The WG participants looked at the standard lifecycle for onboarding versus five different elements that are the key to successful automation for the complete the onboarding process. Green represents the least complex elements to automate, and red signifies a significant complexity to resolve. These are summarised in Table 1 below.

	Static Data (Y/N)	Template Friendly (Y/N)	Standardization usage feasible (H/M/L)	Business Case to Automate (Strong/Med/Weak)	Liability issues (H/M/L)
Know-Your-Customers (KYC)	Yes	Yes	High	Strong	High
Tax Documentation	Yes	Yes	High	Strong	High
Internal Account Opening	No	Yes	High	Strong	Low
Product Specific documentation	No	Yes	Medium	Medium	Medium
External Account Opening	No	Yes	High	Weak	Medium
System access / Cyber security	No	No	Low	Weak	Medium
Credit Risk Management	No	No	Low	Weak	High

TABLE 1 COMPLEXITY - ONBOARDING PROCESSES VERSUS BUSINESS CASE ELEMENTS

For each element in the table, the WG assessed it against the processes involved in onboarding.

1. Static Data

   The first finding was that in the majority of cases "Static Data" is not static across entities. The only areas where it appeared that data could be static were KYC and tax documents. In principle Securities Services providers would have a known number of pieces of evidence that they require for KYC and tax. These do not change irrespective of which Securities Services provider is asking for them. There is a superset of documentation that if a client provided, would satisfy all Securities Services providers. It should be noted that many Securities Services providers only require a subset of the data. In respect to tax documentation static data elements are driven by requirements which may vary by custodian based on the relationship, and tax treaties, between the client's and custodian's domiciles.

2. Template Friendly

   The second element relates to whether the processes are "Template Friendly"? There are many areas in which a defined set of questions could be re-used by the whole industry and standardised into a set of industry standard templates.

3. Standardization Usage Feasible

   The Standardization of Usage show where the WG believe that there is a highly repeatable process across all clients i.e. is an area which is ripe for digitization. The areas where the WG felt that there would be process or information variation between clients was for Credit Risk Management (CRM) (is the client only trading cash products without credit extension versus repo or other exposure) and Tax documentation where the combination of product, product location, and domicile of the Securities Services provider and the client creates a fourth power exponential relationship. Product specific documentation has a one-to-many relationship complexity, but lower complexity than tax documentation.

4. Business Case to Automate

   This element is a function of perceived underlying cost, volumes and in some cases risk appetite. The WG believe that the Cyber and CRM are low frequency and client/case specific. Additionally, both have potentially catastrophic tail risk that reduces the attractiveness of any business case to outsource.

5. Liability Risk

   The final element in the table is the liability risk. The cost of black swan errors within KYC, CRM and Tax documentation are extremely high and often insurance is impossible to purchase or indeed invalidated due to regulatory action.

4 Quantitative and Qualitative analysis of the problem

Whilst establishing the cost of onboarding was considered too complex, given the remit and timeline, the WG did feel that it was important that the scale of the quantitative problem was articulated.

Various cost groups were identified which could potentially impact the overall business case for improvement in onboarding:

- The opportunity cost for an economy which lacks investment capital
- The opportunity cost for asset owners and investment managers from a slow entry into a market that they have identified
- Client experience costs including relief at source or withholding tax being applied
- External costs of lawyers / notaries / couriers for the creation and validation and shipping of physical documentation
- Environmental costs of flying documents around the world
- Governmental processing costs for non-digital information
- Internal costs for the banks in onboarding processes
- External costs for the banks from fines and other regulatory sanctions if not done correctly

McKinsey and GLEIF published a study[1] into using the Legal Entity Identifier (LEI) to help facilitate onboarding. In the following diagram from the report the cost for client onboarding for the banking industry alone was USD 40bn per annum. This is clearly broader than Securities Services but is indicative that there is a substantial cost.

