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FTF NEWS SPECIAL REPORT:

Coping With the Challenges of Regulatory Reporting

With regulatory reform evolving across the globe, financial services firms are facing challenging data hurdles as they strive to comply with multiple authorities.

By Eugene Grygo

Regulatory reporting to multiple authorities across many geographies has become a problem for financial services firms.

While many in the securities industry braced for the reforms that came after the financial crisis, they weren't quite ready for the data demands of the new

regulation. The data demands at the heart of the reforms have been a major, ongoing challenge for firms across the globe.

This problem is particularly acute for firms that have securities operations in multiple trading centers around the world. These market participants are

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Mary Kopczynski CEO and founder, 8of9

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required to report their transactional and related data to regulators in the E.U., the U.S./North America and the Asia-Pacific region. They face an alphabet soup of regulatory frameworks such as MiFID II (Markets in Financial Instruments Directive II), MiFIR (Markets in Financial Instruments Regulation), EMIR (European Market Infrastructure Regulation) and, famously in the U.S., the Dodd-Frank Act.

DOWN TO THE DATA

Ultimately, the problem boils down to a firm's management of huge amounts of complex data, which needs integrity, internal and external reconciliation, and then formatting to meet the compliance requirements of regulators.

Other steps are also required such as relaying the data to regulators via an Approved Reporting Mechanism for MiFID II or a trade repository such as those mandated by EMIR and Dodd-Frank.

The data requests from the regulators can be "really annoying," given that there are so many regulators "and they're not talking to each other," says Mary Kopczynski, CEO and founder of 8of9, a New Yorkbased consulting firm focused on regulatory reporting. "So regulators are requesting the same data but each does it in a little different way," Kopczynski tells *FTF News* in an interview. "You have one regulator who is asking for transactions of this type per month. Then you have another regulator that is asking you for this transaction type plus another transaction type by year."

A complicating factor is that much of the data requested has not been designed to be expanded or sliced and diced to fit the needs of the regulators, Kopczynski says. "If you think about it, most of these financial to aggregate the hard-to-get data that they know the regulators will want to see, says Bill Fearnley Jr., research director — compliance, fraud and risk analytics — for IDC Financial Insights, part of market research giant IDC. "One of the challenges that's particular to individual firms is how much it has already aggregated its data," Fearnley says.

The aggregation challenge happens when firms have accumulated incumbent but disparate trading data- and market data-related systems from so many mergers and acquisitions, Fearnley adds. Firms

A centralized, multi-regulation data hub can streamline and consolidate reporting and risk monitoring processes. These refinements can pave the way for more efficient middle office functions that yield deeper insights into the data, satisfying the regulators and benefiting the trading enterprise.

institutions were working with IBM mainframes. They are just not set up for that level of flexibility," she adds.

"In addition, sometimes the regulators are asking for data about your counterparties," Kopczynski says. "Sometimes they're asking for data about you. Sometimes they're asking for data about your transactions. Sometimes they're asking for data about your processes. ... They don't really know what they're looking for, and they don't define it very well. ... It's unbelievable."

GATHERING THE DATA

Another major data management challenge for firms is figuring out how

may find that their biggest challenge is gathering the data within their four walls because it is spread across the enterprise and maintained in a variety of systems, including legacy and siloed platforms. Meeting the regulatory reporting challenge will test the limits of a firm's systems especially if they needed to be replaced or have been inherited with a business unit, Fearnley says.

As they ramp up to meet regulators' demands, senior managers and executives at firms will know firsthand the maturity level of their data management skills. This will become stressful as regulators want more detail for periodic reporting, financial and risk models and

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details about them, and often ad hoc reporting, Fearnley says. "The challenge is the same as before and in many instances it's gotten incrementally harder because there's political pressure to make sure that the financial institutions are watched closely by the regulators," he adds.



Bill Fearnley Jr. Analyst, IDC Financial Insights

Thus, as firms feel the pressure from regulators, they are scrambling to prepare and report accurate data to avoid facing the consequences.

