MARKET NOTE
FinTech
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April 2018

A Case of Mistaken Identity:
Is There Strength in Numbers?

Introduction

The lifecycle of a financial instrument transaction – and its post-trade maintenance – is largely dependent on the identifiers or labels assigned to the security itself. Identifiers contain essential information about the security and are meant to ensure agreement across issuers, exchanges, buyers and sellers that they have traded the same instrument.

> *"There is strength in numbers, but organizing those numbers is one of the great challenges."*
> **John C. Mather**
> **American Scientist**

Currently, there are multiple identifiers applied to a single security being tracked, managed and distributed by multiple organizations, resulting in an onerous mapping and reconciliation exercise by market participants. A mostly subjective practice resulting in operational inefficiencies caused by manual data exceptions processing and errors, securities identification is costly to the industry, even beyond licensing fees.

One year ago, TABB Group conducted a study to estimate the operational pain across the capital markets caused by inaccurate or insufficient financial instrument identification, as well as the benefits an open symbology can enable (*see TABB Group's report, "*Building a Framework for Innovation and Interoperability: Preparation Meets Opportunity*"*). One year on, TABB sought to detect and benchmark any changes since then in the pain experienced, or in firms' attitudes toward the adoption of an open symbology framework.

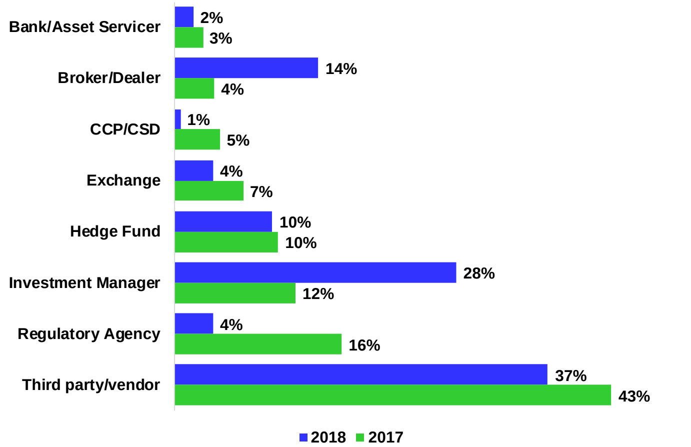
To accomplish this, we conducted outreach to 155 global financial firms to determine their current approach for maintaining security instrument identifiers and the extent to which there are alternatives to traditional instrument identification. This year's outreach had a significantly greater representation of brokers and traditional investment managers, offset by lower participation by third-party vendors, exchanges and regulators (*see Exhibit 1*).

Key Points

- TABB Group surveyed 155 global capital markets executives to understand key trends in securities identification practices in 2018, and to compare them to the results of the 2017 research study.
- Overall usage of multiple security identifiers has increased this year over last year.
- Firms are maintaining a greater number of security masters in 2018.
- Usage of the FIGI has increased substantially overall from 2017, particularly by hedge funds, vendors, banks and brokers.
- Poor data quality has become an even bigger challenge since last year, caused by traditional instrument identification practices, and now is the No. 1 challenge faced.
- Lack of industry vision was cited as the biggest barrier to adoption of an open standard.
- A combined 61% of respondents believe that there should be mandated use of a specific identifier.

Participants traded across asset classes and represented every geography. This year, a considerable number of data professionals (24%) and senior executives (21%) participated in the study, indicating a sizable subject matter expertise in data practices and challenges. Other participants hailed from technology (20%), operations/risk/compliance (14%), portfolio management (13%), and trading (8%) roles.