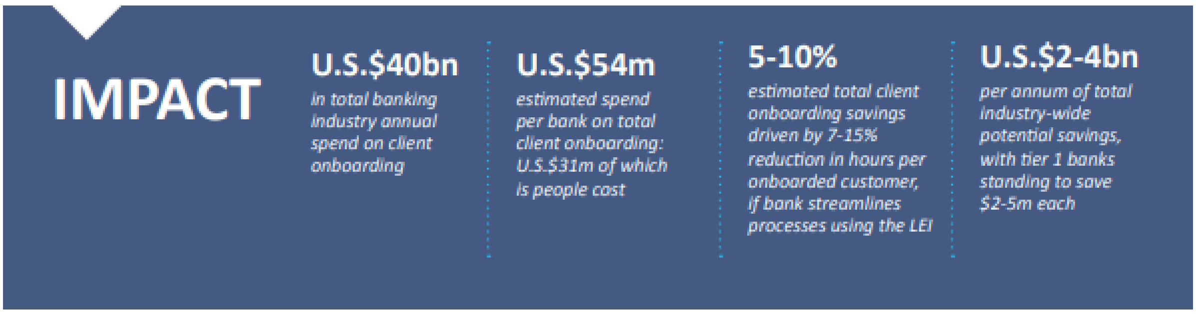

FIGURE 3 ESTIMATED VALUE TO BE UNLOCKED IN CLIENT ONBOARDING

Given the difficulty in precisely quantifying and articulating the onboarding problem, the WG took a qualitative research-based approach. The methodology was one of open-ended questions in an interview setting. The aim was to draw out from the interviewees the current state, the challenges, the opportunities and their wish lists for the future. The key interview structure comprised:

- Interviewees were either members of onboarding teams, account opening teams or people involved with onboarding initiatives from six large banks and a small number of market infrastructures
- The interviewee institutions represented various business lines including institutional buy side, broker dealer sell side, retail and wealth management onboarding teams
- The interview focus was to consider the topic from a cost, process, client and regulatory viewpoint

[1] McKinsey & Company and GLEIF: LEIs and Client Lifecycle Management in Banking - a U.S.$4 Billion Beginning - Solutions – GLEIF

5 Interview Findings

5.1 Is Onboarding a differentiator?

In the view of the interviewees, onboarding was not felt to be a strongly differentiating service - at least not currently. One respondent commented that 'It can be a differentiator but mainly it's a disappointment.” Through discussions, the WG believes that it will become a differentiator and that clients will divert business to the Securities Services provider with whom it is easiest to onboard. There was anecdotal evidence that this had already started to be a trend.

5.2 Is Onboarding a challenge?

The WG findings reiterated the hypothesis that onboarding is a problem area for all Securities Services providers. A number of firms have invested already and have achieved some level of automation and digitization. This has started to improve the internal processes but, in general, clients are still not reaping the full end-to-end benefits and the process is still perceived as difficult, confusing and slow.

5.3 Does Onboarding have sufficient investment?

It was observed that onboarding has lacked the required focus and cash investment within many organizations for several years. One respondent said “Historically the view of onboarding has been one of 'yes there are issues but there's no real risk of a direct loss'” so it was not as high up on the priority ladder. It was noted that this view is changing. This is particularly true where Securities Services providers recognize that a good onboarding process affects the profits of a firm as it allows revenue generation earlier in the relationship and is a continued regulatory focus.

5.4 What is the current state view of Onboarding?

There were no surprises when it comes to the current state view. The consensus is that onboarding is a difficult subject. As one participant put it "It’s a nightmare for everyone.” Most agree that the processes today are not designed for efficiency.

The reasons for this vary across firms but include:

- Lack of investment in design and automation of the processes across some firms
- Changing requirements (either driven by regulatory change or risk appetite change)
- Complex area to fully automate as requirements are driven by client entity type, which products are to be traded in which markets, and the interrelated tax status and domiciles
- Deep and current expertise is needed for numerous elements of onboarding for example tax advice or credit analysis which make centralization a challenge

It is recognized that the retail banking world has moved well into the twenty-first century with smart onboarding encompassing paperless, digital, biometric and near real-time onboarding. However, in many ways, the retail market is substantially less complex involving a standalone client in a singular jurisdiction. The institutional client equivalent is firmly stuck in the twentieth century with lengthy, paper based, and manual processes leading to eventual onboarding.

This is not a binary issue of good and modern onboarding versus bad and paper-heavy onboarding practices. The risks associated with corporate or institutional banking far outweigh that of retail banking. One interviewee pointed to the increased level of Know You Customer (KYC) due diligence in recent years noting “Around 2010/2011, there was a massive change in KYC, due to well publicized lapses and gaps in the processes with several large financial institutions”, referring to the numerous Deferred Prosecution Agreements (DPA’s) with large financial institutions around money laundering and fraud schemes.