The best way to avoid harsh consequences from regulators is to make certain the data is accurate, which is paramount, says Maryse Gordon, senior presales consultant for the London Stock Exchange Group's UnaVista, in response to questions from *FTF News*.

"Attaining that accuracy is never easy, though," Gordon says. "Reporting for EMIR, for example, requires completion of up to 85 fields." In addition, the data required by EMIR officials is often stored in multiple source systems and often may have been adhering to multiple source formats.

"The reporting firm will need to collate all this data and translate it into the correct format without losing the integrity of the data," Gordon says. "Then firms will also need to fill the gaps in from the data they are missing — LEI [Legal Entity Identifier] data, MIC [Market Identifier Code] and CFI [Classification of Financial Instruments], to name a few. Getting hold of this data means going to multiple reference data sources and feeding it in."

Which is not to say there won't be a few hurdles along the way.

"LEI data is proving particularly troublesome for firms," Gordon says. "Without one available for every counterparty, firms are unable to report correctly. Whilst LEIs are available for the majority of larger firms, the smaller counterparties, like trusts and funds, often do not have one. With the upcoming MiFIR [MiFID II plus regulation] in the E.U., even more firms will be required to acquire an LEI, including trusts, meaning the potential for hundreds



Maryse Gordon Senior presales consultant, UnaVista

of thousands of new LEIs required by people who will generally be unaware of the situation."

COPING STRATEGIES

For Kopczynski and her clients, she urges them to scope out what the regulators want and focus exclusively on those specifics. Once the needs are clarified, firms must act quickly to give regulators exactly what they want. There is no point in wasting energy on delivering more than what was requested, she says.

However, that strategy will be sorely tested if regulators ask for a wide range of data in large amounts that has to be delivered in record time. In fact, it's not uncommon for regulators to make requests before major holidays and require compliance in a matter of two weeks, ruining vacation plans and, more importantly, adding to the agita among firms, Kopczynski says.

"If someone walked up to you and said, 'Give me every receipt and match it with every single item in your home,' that would be totally overwhelming," Kopczynski says in describing the sometimes enormous demands of regulators. "You just haven't lived your life like that. So they're struggling."

In addition, regulators' requests sometimes compel firms to resort to manual or partially manual operations. "The regulators are still requesting things like 10-Ks in PDF files," Kopczynski says. "They're not requesting it in Excel spreadsheet files with underlying XML or useful data that can be crunched."

While it may not be their top concern, regulators acknowledge the many data challenges that firms face. They also have taken some basic steps to resolve the broader issue of poor harmonization among regulatory authorities.

In particular, the CFTC began an effort to refine swap data reporting and to foster data harmonization internationally. Petal Walker, chief counsel for CFTC Commissioner Sharon Bowen, told *FTF News* earlier

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this year that the regulator's staff was working hard to change the swap data reporting process for the better.

Walker, who spoke at FTF's DerivOps North America conference in Chicago this past April, says that the CFTC's Division of Market Oversight and Office of Data and Technology have been reviewing industry feedback on the regulator's draft technical specifications for swap data elements that are reportable under Part 45 and related provisions of CFTC regulations.

"We're getting a lot of data. There has been a lot of commentary about the utility of our data and how it's 'garbage.' Well, let me just clarify," Walker says. "We're going to do a lot with that data — back to our fantastic staff. The kinds of things that they're able to see, analytically, with that data are very impressive. But it is difficult to use. It takes a lot of manpower to pull out the right information from that data."

The answer is for the regulator to be "actively engaged in refining that data," Walker says. "Our staff recently came out with a release to have a data spec for certain products and they took comment on that. So we are looking at those comments to see if we can move forward with refining our requests."

In particular, the regulator asked for comment upon "80 enumerated questions addressing 120 data elements for several swap data reporting topics including counterparty-related elements, price, clearing, product, periodic reporting, orders, package transactions, options, additional fixed payments, notional amount, events, rates and foreign exchange," according to the CFTC.