Exhibit 1: Types of Firms Represented in Outreach 2018 vs. 2017

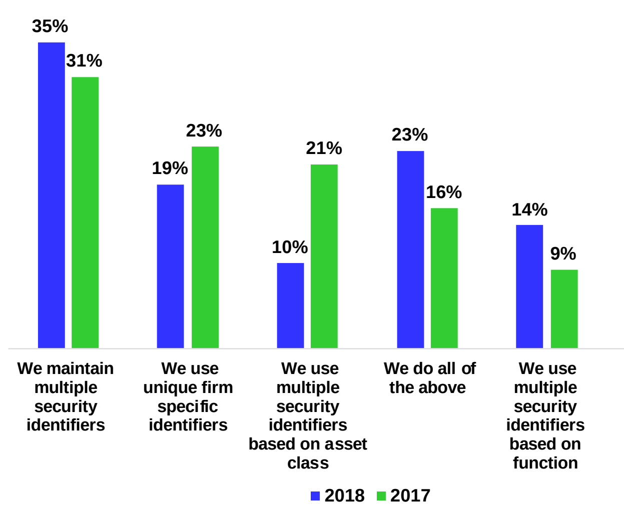


Source: TABB Group

The Convolution of Securities Identification

If redundancy and complexity in securities identification are anathema to the capital markets, then the industry is surely headed in the wrong direction. A single bright spot in 2018 is the shift away from the usage of unique, firm-specific identifiers; however, the usage and maintenance of multiple security identifiers has increased this year over last (*see Exhibit 2*).

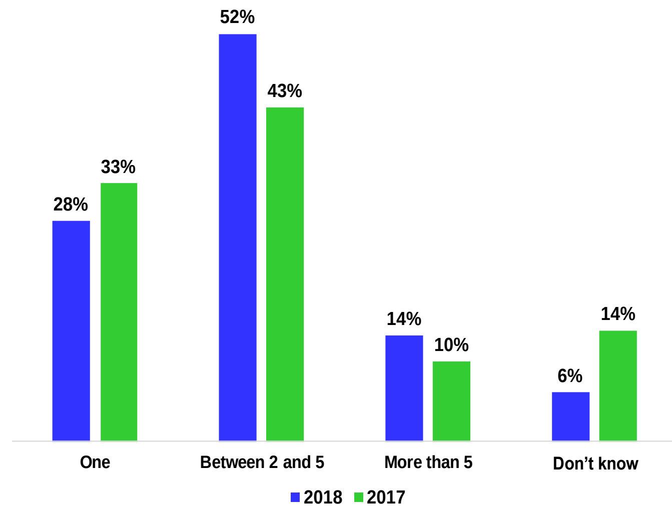
Exhibit 2: Approach to Maintaining Security Identifiers, 2018 vs. 2017



Source: TABB Group

And if complexity can be measured in terms of the number of security master files being maintained by an organization, then the trend is going in the opposite direction here as well, as shown in *Exhibit 3*.

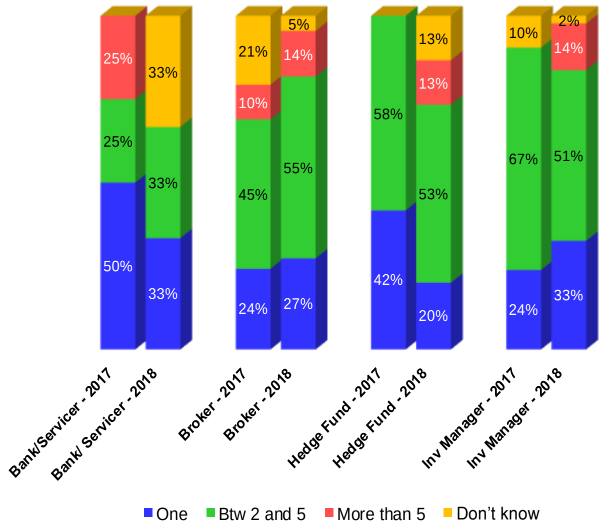
Exhibit 3: Number of Security Master Files Currently Maintained, 2018 vs. 2017