These regulatory punishments and the consequential increase in internal scrutiny of clients has led to an even longer list of requirements within the KYC checklist. For example:

- UBO and UBO proof became more standard as a pre-requisite to conduct business or open accounts. Passport copy requests for directors and significant position holders are now normal practice
- Intermediate Beneficial Ownership (IBO): the IBO is an entity or legal arrangement (e.g. a structure such as a Trust or Foundation) identified as existing within the corporate structure that sits between a business and the UBO (as defined above) in the ownership chain

One of the survey participants stated their onboarding goal was to 'be like Amazon' - making it as simple to open an account as it is to buy from Amazon. There is anecdotal evidence that even as Securities Services providers improve their processes - for example by using SWIFT to open accounts - institutional client expectations regarding onboarding (and account opening) have developed faster. In the view of one interviewee, clients want to have AI convert simple human language (i.e. Natural Language Processing (NLP)) into actions. “I want to open an account in Taiwan, now go open”. In this case, the clients do not want to have to change their own process or to use ISO 20022 xml language but have imagined what the perfect future would look like for them – whether realistic or not in the short term.

5.5 What are the key challenges for Onboarding today?

In terms of the key aspects which are preventing a seamless and efficient onboarding process; the lack of agreed standards is paramount. However, the following list of challenges and opportunities expands on the other factors:

5.5.1 Challenges

5.5.1.1 Cost

- The cost of the onboarding process is recognized as too high. This cost is mainly a function of the time and effort that is required to onboard a client
- Documentation acceptance differences are seen a problem area that can increase costs, as one participant noted "We run into problems with validations and documentation requirements that various other jurisdictions / peers would accept as valid etc "
- Backlogs of re-verification - also known as periodic reviews - create their own pain points in addition to the new onboardings needed. "The backlog is almost 9 months, and it has important repercussions. The business case (for improvement) is very substantial"
- Not all firms see onboarding as a priority for investment and if it is prioritised the focus is generally around improving workflow for a sub-optimal process. The overall lack of investment hinders any possible end-to-end automation

5.5.1.2 Regulatory

- The regulatory requirements around KYC and onboarding have increased substantially over a number of decades. Much of this was needed. It has been driven partly by firms failing to be sufficiently rigorous at the turn of the century and partly by geopolitical events and an increased governmental focus on reducing the flow of funds to terrorists and criminals
- A Securities Services provider's history affects their requirements and generates particular nuances (e.g. home regulatory requirements) which determine what needs to be validated and at what level. Some firms have imposed stricter internal policies due to previous regulatory issues or in accordance with their own risk policies
- Changes in market requirements also increase the challenges, as it is difficult to systemically automate regularly changing requirements, and it weakens the business case for automation.
- Workload has increased over the past 1.5 years - due to sanctions (such as those on Russia and Russian related entities) - which can be extremely targeted, nuanced and requiring a deep understanding of the corporate structures
- The account opening processes in several emerging markets are heavily paper based, particularly in Asia. During the pandemic many markets started accepting electronic copies, but most have reverted to wet ink signatures (e.g. Republic of Korea, Vietnam and Taiwan). However, Brazil has showed sustained signs of improvement by accepting soft copies of documentation. Even prior to working on the "Solutions" report the WG would ask all regulatory bodies to look at the value of wet ink signatures
- Clarity of the regulation is sometimes lacking. India is a good example of a market where the regulators request differing levels of KYC documentation, and the service providers interpret these based on their own risk approach