Petal Walker Chief counsel for CFTC Commissioner Sharon Bowen

CFTC officials and other regulators note that the authorities still have work to do. In the meantime, market participants are waiting until the CFTC and other regulators in the U.S./North America and Europe can provide clarity on the many issues emerging about the data being reported to regulators.

A SILVER LINING?

As the industry waits and monitors regulators, firms need to derive a silver lining from the constant updating of their reporting implementations.

"The very nature of regulation involves change, in line with industry practices and standards, so it is important to ensure that the compliance function and legal teams stay on top of the regulation," Gordon says. "Firms must ensure that they have sufficient oversight and understanding of a regulatory regime to recognize the impact of any changes, functionally, technically and operationally."

For instance, firms have to make certain that any updates to the reporting framework "do not introduce errors in data processing, which could compromise the integrity of the information being reported," Gordon adds. Ultimately, the single, proverbial golden source upon which an enterprise's data management strategy must be based can allow for the "positive recycling of this highly integrated data," Gordon argues.

The golden source that is the heart of a centralization of the reporting activity has to be watched carefully. A change to one regulation "must not impact the reporting for another regime," Gordon says. "There needs to be clear segregation of rules and business logic when processing data, and reconciliation procedures (as always) are key to safeguarding the integrity of a firm's data."

The hard-earned goal of "a centralized, multi-regulation data hub" can streamline and consolidate reporting and risk monitoring processes, Gordon says. These refinements, combined with best practices and controls, can pave the way for more efficient middleoffice functions that yield deeper insights into the data, satisfying the regulators and benefiting the trading enterprise. **FIF**

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Is a Single Strategy for Regulatory Reporting Possible?

A subject matter expert says much will depend on resources and the technology available to centralize the reporting process.

By Eugene Grygo



Maryse Gordon Senior presales consultant, UnaVista

(Editor's Note: Maryse Gordon, senior presales consultant for UnaVista, part of the London Stock Exchange Group, recently spoke to FTF News about the complexities of regulatory reporting to multiple authorities. Gordon has worked in the financial software realm in positions ranging from product development and support to product management and presales. Gordon began her career at Hewlett-Packard. In her current post, Gordon covers UnaVista's regulatory compliance, trade confirmation, reconciliation and data solution offerings.)

Q: How do the data challenges change as a firm reports to multiple regulators?

A: One of the main challenges is to avoid duplication of effort.

Many of the regulations require the same sources of reference data, and having a single interface or portal where all that data can be kept will help to avoid a situation of building multiple, similar tactical solutions. Identifying which trades are applicable for which jurisdictions can also be challenging as eligibility for each regulation is not always straightforward.

In some cases, a single transaction may be reportable under multiple regulations; alternatively, it may only need to be reported once.

Having a single platform from which firms can report will allow them to navigate these issues more easily and avoid over- or underreporting.

Siloed applications and systems can be a challenge when reporting to multiple regulators, as not only can this data produce multiple versions of the same truth, but inconsistent data sets can be sent across multiple regulations. This leads to secondary analysis and manual reconciliation processes when exceptions occur.

Firms have now found it has become important to create a process of cross-system reconciliation. By doing this, firms can add checks that cross-reference the data, sent to Regulator A, is in line with Regulator B, and matches internal records across the source systems, creating a three-way reconciliation of firms' regulatory data.

Often systems that are split or systems crossing different operating units create differences in data standardization and business rules. This inconsistency creates an added overhead to not only human resources in maintenance and enhancements but to data processing and storage requirements, as well.

Q: What level of data synergies can be achieved across the multiple regulations?

A: If firms deploy a single golden source approach to data management, taking in multiple data streams and reconciling at key checkpoints can allow for positive recycling of this highly integrated data.