Source: TABB Group

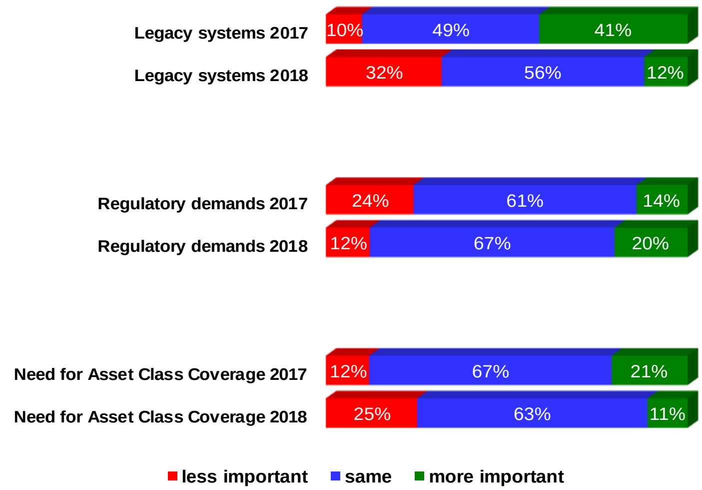
In aggregate, the industry has moved even further away from having a single master file, and two-thirds of firms are maintaining two or more, meaning more mapping and more cross-referencing of identifiers across platforms. At a granular firm segment level (*see Exhibit 4*), brokers and investment managers are bucking this trend since they have consolidated a portion of their security master files into a single file, although at the same time a higher percentage appear to be maintaining more than five files. The shift away from the "don't know" category implies a growing awareness by these firms of their internal operations. Banks, although they have moved away from maintaining single files, have made some progress in decreasing the percentage of more than five master files from last year, from 25% to 0%. Hedge funds seem to have lost ground since last year in that they have shifted away from supporting single security master files while adding to the "five files or more" category.

Exhibit 4: Number of Security Master Files by Segment, 2018 vs. 2017



Source: TABB Group

Exhibit 5: Expected Drivers for Using Different Identifiers, Today vs. in 2 Years



Source: TABB Group

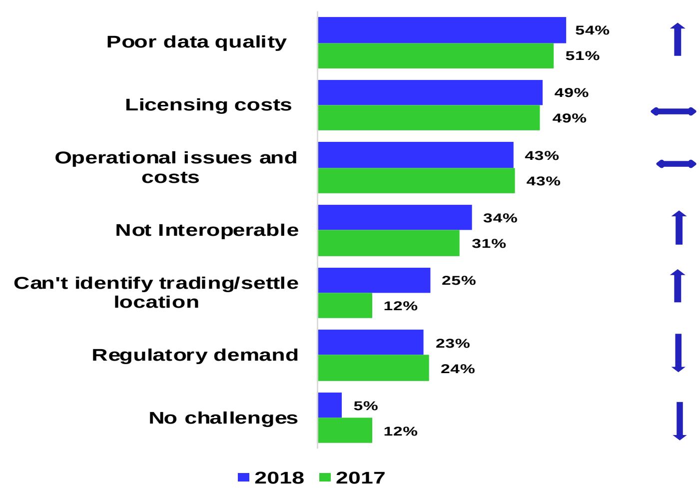
Drivers, Challenges, Issues and Costs

The difficulties and challenges of maintaining multiple security identifiers and security master files are the reality for financial institutions. Why the need to support so many? In 2018, in aggregate, the need to meet regulatory requirements and reporting demands over the next two years has become the biggest reason driving the need to use multiple identifiers, unseating the need for asset class coverage from the No. 1 spot in 2017 (*see Exhibit 5*). The fact that two-thirds of respondents named it as the driver that will increase most in importance is hardly surprising given the complications and tumult presented by MiFID II and its increased reporting requirements this year. The need to support legacy systems had a substantial decrease in magnitude as a driver for multiple identifiers this year as well, although it remains important.

> *We use multiple identifiers "due to increased regulation and their requirements."*
>
> **Senior Manager**
> **EMEA Bank/Asset Servicer**

This reality comes at a cost to financial services firms. The challenges of traditional instrument identification that were front and center last year still hold true today. Poor data quality has risen in importance, while the costs associated with licensing security identifiers and operational issues have remained the second and third critical challenges, respectively (*see Exhibit 6*).

Exhibit 6: Challenges Posed by Instrument Identification, 2018 vs. 2017



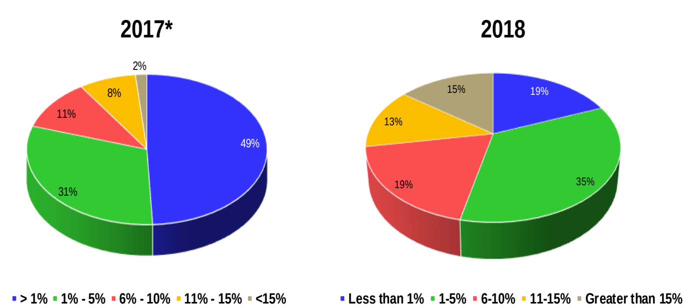
Source: TABB Group

The number of respondents that cited no challenges at all last year has decreased from last year's survey, as they struggle with increased difficulty in identifying trading and settlement locations via security identification. This particular challenge notably increased in importance to the buy side in 2018.