5.5.1.3 Processes

- In the majority of Securities Services providers, there is no single owner of the onboarding processes. The ownership may be shared between Sales, Account Management, Tax, Compliance, Onboarding, Operations, Information Technology, Cyber Risk, Tax Operations, Credit and other functional groupings. Each area has a specialist knowledge that makes it extremely hard to centralize all aspects of onboarding a client
- Onboarding is resource heavy. KYC documentation is typically a manual data collection process from multiple sources which may need further validation (see Costs above)
- The processes are generally not digitized - and often duplicated. For example, investors will typically have to complete a W8 Ben or W9 form for US Tax purposes, and they will also have to complete the same information for the Securities Services provider's own tax questionnaire and potentially repeat it for certain market account opening packs
- The onboarding process sometimes involves updating the same information multiple times and at different points in the onboarding journey. Securities Services providers can rarely rely on previously received documentation for concerns that information might be stale or inaccurate. This causes a vicious circle of explanations and statements of "we have already provided this information"
- There is no consistent transparent process nor set of standards that a client can see and adhere to, which applies to all Securities Services providers in the industry, even if an individual firm may have a list of its own requirements
- Utilities exist but are not used at scale due to several reasons such as data protection / data privacy, the cost of services, and costs of integration. To date, the FinTech solutions are not perceived to be E2E so do not solve the problems
- Data inconsistencies remain despite the advent of the Legal Entity Identifier and other solutions. It is likely that, within each Securities Services provider, a number of the Global Custodians' or Prime Brokers' (and their agents') references are used for the same entity
- External data may not be current enough to facilitate the onboarding (annual accounts, or ownership records for example)
- Given the size of the financial repercussions of incorrectly onboarding an entity there is reticence to trust data providers to provide correct client data. This is a constraint on both parties in this relationship, as the data providers do not want to take on potentially uncapped liability for a small fee
- Given the manual nature of the processes there is an increased chance of human error occurring

5.5.1.4 Clients

- Timeline to onboard varies greatly per product, per market, per client type
- One of the biggest issues is the lack of consistency between the various Securities Service providers. This is a real frustration for clients, who are being asked for different documentation from different Securities Services providers for the same market or offering. As seen above this can be down to interpretation of the unclear or ambiguous local market rules and a particular firm's history and risk appetite
- The iterative nature of onboarding documentation causes frustration for clients i.e. provision of a document stating that the client is a Trust as the IBO means that there is now a requirement for documentation from the UBO. This is unknown until the document is received
- Legal teams - rightly - get involved in negotiating client specific agreements such as ISLA's Global Master Securities Lending Agreement, ISDA's Master Agreement etc, which can add significantly to timelines. The WG acknowledges that the onboarding firm's legal team may equally be the bottleneck in a negotiation

- The institutional clients also have their own bottlenecks and constraints around responding to queries and, for more technical questions, they may be taking external legal or other advice which may be an iterative process. This point is not made to shift the problem onto the clients, rather it is made to recognise that, even if the onboarding process was ideal, the likelihood of it being comparable to the digital experience of a retail investor in a domestic market is unlikely

5.5.1.5 Tax

- Tax Offices around the world also impact the speed of onboarding. Two elements drive this; one is the demand from tax offices for original documentation and document quality and the second is the speed in which queries and questions are answered. A number of frontier, emerging and developed markets were identified as markets with slow responses, so it is not just a function of the level of market development
- Potentially an institutional client can open statutory accounts and then validate them for tax, but they usually prefer not to do so
- Without the correct documentation in place there are other issues that arise e.g., penal withholding rates, lack of relief at source and delays in reclaims

5.5.1.6 Privacy

- The world has changed in regard to the requirement of Securities Services providers to have for knowledge of an institutional client. At the same time costs of failing to protect data and privacy have increased substantially both from a reputational standpoint and related financial penalties
- A greater knowledge of the corporate structure, entity ownership (including UBOs) and the corresponding "negative news" and the assessment thereof has made onboarding much more intrusive. This data collection has increased demands for maintaining confidentially
- At the same time, "identity theft" has increased the reluctance of UBO's and officers of an entity to have their details shared even within a firm let alone on a central database that multiple parties can access
- GDPR - especially for passports of officers etc. adds to the risk burden of anyone handling the data and increases if outsourced to a third party. It could also potentially conflict with local individual data privacy regulation

5.5.2 Mutualization

Mutualization is an often talked about solution for onboarding. However, there are some challenges that need to be understood and addressed if mutualized solutions are going to provide the answers.

Securities Services providers - particularly Global Custodians (GC) and Regional Custodians – are governed by similar regulatory frameworks across the globe and those frameworks are unforgiving if errors are made. This disincentivizes a single Securities Services provider from embracing a new solution if they then become the outlier. As a logical consequence, there is a high degree of conservative behaviour in the Securities Services industry, which can be perceived by those looking to provide solutions as resistance to change. On the positive side, Securities Services providers can act together to embrace a novel solution (although likely at different speeds).