The better data architecture of harmonized systems brings costs down, reduces operational and regulatory risk, and makes firms more efficient as a whole. This level of harmonization provides a holistic view, helping stakeholders make key decisions more effectively.

In addition, having a centralized, multi-regulation data hub allows for consolidation of reporting and risk monitoring processes, allowing for best practices, systems and controls to be leveraged across all regulatory reporting needs now and in the future.

Q: What are the major data translation issues when complying with so many regulators?

A: Each regulator has its own standards, required data points and validations, making conforming to each of those methodologies challenging. When firms have

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individual tactical solutions for each regulation, the reconciliation of varied data sets becomes challenging.

Q: Can global firms build a single operational strategy to satisfy multiple regulators?

A: Being caught by multiple regulations means there will be many reporting deadlines to comply with, a number of regulatory specifications to conform to, and a wide range of knowledge that will need to be gained by a single operations team.

Whether or not it is possible for a global firm to build a single operational strategy for regulatory reporting will be dependent on resources and the technology available to centralize this process.

If it is feasible for a firm to set up this structure, it is advisable to ensure consistency within the reporting process, centralizing responsibility and ownership, reducing risk, and improving operational efficiency.

Currently, most global firms have moved or are in the process of moving to a single reporting data hub approach.

Q: Do some firms have to construct different strategies for different regulators?

A: Setting up different strategies for different regulators will depend on the structure of the business.

If it is a segregated and siloed global business, it may not be able to generate a centralized strategy for regulatory reporting if there are no synergies between the geographies from a technical and operational perspective.

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Headaches Across the Globe

What are the data integrity challenges of the world's trading centers?

By Eugene Grygo



(Editor's Note: FTF News asked Maryse Gordon, senior presales consultant for the London Stock Exchange Group's UnaVista, to provide a quick review of the different data integrity challenges that firms face in the major trading centers across the globe. At UnaVista, Gordon oversees its regulatory compliance, trade confirmation, data and reconciliation offerings.)

U.S. Regulators:

"Regulation in the U.S. is highly fragmented due to its regulatory structure being assembled with multiple regulators monitoring separate areas. For example, securities, commodities and insurance are covered under separate agencies. This fragmentation has increased in the post-Dodd-Frank era for trading and subsequent reporting of derivatives.

"Management of this process involves communication between multiple swap execution facilities [SEFs], dealers, clearinghouses and swap data repositories, as well as facilitating regularly reconciliations of the derivative trades at the portfolio level. This can often be a very complicated process, consisting of tens of thousands of portfolios trading with numerous counterparties. Establishing connectivity to multiple sources, defining effective data management procedures, while also sourcing pricing data from multiple feeds to make sure this data is accurate and consistent is an ever present challenge."

U.K. Regulators:

"The U.K. has for many years been a flag bearer for innovation and regulatory change in financial services, which often leads to the U.K. adopting certain rules and the rest of Europe [ROE] following U.K. trends. Two general challenges for firms operating within the U.K. come from an old, ever present challenge of understanding the regulation, and capturing both structured and unstructured data.

"Interpreting regulation and converting that into a definitive understanding of the data requirements — for example, what fields are reportable,

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However, if there are collaborations between the different business areas, a single strategy can be achieved by sharing key resources such as compliance, operations, IT and legal. If these key divisions are all connected across the business, it makes strategizing over regulation reporting a far easier and achievable task.

Q: What are the pros and cons of using a vendor versus internal data integrity solutions?

A: Vendor versus internal build is a common dilemma for firms when deciding on data integrity solutions.

By using a vendor, firms can be safe in the knowledge that they have a solution that, if standardized, is being used and maintained across the industry. It will be a recognized and reputable vendor with a dedicated task force for designing and maintaining data integrity products. Many firms like the fact that a vendor provides them with one more level of protection before data is sent to the regulators. A vendor can also be used as a sounding board for issues without alerting regulators to a problem.

By using an internal build, firms can ensure that the data processing logic is specifically aligned to the business, with in-house knowledge and expertise being able to understand, direct and manage the process.

