



# OTC DERIVATIVES – FROM REFORM TO REINVENTION

Convert regulatory compliance into business transformation

## Abstract

Over-the-Counter (OTC) derivatives trading firms must transcend regulatory compliance and use it as an opportunity to streamline operations, reduce costs and boost revenue. Our authors navigate the regulatory landscape for OTC derivatives and chart a road map for a future-proof reporting solution.

## Regulations for OTC derivatives are here to stay.

In the wake of the global financial crisis triggered by irregularities in financial markets, regulatory authorities across the US, Europe, Australia, and Asia outlined prerequisites for firms to report Over-the-Counter (OTC) transactions to a Trade

Repository (TR). Trade repositories receive and store data such as details of the transaction, counterparties, valuation, and confirmation to monitor OTC transactions and mitigate risks arising out of these less monitored transactions.

The compliance dates (go-live) for reporting OTC derivatives transactions has

been stipulated for different regions. Many financial as well as non-financial firms have commenced reporting OTC transactions to their TR, specifically for Dodd-Frank and European Market Infrastructure Regulation (EMIR) compliance. From 2014, other geographies are following suit.

## Challenges in OTC regulatory reporting

Firms need to address business, operational and technical challenges in reporting their OTC derivatives transactions to TRs.

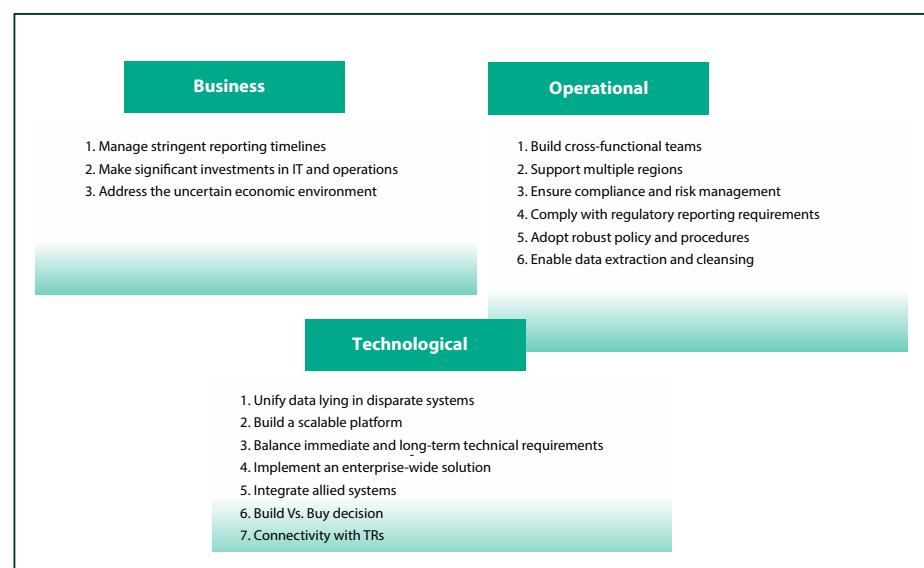
### 1. Business challenges

Meeting the reporting compliance deadlines across jurisdictions is a big challenge for firms. Regulators have announced dates for reporting requirements compliance. For a majority of firms, it may be difficult to comply with the stipulated deadline. Firms have requested for extension of dates through joint representations, but extensions are unlikely to be granted by some regulators.

Adherence to OTC derivatives market reporting requirements requires significant investments in personnel, systems and processes. In an uncertain economic environment, provisioning for such expenditure is a challenge. While regulations related requirements compete for a firm's expenditures, firms also face challenge in allocating funds that promise business growth and process efficiency such as product innovation, CRM, distribution, and promotions.

As regulators require reporting deadlines to be adhered to in 2014 and 2015, it is going to be challenging for firms to invest across regions. Russia and Canada have set 2014 as the deadline for compliance. In addition, new directives in DF and EMIR will be complied with to ensure improved compliance rates.