There are several barriers to mutualization that must be overcome:

- There is a tendency, and in many cases a legal requirement, not to share information, across the industry which requires solution providers to solve for the extremes in terms of privacy and security. This is a particular issue with sharing information about clients. If a solution would provide a digitalized, centralized record this would help solve the cost challenge, but privacy and confidentiality concerns may prevent this

- An additional hurdle for mutualization solution providers is the flexibility of their solutions while maintaining a single code base (which helps the business case for a utility). The rigidity of solutions can lead to failure as firm X has to have functionality Y and will not participate if Y is not provided
- There are also differences in the definition of core required data – disagreements between compliance teams (both internal and external to the Securities Services provider) – of what records need to be contained. Therefore, if the result is that the number of records needed are 238 for Bank W and only 53 for Bank X – so why will Bank X pay for the extra 175 attributes to be sourced?
- The definition of data fields required: There needs to be agreement on the standards of what constitutes proof of a good record e.g. a copy of the “Handelsregister” record or the notarized copy of the record?
- Any mutualised solution needs to be global i.e. if the utility does not have Japan in scope of the offering, then the bank systems cannot be decommissioned which again reduces the business case for mutualization
- Commercial models must work for both the utility and the Securities Services providers. History has shown that institutional client profiles are rarely used by more than 6 banks. This makes the commercials less attractive for a provider as the costs incurred for an AML check can only be split between 3-6 banks. Hence to make money the provider must be substantially more efficient than the existing securities services provider is. This means that the opportunity for cost arbitrage by creating a utility is not as great as it would appear if institutional clients used 100 providers each
- At the moment, multiple “portals” exist as there is no singular standard interface. This complicates interoperability and document provision. In addition, it is understood that not all clients want a single portal, a small percentage of clients have extra sensitivity about who has access to their information and want clear delineation between providers and the information that they provide

It is the WG belief that these barriers can be resolved and agreed with effort. However, an example of the complexity of resolving these issues is that DTCC launched Clariant in 2014 together with six banks (Barclays, BNY Mellon, Credit Suisse, Goldman Sachs, JP Morgan and State Street) to focus on compliance, KYC and client reference data. Clariant tried to agree the “ISO model” document set but there was no agreement on those documents alone and firms wanted to add documents for their requirements. Clariant could not get agreement on a single set of documents. It was sold to Thomson Reuters in 2017.

A further example of the challenges can be found in Singapore. In 2017, an industry initiative for a KYC Utility was launched, called e-KYC, backed by Monetary Authority of Singapore (MAS) and in collaboration with the Ministry of Finance, GovTech and two banks. It was not successful because while the technology worked, it was seen as far too expensive to implement. In 2019 there was a reboot, however focused mainly on Singapore registered corporations. The aim was to use a less costly technology architecture, but its founders have emphasized the need for a global approach to KYC. The e-KYC offering in Singapore encompasses 3 services:

- Singpass – National digital identity. This initially started in 2003 for accessing government services (https://www.tech.gov.sg/products-and-services/for-citizens/digital-services/singpass/)
- MyInfo – “is a personal data management platform for citizens and residents. Through Myinfo, users can manage and consent to the use of their personal data to pre-fill digital forms from participating government agencies and businesses. This removes the hassle of repeatedly filling up forms” (https://www.developer.tech.gov.sg/products/categories/digital-identity/myinfo/overview.html)
- SGFINDEX – online consent system to enable individuals to access their financial information held across different government agencies and financial institutions (https://www.tech.gov.sg/products-and-services/for-citizens/digital-services/sgfindex/)

A more fundamental barrier to mutualization is that the GC and sub custodian community cannot outsource liability as they are ultimately responsible for the onboarding. Therefore, they want to ensure that the solution provider provides indemnity or insurance for the solution. In a cost-plus recovery pricing mechanism this becomes problematic. The cost of underwriting the tail risk is extremely high. This therefore creates a vicious cycle destroying the business case as the mutualized pricing does not meet the business case threshold for outsourcing and mutualization only works if there are cost synergies created by scale.

A possible mitigant of the liability issue could be through some form of a double check, within the onboarding institution. For example, this may mean double checking the received documentation to ensure the notary stamp is real, but again this erodes any mutualization benefits as the departments still exist in the onboarding institution.

Mutualisation can only work if there is harmonisation. A single market example where this appears to have worked to a certain extent is in India. The NSDL (one of the local CSDs) established the KYC Registry in 2021 and this has worked well in the market where one set of KYC documentation for a client can be used by various local banks to open accounts.