In the short term, a vendor product can be expensive to implement and deploy; however, the long-term maintenance of an in-house build can outweigh the cost of an initial vendor implementation.

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combined with determining what instruments are reportable — can be time-consuming and can introduce high risk to the organization.

"Data capture challenges can be seen in the adoption of the Market Abuse Regulation [MAR] and the fact that firms now have to combine capturing both structured and unstructured data, along with both order and trade data. Combined with the large scope of securities and derivatives captured in the regime, this will put a natural strain on operations and compliance when trying to identify accurate sources of eligibility reference data.

"Persistent challenges exist around the ability to analyze requirements in order to provide compliance users a consolidated view of reporting activity. As a result, we have seen a number of technology vendors offering new services for statistical analysis of market peers and statistics of how firms are complying and coping with modern regulatory pressures."

E.U. Regulators:

"Within Europe, one of the biggest challenges comes from the use of a directive versus regulation when implementing regimes. This allows for local interpretation of rules, which can lead to multiple variations of a single regulation. This, in turn, can mean that the number of regulators, competent authorities and repositories that firms must comply with, despite harmonization of the regulation, has become onerous for firms to manage. Often organizations have to comply with gold-plated requirements in one jurisdiction, different versions of a schema or specification in another jurisdiction, and ultimately put in place a process to manage these nuances before data leaves the firm.

"On top of this is the E.U. approach of dual-sided reporting under certain regulations (such as EMIR), meaning that both counterparties to a trade must capture the correct details of their trading data in a timely manner and report to their trade repository [TR] of choice.

"With inter-TR reconciliation still a problem across the industry, and exchange of key information such as UTIs [Unique Transaction Identifiers] and LEIs [Legal Entity Identifiers] still a challenge, this dual reporting process is a major headache for firms."

And Asia-Pacific (APAC) Regulators:

"Typically, in the past there have been less regulatory requirements in APAC. However, this is fast changing since the international push for regulatory reform as part of the G-20 Pittsburgh Summit commitment.

"With a number of jurisdictions signing up to new regulatory initiatives such as Basel III and IV, BCBS [Basel Committee on Banking Supervision] 239, FATCA [Foreign Account Tax Compliance Act], and a number of regions going live with G-20-style derivative reporting, firms face similar headaches of having to connect and provide data for multiple jurisdictions in a variety of complex formats.

"Additional challenges come from local language requirements for understanding, communicating and reporting in APAC." FIF

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Q: What are the major challenges regarding issues with multiple asset types?

A: Many regulations issue a single template for reporting all asset classes in scope. The specification will dictate what is mandatory, conditional and optional. It will outline typical trading scenarios and reporting obligations.

A common problem for firms is that not all asset classes can be sensibly and accurately reported in the single reporting specification.

One area where we see a lot of challenges is reporting multiple legs of a swap. Some regulations will require a single report representing all legs, whereas other regulations require one report per leg. This disparity makes it difficult for firms to manage reporting, as there are different rules for reporting the same transaction, depending on the regulation.

Another issue arises when the defined fields do not allow certain asset types to be correctly reported. The lack of structure for exotic derivatives tends to mean not all mandatory fields can be filled.

Q: What compliance/operational issues are caused by multiple data formats?

A: From a compliance perspective, ensuring data can be transformed accurately and in a timely fashion can be a challenge. There is a requirement to understand and filter reportable transactions, then reformat the data to conform to a particular regulatory specification.

Repeating this process under a number of regulatory requirements and ensuring the integrity and



accuracy of the data across reporting regimes requires the compliance function to have complete transparency and visibility of the entire reporting process.

They will rely heavily on analytical tools, management information and reporting from both the regulator and their reporting technology. It is paramount to put these functional aids in place as a key feature of any regulatory reporting technology. Too often firms focus just on the reporting element rather than thinking about the compliance monitoring capabilities of a potential vendor.