Firms have no option but comply with regulatory requirements. While large firms



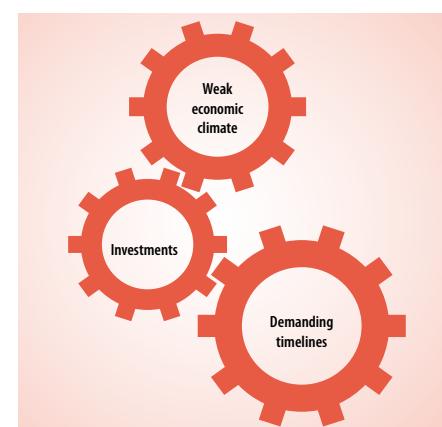
**Fig 1:** Challenges in OTC derivatives reporting

may meet the deadline, small firms may be challenged to achieve compliance on time. In many cases, the requirements are being finalized a few months before the go-live compliance dates.

The set of transaction, valuation, counterparty, and confirmation data required to be reported to TRs is another business challenge. While reporting requirements are similar across regions to a large extent, there are differences in reporting. For instance, the U.S. Commodity Futures Trading Commission (CFTC) reporting is almost identical to Canada, but Russia's reporting requirements are different in terms of attributes to be reported and interactions with the National Security Depository (NSD), the central Trade repository of Russia. NSD requires firms to submit data through a web client unlike EMIR, which accepts files in the Comma Separated Value (CSV) format via the Secure File Transfer Process (SFTP).

Firms will face challenges about the

exact data required to be reported since the requirements keep changing. They need to understand and comply with reporting requirements in letter and spirit. In addition, upstream systems must be compatible with the reporting warehouse for the correct data set to be generated in a standard reporting format such as Financial products Markup Language (FpML)



**Fig 2:** Business challenges of OTC derivatives reporting

## **2. Operational challenges**

Firms face significant operational challenges while reporting requirements to TRs stipulated by regulators. They can address the challenges by forming cross-functional teams comprising requirements, technical, project management, and testing professionals. However, a majority of the firms lack the experience and capital required to form teams that can work across jurisdictions. It requires streamlining of communication and documentation, reuse of knowhow/ code, and automation in areas such as testing. Empirical evidence suggests that firms have not managed to achieve synergies in key areas.

As reporting requirements become a focus area, the role of the compliance and risk management department will undergo significant changes. It will have

an enhanced scope and be instrumental in reporting compliance with OTC derivatives regulations to market regulators and investors on a regular basis.

The Commodity Futures Trading Commission (CFTC) requires firms to submit quarterly reports with details of their risk exposure across market, credit, liquidity, and legal dimensions. In addition, the firm must present its Chief Compliance Office (CCO) annual report to CFTC within 90 days of the financial year closure. The report must include measures undertaken by the firm to ensure reporting compliance. It must also provide details of the compliance program, including policies and procedures, financial and non-financial resources, and measures to address limitations.

Risk and compliance teams must monitor reporting exceptions, possible violations, and adherence with policies and procedures for reporting requirements.

Firms must prove that their systems are tested for compliance and address non-compliance areas. While it is not feasible for firms to achieve 100% compliance at the outset, they must aim for incremental improvement which targets 100% compliance.

Firms must learn from the lessons leading to go-live to comply with subsequent phases of reporting. Senior management must monitor progress toward compliance and ensure that adequate resources are deployed to comply with reporting requirements.



**Fig 3**Operational challenges of OTC derivatives reporting

### **3. Technical challenges**

Firms must invest in data warehouses to report data to TRs. Firms building new data warehouses will face several technical challenges, while firms that have built data warehouses for Dodd-Frank and EMIR reporting will face ongoing operational challenges..

Firms will be challenged by the architecture, performance and the stability of their reporting platform and its ability to integrate with upstream systems (trade execution systems from where data flows in). They will also face challenges in reporting to TRs due to diverse jurisdictions such as DTCC for Dodd-Frank and EMIR, and NSD in Russia.

Significant effort must be invested in building data warehouses and testing the functionality and connectivity with systems, including TRs. The transaction warehouses must process standardized data, integrate seamlessly with trade systems (trade execution, confirmation systems, and middleware solutions) and report to TRs in the stipulated timelines. Apart from reporting business-as-usual trades, firms need to report large volumes of trade backlog running into millions of trade data depending on the volume of asset classes and the start date for backloading. The data warehouse of firms must manage a large volume of trade and extract data required by the TR.