Additional operational issues can be traced back to incorrect instrument identification as a root or contributing cause. Errors in pricing and valuation, reconciliation exceptions, unmatched trades, and compliance errors can be the result. Exhibit 7 reveals that only 19% (versus 49% in 2017) of respondents in 2018 said that less than 1% of their errors were attributable to inaccurate securities data. And the percentage that estimated that greater than 15% of their issues were data-related increased, from 2% in 2017 to 15% in 2018, which could alternatively be interpreted as an increase in the actual awareness of internal operations.

> *"There is no movement yet to switch the way we do business. It's not imperative. The breaks that occur are assumed as 'business as usual' and built into people's responsibilities."*
>
> **Data Architect**
> **North American Hedge Fund**

Exhibit 7: Challenges Posed by Instrument Identification, 2018 vs. 2017

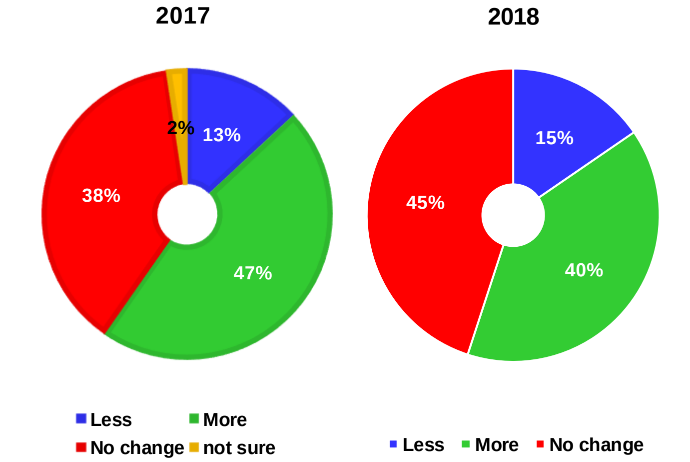


Source: TABB Group

Added to the costs associated with operational errors is the spending on multiple symbology licenses. Seen as a cost of doing business by financial services firms, overall 40% of respondents anticipate spending more on licenses over the next two years, as compared to 47% of last year's respondents; 15% expect to pay less over the next two years, with 45% expecting no change (*see Exhibit 8*). Reasons cited for spending more include increased regulatory requirements and rising costs of licenses. As many respondents stated, licenses rarely become cheaper over time.

> *We will spend more, "because the price will go up - not because we are getting more for our money."*
>
> **Senior Market Data Advisor**
> **North American Broker**

Exhibit 8: Estimated Spending on Licenses Over the Next Two Years, 2018 vs. 2017

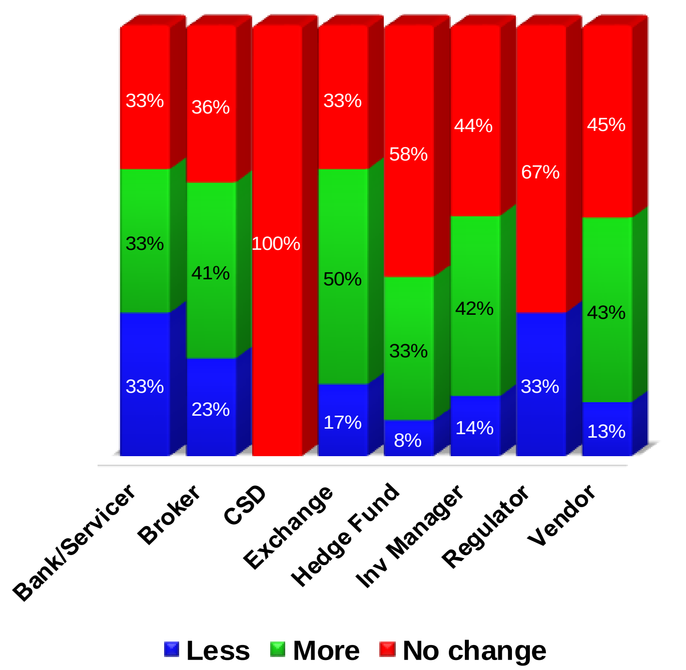


Source: TABB Group

When viewing spending expectations by segment (*see Exhibit 9*), one-third of banks and one-quarter of brokers plan to spend less on licenses over the next two years: both figures representing significant increases over last year's results.