Operationally, a key challenge would be streamlining of the exception management process.

As each regulation has its own reporting specification, it may be operationally impossible to consolidate the exception management process if there are different workflows and standards for each regulation.

Technology can play a big part in improving visibility to see where exceptions lie, but there may be a duplication of effort when resolving errors if there are multiple outcomes from a single data point (such as a counterparty code being represented as an FRN [Financial Services Authority Registration Number], LEI [Legal Entity Identifier] or BIC [Business Identifier Codes] code).

Q: What additional operational challenges are created from reporting to multiple regulators?

A: Operationally, challenges lie in managing high volumes of reportable transactions and dealing with reporting exceptions for different data sets in a timely manner.

With the nature of global businesses running on multiple time zones, it becomes difficult for firms to meet reporting deadlines across multiple jurisdictions. For instance, a deadline of T+1 can mean a range of different things; for example, EMIR T+1 is 23:59 on T+1 GMT. Under MiFID, T+1 will be determined by the ARM's [Approved Reporting Mechanism's] final submission slot to the competent authority on T+1, which can be as early as 21:00 GMT.

Understanding the data and then prioritizing and managing these demands are some of many operational challenges for firms.

Knowledge transfer and training to ensure that staff members understand the regulations they are managing is becoming a more difficult task.

As firms try to centralize regulatory reporting, staff members are required to maintain knowledge of a wide range of regulations, along with their reporting specification, without necessarily having the trading or legal experience to fully grasp the obligation. **FIF**

Waiting for the Blockchain

The highly touted distributed ledger technology efforts might ease regulatory reporting responsibilities, but in five years or more.

By Eugene Grygo

While firms stay on top of their regulatory requirements, they might be wise to look toward a solution on the horizon that might resolve the data discrepancy problems. The emergence of blockchain/distributed ledger technology (DLT) could revolutionize regulatory reporting.

Global banks and other financial services firms have begun exploring how blockchain/DLT, whose history stems from the bitcoin cryptocurrency, will lead to operational overhauls, particularly for recording and then sharing data about transactions that are at the heart of most regulatory reforms.

"If you have a golden source between you and everyone you're transacting with, so that you're not the only one in charge of it, you can also give regulators a key direct to the data," says Mary Kopczynski, CEO and founder of 8of9, a New York-based consulting firm. "I absolutely see the No. 1 issue with this industry is data."

One of the more interesting aspects of the blockchain/DLT disruption is that it has caught the attention of the regulators.

"What I find surprising is that the major regulators have been very supportive publicly about



Mary Kopczynski CEO and founder, 8of9



Bill Fearnley Jr. Analyst, IDC Financial Insights

blockchain ledgers as a new technology," says Bill Fearnley Jr., research director, compliance, fraud and risk analytics, for IDC Financial Insights, part of market research giant IDC. The potential use of blockchain/DLT is attractive to the regulators because all the records of the chain are immutable, locked and stored, and in sequence, which greatly simplifies compliance and examination.

Both Fearnley and Kopczynski say that it will be at least five years before blockchain/DLT solutions will have major impacts upon regulatory reporting.

In the meantime, the banks, industry associations, established providers, startups and others forging ahead in blockchain/DLT will have to consider the element of harmony among their innovations.

"Look, we need to avoid a Betamax vs. VHS moment," Fearnley says, referring to the standards battle for videotape technology in the 1980s. The many financial services industry groups working on blockchain/DLT applications will have to find common ground. "I think what's going to happen is that there are going to be negotiations," he says. "I think some standards will settle out." **FIF**

UnaVista

Improve your regulatory data integrity

UnaVista is an award winning technology platform that helps firms report for multiple regulatory regimes and improve their data integrity.

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Reference data to enrich your own

UnaVista is a source of reference data such as LEI, SEDOL and ISIN, which can be used to enrich your firm's data sets along with our eligibility files. Helping to improve data integrity and avoid over and under reporting.

