

Risk Data Aggregation: An Implementation Perspective

Abstract

The BCBS 239 guideline mandates financial services firms the world over to achieve risk data aggregation using themes such as completeness, timeliness, accuracy, and adaptability. This will in turn help firms generate comprehensive regulatory reports with capabilities to drill down to the most granular data.

This paper highlights the challenges faced by banks in achieving the regulatory objectives envisaged by the 14 principles of BCBS 239. We also examine the readiness of banks to comply with the Risk Data Aggregation (RDA) regulation, and assess if compliance can be ensured using an application based software or not.

Why BCBS 239 Came Into Being

Relevant information often gets lost in the gigabytes of data generated almost on a daily business in banks. Most of the recent financial crises point to one major shortcoming– the inability of banks to get a single, unified view of risk exposures for a counterparty across multiple types of risk and the various hierarchical levels of the organization. The Basel Committee on Banking Supervision (BCBS) identified several factors that led to the 2008-09 financial crisis. These included the inadequacy of banks' IT and data architectures; insufficient risk data aggregation capabilities; poor reporting practices; and the inability to aggregate risk exposures quickly and accurately. Unfortunately, these issues still exist, and have probably become quite commonplace today.

To address these systemic issues, the BCBS has introduced the Principles for Effective Risk Data Aggregation and Risk Reporting, also known as BCBS 239 or Risk Data Aggregation (RDA) guidelines. It lays down 14 principles to enhance risk management and improve decision-making in banks.

The 14 principles focus on four areas – overarching governance and infrastructure; risk data aggregation capabilities; risk reporting practices; and supervisory review, tools, and cooperation.¹ They address an important and pressing point: the absence of a single view of the aggregated risk exposure across risk types. The BCBS believes that the 14 principles, espoused by the regulation, will strengthen the risk management capabilities, improve governance, enhance data aggregation capabilities, and ensure adequate supervisory review of risk data aggregation.

What it Means for Banks

The principles-based format of RDA is indeed welcome, as it gives banks the freedom to give more priority to themes like governance, data architecture, reconciliation, and so on. However, principles-based and rules-based guidelines complement each other. In fact, we believe that this principles-based guideline will lend more credibility to rules-based guidelines like Basel II or III, on regulatory capital calculation. For instance, if a bank complies with Basel III in regulatory capital computation, but fails to adhere to the data governance principle as per RDA, the risk numbers generated would not make much sense. Hence, banks will need to accord equal importance to both guidelines.

RDA in Action

In 2014, the Basel Committee administered a questionnaire to Global-Systemically Important Banks (G-SIBs) to understand the readiness of G-SIBs to comply with the 14 principles of RDA by January 1, 2016. The self-assessment by 30 G-SIBs revealed non-compliance with three principles—data architecture and IT infrastructure, data accuracy and integrity, and adaptability (principles 2, 3, and 6)—with almost half the banks indicating non-compliance. According to the report, many G-SIBs expressed their inability to comply with the requirements by January 2016, mainly on the account of inadequacies around data architecture, data accuracy and integrity, adaptability in data aggregation, and accuracy in risk reporting. This was corroborated by a 2014 BCBS survey that revealed that the three principles with the lowest compliance were data architecture, adaptability of IT systems, and accuracy and integrity of risk data.¹

According to the report, banks' existing IT systems are the biggest hindrance to achieving RDA compliance. This hardly comes as a surprise given the fact that most banks are plagued with siloed IT systems that are often architected keeping in view the needs of a specific business unit within the bank. In many cases, common data requirements across multiple IT systems of the bank are ignored, and each system sources data as per its requirements. In other words, centralized data hubs for all data requirements of the bank either do not exist, or efforts in this direction have not been able to deliver the desired results. In many cases, projects initiated to create central data hubs have failed, and have had to be abandoned by banks despite considerable investments.

Technical Feasibility Check

Since principle-based guidelines place the onus on banks, we decided to assess the readiness of banks to deliver on BCBS 239 using their existing or enhanced applications and frameworks. We adopted a two-pronged approach to assess the technical feasibility. We analyzed the readiness of the financial industry's leading analytical applications such as OFSAA, SAP, Moody's, SAS, and Sungard, to deliver on RDA requirements. In addition, we also examined the approach banks have hitherto adopted to address the 14 principles of the BCBS 239 regulation.

Readiness of available applications

Several leading analytics companies in the industry have come out with architectures to address the 14 principles of BCBS 239. Most of the industry standard applications provide strategic frameworks comprising data models, data processing tools within the applications, and native reporting capabilities to comprehensively address the regulatory requirements.

However, based on our understanding of BCBS 239 and experience with various global banks, we believe that RDA compliance transcends analytical applications and encompasses the entire IT infrastructure of a bank—from data sourcing and transformation, to aggregation, processing, and reporting. Some of these processes are outside of standalone analytical systems and require linking with other source systems in the IT landscape to deliver on BCBS 239 requirements. This may entail a redesign of the entire IT architecture to link the IT systems and ensure seamless transfer and linking of data. However, RDA compliance will also require human intervention, as can be inferred across all the principles, especially principles 12 to 14.

Banks' approach to RDA compliance

Most banks are trying to address the BCBS 239 compliance requirements through their existing IT systems instead of licensing additional systems to comply with RDA guidelines. The reason for this is that most banks are aware that instead of a single IT system, the smarter option would be to integrate all the systems, after gaining a deep understanding of the data available within the bank.

The solution to address RDA requirements therefore lies in restructuring the IT landscape after a due diligence check of data flows, data aggregation needs, and reporting requirements. Banks should analyze and understand the results of such assessments prior to developing a plan for RDA compliance.

Conclusion

The BCBS 239 guideline for effective RDA and risk reporting is an important piece of legislation. Achieving compliance, however, remains a big challenge. Despite huge investments, banks are yet to fully comply with the regulation, though the deadline of January 1, 2016, has gone by. As they struggle to

comply with the regulation, banks would do well to look upon BCBS 239 as a strategic enabler, rather than a mere compliance mandate. Banks must grab the opportunities presented by BCBS 239 to overhaul their IT infrastructure, fortify their governance mechanisms, and upgrade data management to realize the long-term benefits of improved, data-driven decisions.

References

- [1] Bank for International Settlements, Progress in adopting the principles for effective risk data aggregation and risk reporting, January 2015, accessed 31 July 2017, <http://www.bis.org/bcbs/publ/d308.pdf>
- [2] Bank for International Settlements, Progress in adopting the "Principles for effective risk data aggregation and risk reporting", March 2017, accessed 31 July 2017, <http://www.bis.org/bcbs/publ/d399.htm>

About The Author

John Sunil Soren

John Sunil Soren leads the OFSAA CoE of TCS' Banking and Financial Services (BFS) business unit. He has over 22 years of experience in banking, risk and compliance management, mortgage, and credit life cycle management. Soren has held various positions in business development, presales, resourcing and delivery of OFSAA related projects in TCS. Previously, he was with Oracle Corporation, where he led presales for OFSAA suite in the EMEA region. Soren holds a Post Graduate Diploma in Management from the Indian Institute of Management, Bangalore, India.

Contact

Visit the [Banking and Financial Services](#) page on www.tcs.com

Email: bfs.marketing@tcs.com

Blog: [Drive Governance](#)

Subscribe to TCS White Papers

TCS.com RSS: http://www.tcs.com/rss_feeds/Pages/feed.aspx?f=w

Feedburner: <http://feeds2.feedburner.com/tcswhitepapers>

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled, infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at www.tcs.com