This example highlights an observation made by the group that Emerging Market technology solutions are often more advanced and effective than developed markets. This is in part because there is little legacy to disrupt and that their governments see the digitization of services as a priority and therefore ensure the regulation facilitates digital commerce and banking. It is noted that this is common in many areas of technology and is called Technological Leapfrogging. The best example is that Africa adopted the user of cell phones without ever having a well-established landline phone system.

This does not mean that mutualization cannot play a role in resolving the industry's challenges, but the problems identified above need to be overcome to make it a success. It was observed that "a motivated closed membership group who do not let great be the enemy of good can succeed!" The Solutions Report will progress with this mantra in mind.

6 Conclusion

Onboarding has been described as a "hyper local set of processes and rules trying to facilitate a globalized securities market – and failing". Indeed, the WG identified a great deal of variability in the processes both within Securities Services providers and, especially, between organizations. This variability is driven by three key factors:

- each firm's risk appetite and acceptance – perhaps driven by past failures or penalties
- different interpretations of the regulations
- the geographical variabilities in the requirements

The aim of open economies should be to drive investment and capital formation to assist in growing the wealth of a nation, whilst preventing all aspects of money laundering and collecting the agreed levels of taxation. If this is true, then onboarding and digital identity is an area where countries could work together to implement robust and controlled processes which give the desired outcome without the variance in process and regulation.

Potentially governmental agreements do not address the corollary problem of what the institutional investors and UBOs want in the way of privacy. If the governmental agreement is globally consistent, but overly intrusive, then the clients are less likely to share the detail required in countries where there is less trust in the rule of law and privacy safeguards. Whether this lack of trust is warranted or otherwise is not for ISSA to comment on and will be an emotional response from the investor.

Any solution must address the challenges highlighted above of cost, regulation, processes, clients, taxation, and privacy but it is an extremely complex problem - involving many stakeholders with differing priorities and desire outcomes - and the answer will have to address these.

The second report in this series will lay out options for improving the outcomes for all parties involved in onboarding. The WG would ask for interested parties to reach out to the ISSA office to register their interest and either join the WG or present the solutions that they think may solve this challenge.

To whet the appetite of those market participants who wish to join this initiative the WG have come up with a short list of items that it believes will help address the challenges – to explore further in the "Solutions" report:

- Regulatory Standards – the WG would ask regulators to agree globally consistent standards and documentation requirements, including globally accepted legal structures, and to remove wet ink signature requirements
- Government issued Digital IDs would be required if the end-to-end process is to be fully automated
- Digital technology and Digital Identity can provide a solution to privacy concerns on a centralised database
- The expansion of Wolfsburg Principles and ISSA FCC Principles to cover more attributes
- Banks should also continue to investigate emerging technologies such as distributed technology solutions and government ID systems to improve the end-to-end process
- Banks can take action to improve the processes, without technological changes, such as adoption of lean processes

Appendix 1 - Typical Onboarding Requirements for an Institutional Client to a Securities Servies Provider

For a typical Institutional Client onboarding to the Securities Servies Provider requests include: (not exhaustive)

- KYC / AML / LEI
- Minimum Documentation Required
    - Articles of Incorporation
    - POAs
    - Tax Certificates
- Challenges with Documentation
    - Notary / Consularization
    - Renewals
    - Distribution of Documents to the sub custody markets
    - Securities Servies Provider opening sub custody accounts
    - Second KYC occurs in each market of investment
    - Sub Custodian getting approval for investor to invest
    - 'Persons purporting to act' information – i.e. when either the signing person or senior executives are asked to provide personal details e.g. passport or electricity bill
- Those documents may need periodic refreshing
- Subcustodian opening account at CSD (for segregated CSD markets) may lead to further documents being requested

There is no centralized source of the documents so if a client record is updated the entire Securities Services chain needs to distribute the new document throughout the chain and into the markets where the Asset Manager has accounts or assets.

Appendix 2 - ISSA Members participating in the Working Group

Firm Name

Central Depository Services India Limited

Deutsche Bank AG

Deutsche Börse Group

Globe Tax Services, Inc.

HSBC

LLB

MYRIAD Group Technologies Ltd

Northern Trust Corporation

S&P Global

Saphyre, Inc

State Street Corporation

Strate (Pty) Ltd

Tata Group