Firms must be prepared to manage a broad regulatory framework that spans diverse regulations and regions and adapts to near-and long-term regulatory changes. Firms must adopt a strategic platform / solution that allows OTC derivatives reporting to TRs for all regions. It must incorporate multi-reporting capabilities and non-functional requirements, while addressing higher threshold for volume of data, peak load, and escalation of data type. As trading regions and volumes increase, firms need to build a flexible architecture to manage new jurisdiction requirements and asset classes.

Data warehouses must process responses from TRs and make them available to the operations / compliance teams when a submission is not acknowledged or a report is rejected. Firms need intuitive analytical interfaces to the data warehouse that display the status of submitted messages and help the operations team investigate the root cause of submission failures / non-compliance.

Firms must evaluate the pros and cons of build vs. buy for reporting solutions. Building the solution in-house requires reallocation of resources and significant investment. Moreover, firms may lack the technical expertise to build an indigenous solution. On the other hand, buying an off-the-shelf solution facilitates optimal staffing, better utilization of resources, tapping into a global pool of technical expertise, and cost reduction. However, firms must handle data protection since transaction data flows through the vendor's reporting solution.

### **4. A holistic approach**

Regulatory compliance is a journey where firms need to meet successive milestones. Firms must undertake immediate and long-term planning to assess the impact of regulation compliance. Senior management commitment, allocation of resources, periodic evaluation of the project, and prioritizing can help meet deadlines.

Before building a solution, firms must understand regulatory requirements to minimize rework during development, reduce defects during deployment, ensure higher acceptance rates of submissions to TR, and reduce cost and time overruns that may result from non-compliance and penalties.

TRs publish reporting requirements on their websites. They keep channels of communication open to address queries of dealers and counterparties. Firms can participate in industry level discussions to reach a consensus on solving recurring problems.