> *We expect to spend less as "we have been moving to FIGI using the OpenFIGI API."*
>
> **Director**
> **European Investment Manager**

Exhibit 9: Estimated Spending on Licenses over the Next Two Years by Firm Type, 2018



Source: TABB Group

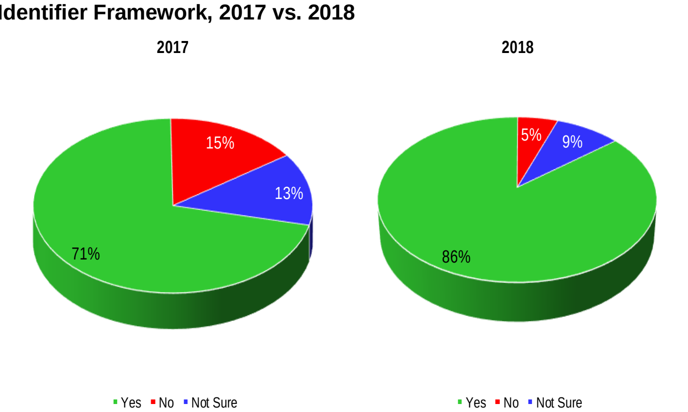
Both segments have likely already made the investment in multiple symbologies to meet the requirements of their buy-side customers and have projects in place to reduce redundancy. Most buy-side firms see their spending on licenses staying the same over the next two years (58% of hedge funds; 42% of investment managers); but fewer firms plan to spend less on licensing than they did in 2017. Those that do estimate they will spend less mentioned that they "are dumping proprietary identifiers," or that they have switched or are in the process of switching to the Financial Instrument Global Identifier (FIGI). The FIGI is a global open standard identifier framework maintained by the Object Management Group, a non-profit technology standards organization, and administered by Bloomberg L.P. as registration authority.

> *We don't expect any changes in our spending because "we are currently trying to rationalize our static data and corresponding identifiers."*
>
> **Head of Trading**
> **European Custodian/Asset Servicer**

An Open Framework for Securities Identification?

So, is there an appetite within the financial services industry for an open standard identifier framework scheme that includes contextual relationships and hierarchies for all instruments? And has it evolved since last year? When aggregated, 86% of 2018 respondents are in favor of such a model, compared to 71% in 2017 (*see Exhibit 10*).

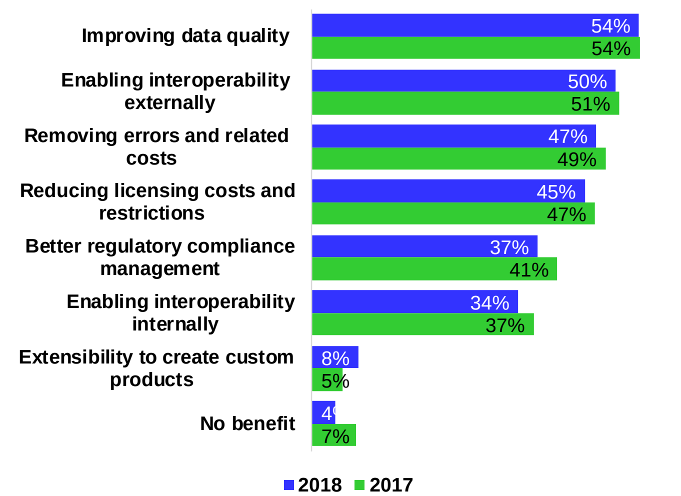
Exhibit 10: Belief That the Industry Needs an Open Standard Identifier Framework, 2017 vs. 2018



Source: TABB Group

Only 5% are against it, versus 15% last year. And there certainly appears to be more awareness of the possibility in that the "unsure" segment has decreased this year as well. Banks, brokers, investment managers and regulators all reflect a greater affirmative attitude this year. The perceived benefits of an open system for identification with open governance remain relatively unchanged and are in line with the challenges posed by traditional instrument identification, noted in Exhibit 6, above. Improving data quality remains the biggest driver for adoption of a unique, open source perpetual identifier, followed by the need to enable external interoperability. More respondents believe that extensibility to create custom products is a benefit this year, and fewer see a unique identifier as required for regulatory compliance (*see Exhibit 11*).