**Standardization of data feeds**

**Scalability  
of the solution**

**Performance  
of the solution**

**Integration with  
systems**

**Fig 4** Technical challenges of OTC derivatives reporting

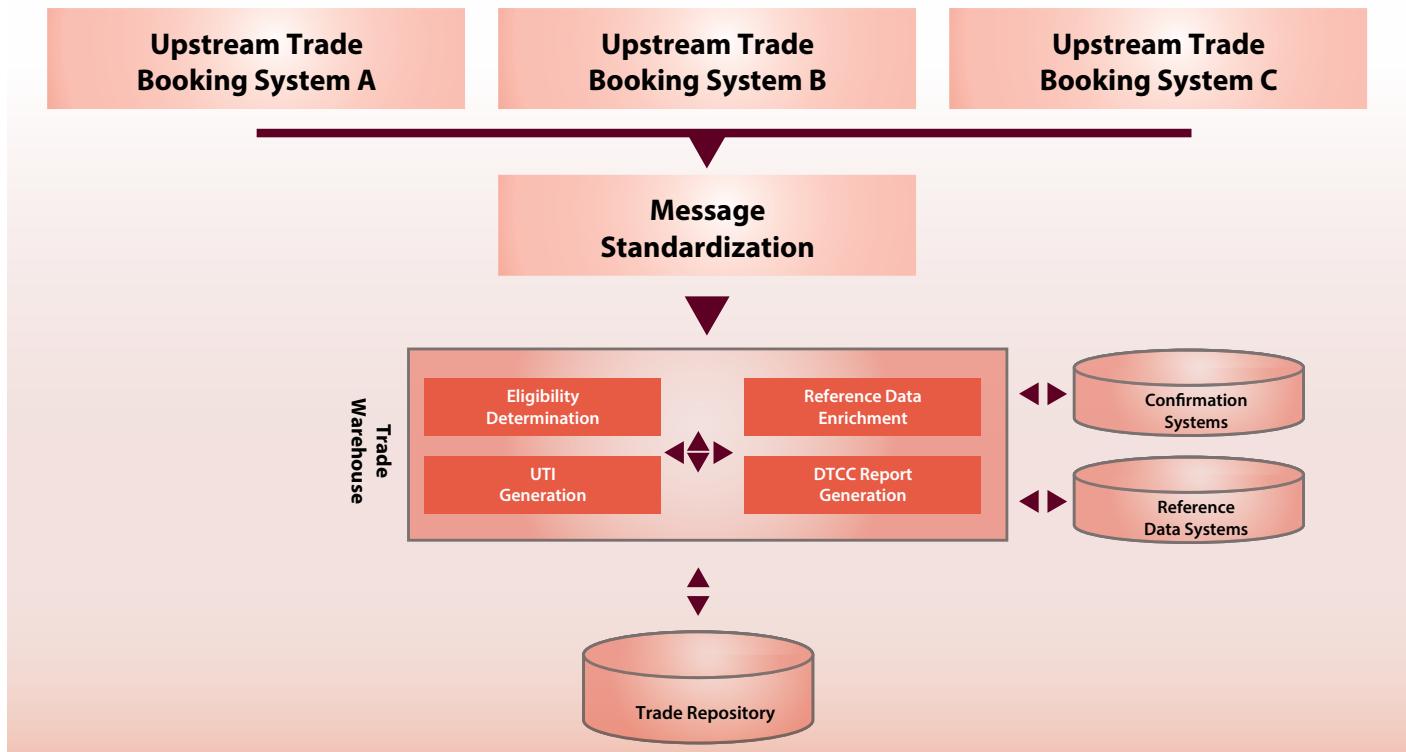
If firms have built an OTC reporting solution to comply with Dodd-Frank and EMIR reporting requirements, they can build on the platform to meet OTC reporting requirements in Canada, Russia, Singapore, Hong Kong, and Australia. Firms can reuse multiple components such as data ingestion, eligibility, exception management, report generation, and processing responses from TRs across regions. However, some regions may require building new components to comply with reporting formats and submissions - NSD, for example. Firms must capitalize on the reporting expertise of teams from diverse regions across the software development lifecycle. It will result in time and cost savings

due to reuse for reporting requirements, development and testing, and knowledge-sharing between the teams. Firms must build compliance solutions that address impending regulatory requirements. For instance, in 2014 and 2015, there may be a surfeit of reforms on the lines of Markets in Financial Instruments Directive (MiFID). Regulatory reforms may have a strategic impact on firms across regions. Firms must strike a balance between regional and global regulatory requirements, and build solutions to meet enterprise requirements. As data volume soars and backloading volume runs into millions of trades, firms must build flexible solutions with scalable

architecture to manage the volume. While onboarding multiple jurisdiction requirements, firms may be challenged by complexities in the solution architecture. The solution design must take into account optimal volumes, integration with multiple systems, submissions and response processing, and exceptions in the data warehouse. Firms should focus on mandatory reporting requirements for day one live requirements.

- 1** Build a warehouse for enterprise-wide reporting requirements
- 2** Strike a balance between global and regional regulatory reporting
- 3** Explore reutilization across resources, code and technical components
- 4** Build a scalable, automated solution
- 5** Address mandatory requirements for day 1 compliance; avoid a big bang approach

**Fig 5** Key considerations



**Fig 6** Infosys data warehouse

### Infosys case study

Infosys developed an OTC derivatives reporting solution (transaction data warehouse) for a leading European bank. Our solution used the Java platform to build the reporting solution and report OTC derivatives transactions to DTCC. Our role spanned the complete software development lifecycle – requirements analysis, solution design and development, testing and go-live. Infosys also helped the bank to implement subsequent new directives from regulators on an on-going basis. The regions covered for reporting included the US, Europe, Canada, Hong Kong and Australia.

Apart from submitting business-as-usual OTC derivatives data to TRs, our solution processes back reporting and incoming data from the repository to indicate the submission status of messages to DTCC.

## Future-proof the enterprise

As more regulators make it mandatory to report OTC derivatives data, the diversity and complexity of reporting requirements will grow. Firms must explore building solutions that adopt an enterprise-wide approach to address emerging regulations and manage the impact of reporting requirements.



## About the Authors



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