Exhibit 11: Drivers for Adopting a Unique, Open Source, Non-Changing and Perpetual Identifier, 2017 vs. 2018*



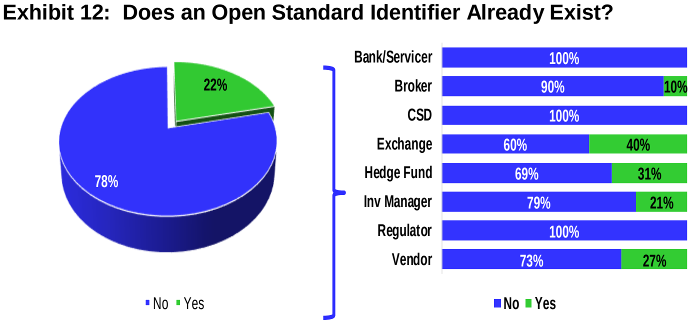
*Totals do not add to 100% due to multiple responses allowed

Source: TABB Group

What's the Holdup?

If the benefits of an open standard meet the challenges posed by traditional instrument identification practices, and 86% of our 2018 capital markets respondents favor that approach, then why is it not being used more widely? More than three-quarters (78%) of firms do not believe that such a standard currently exists (*see Exhibit 12*).

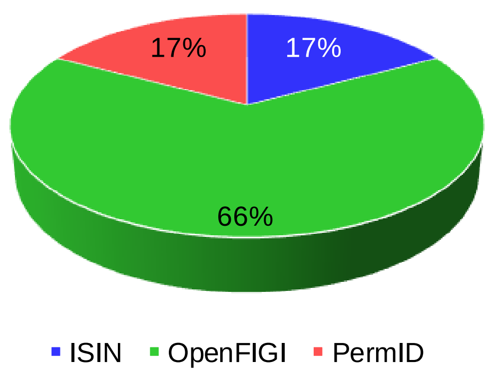
Exhibit 12: Does an Open Standard Identifier Already Exist?



Source: TABB Group

Of the 22% that do believe one exists – mainly the buy side, exchanges and vendors – 66% believe that the Financial Instrument Global Identifier (FIGI) is the answer; 17% (mostly non-North America) reference the International Securities Identification number (ISIN), ISO 6166's security identification structure; and 17% (mostly vendors) point to Thomson Reuters Permanent Identifier (PermID), their open license, unique and permanent entity identifier (*see Exhibit 13*).

Exhibit 13: Does an Open Standard Identifier Exist? Please Specify



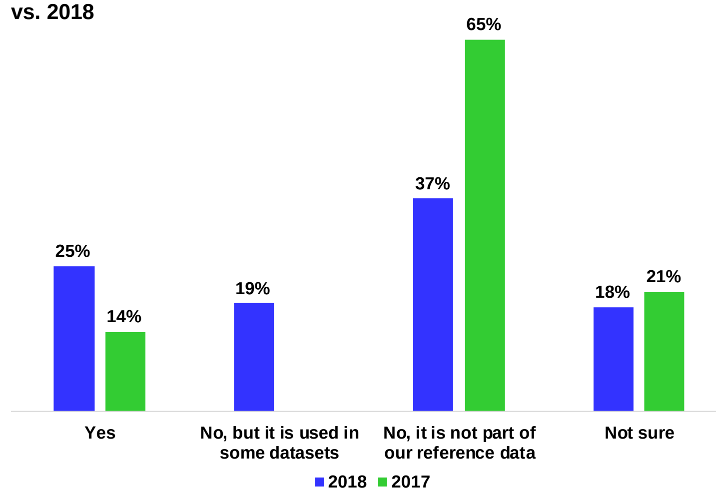
Source: TABB Group

All these options have their perceived limitations. Some feel that the "FIGI is close, but that the governance structure is not obvious." The PermID "allows you to get to the legal entity level using only their codes, but matching is still a major challenge. FIGI unfortunately doesn't go to the legal entity identifier." And those that chose the ISIN felt that it comes close but lacks in asset coverage. One respondent commented that, "PermID and FIGI are like Beta and VHS: they will both succumb to digital!"

> *"We are ISIN based and see that ISIN is fit for purpose".*
>
> **Head of Primary Markets**
> **European Vendor**

Given these results, and as part of our follow up to the 2017 study, we wanted to understand more about the adoption of the FIGI, and if it has changed over the past year. In 2017, 14% of respondents had adopted the standard in their operations. In 2018, 25% of respondents stated that they employ the FIGI as part of their operations (*see Exhibit 14*).

Exhibit 14: Do You Currently Use the FIGI in Your Operations? 2017 vs. 2018

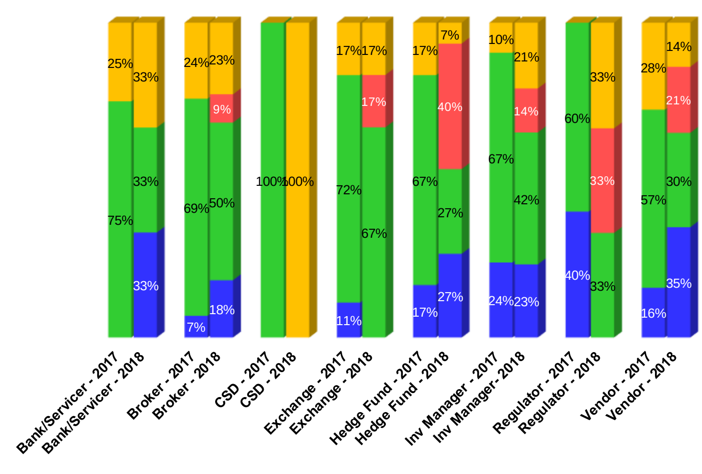


Source: TABB Group

An additional 19% use it as part of some reference datasets – an option that was not part of the 2017 research that indicates a further level of awareness. Only one-third said that it was not a part of their reference data, versus two-thirds last year. The breakdown of FIGI adoption by segment shows an increase in usage and awareness by banks, brokers, hedge funds and vendors. In all segments, the percentage of "No" responses shrank (*see Exhibit 15*).

> *"They (multiple identifiers) are imbedded into our systems and it would be costly to change."*
>
> **Chief Operating Officer**
> **North American Investment Manager**

Exhibit 15: Do You Use FIGI in Your Operations by Firm Type? 2017 vs. 2018



Source: TABB Group

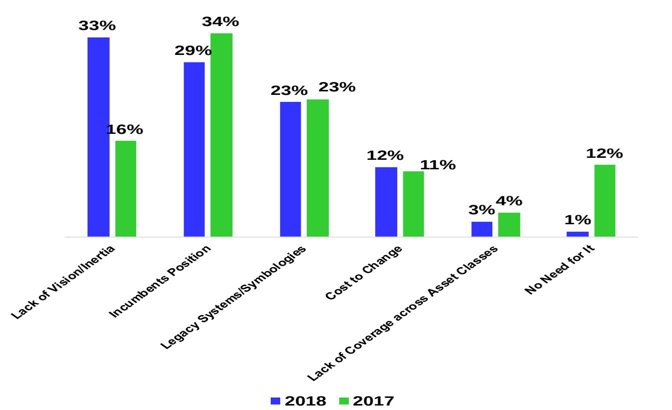
The investment managers who responded in the affirmative revealed that they used the FIGI as their primary identifier for trade processing, reporting, and portfolio accounting, and to map securities across different providers. Vendors also notably increased their usage of FIGI as an additional identifier to validate and cross-reference against other data sources, and for product identification to their institutional clients – as one said, "To remain relevant."

> *"FIGI is a no-brainer. Everyone should switch to it."*
>
> **Chief Technology Officer**
> **North American Investment Manager**

In addition to the majority of respondents who don't believe an open standard identifier currently exists, there are several other obstacles to industry adoption. The biggest barrier cited in our outreach this year is the lack of industry vision and inertia in getting the industry to collaborate and agree on a single standard or approach (*see Exhibit 16*). While this was named as a barrier last year, it jumped significantly in importance this year, replacing the position/self-interests of entrenched incumbents, to put it kindly, as the top seed. Challenges presented by maintaining multiple symbologies to support legacy systems remains the third biggest barrier, followed by the cost to change and the perceived lack of coverage of all asset classes and instruments. And only 1% said that there was no need for an open standard, as compared with 12% last year; another indication that awareness is growing.

> *"Companies that own the identifiers will fight tooth and nail to protect their turf and ensure users continue paying for the privilege of identifying financial instruments."*
>
> **Compliance Officer**
> **North American Investment Manager**

Exhibit 16: Biggest Barriers to Adoption, 2017 vs. 2018



Source: TABB Group

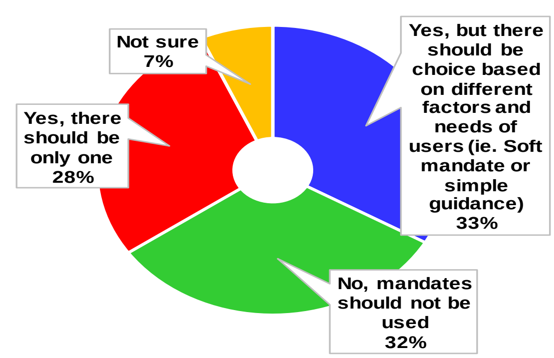
What Will It Take to Incite Change?

Getting consensus, cooperation and change to occur across market participants is a daunting proposition, for all the reasons already mentioned, including entrenchment and commercial interests of incumbents, as well as inertia. With 86% of our respondents believing in the need for an open standard, open source identifier structure, what can be done to make it happen? How can all parties align to adopt and use a standard, when they are compelled to maintain multiple identifiers for multiple purposes?

> *"Existing vendors are entrenched; users/consumers are generally slow or unwilling to adopt new technology."*
>
> **IT Executive**
> **North American Hedge Fund**

This year we floated the notion of regulatory mandates to impose a specific standard on the industry, whether a "hard" or single mandate; a "soft" mandate where there is a choice based on differing factors and needs of users; or no mandated usage at all. The result was that one-third (32%) of participants do not believe that mandates should be used to motivate adoption or usage of a single specific standard. However, a combined 61% do, split between a hard or soft mandate (*see Exhibit 17*).

Exhibit 17: Should Mandates Be Used by Regulators?



Source: TABB Group

Drilling down into attitudes toward regulatory mandates by firm type, excluding the regulator segment, only brokers came out in favor of hard mandates

> *"The necessary changes to systems (i.e., OMS, ETL tools, recons, etc.) could require a significant effort in terms of resources and time."*
>
> **Senior Investment Data Specialist**
> **North American Investment Manager**

over soft mandates. The buy side had the highest percentage of respondents against using mandates at all, with hedge funds at 38% and investment managers at 40%, citing the costs to change underlying systems such as trading, accounting and risk. Vendors were split relatively evenly across all options, interestingly.

Several vendors that favored a single mandate suggested that because there is no commercial business case for them to change, a mandate would be required. One European vendor suggested that, "The industry has already adopted ISIN," and that the question is irrelevant. This was, however, the opinion of a small number of participants, as discussed above. The majority of those that had an opinion on an industry standard believe that the Financial Instrument Global Identifier gets the closest, and several that had not yet adopted the FIGI indicated that they were in the process of switching to it as their primary identifier, and as a way of mapping across multiple identifiers and platforms.

In the opinion of a North American investment manager, "FIGI is a no-brainer. Everyone should switch to it". However, with the costs of updating legacy systems, the lack of industry direction and cooperation, the strong position of entrenched data providers, and the opinions of the dissenting minority, it is unlikely the universal adoption of a single, open standard identification framework, as favored by 86%, will occur anytime soon, at least in the absence of regulatory mandate. Or at least until symbology licenses disappear, as one respondent predicts, in 2022.

