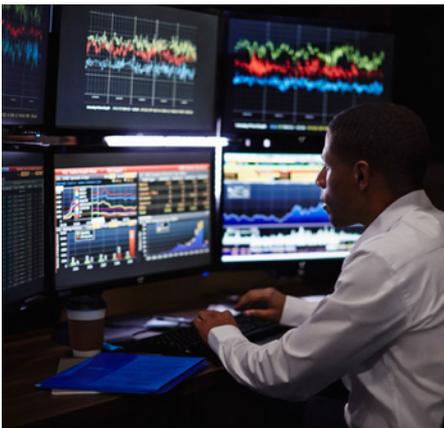


Mastering Risk Management and Regulatory Compliance

Respond to growing risk management and regulatory compliance pressures and costs with a centralized approach to data management and analytics



One of the most significant lessons of the 2007 global financial crisis was that banks' IT and data architectures were inadequate to support the broad management of financial risk.

Industry Strategic Challenges

Financial industry regulators are mandating wide-ranging changes in regulatory reporting in order to better monitor and control systemic risk across the financial system. As a result, firms are facing increasing reporting and disclosure requirements from multiple pieces of regulation. Data integrity, real-time processing and scalability of data and analytics platforms have emerged as the top three challenges for financial service institutions trying to achieve risk management excellence and regulatory compliance.

For many banks, existing risk mitigation efforts are based on siloed systems that are unable to provide a centralized view of risk. In order to ensure they are able to meet new regulatory obligations, these organizations will need to review and update the technologies and processes that handle their data.

The spiraling cost of remaining compliant

A key focus for many regulators is minimizing risk, for the industry, for individual banks, and ultimately for investors. Regulations such as [BCBS 239](#), [MiFID II](#) and the fundamental review of the trading book (FRTB) underline banks' responsibility to provide granular details on their risk position at any time, but the guidelines around how this should be done are often not clearly defined. Also, while all these regulations touch on risk, they each cover different priorities, meaning banks cannot take a 'one size fits all' approach. They must adapt their risk management and reporting strategy to fit these differing demands, as well as any new regulations, as they emerge.

The first step in building a flexible and responsive risk management strategy is taking control of the data upon which it is built. The volume of data that a bank holds is constantly growing – faster now than ever thanks to the introduction of new data sources, such as websites and social media that generate a lot of unstructured data. In addition to handling and storing all this data, the bank must also be able to interrogate and monitor it for risk. For many established banks this creates a significant challenge as their existing risk reporting systems lack the ability to aggregate all the organization's data into one place and create the holistic view of risk that regulators demand.

However, simply being able to centralize and interrogate data is not enough. Firms need to provide accurate information to regulators within a certain time frame to prevent non-compliance. In some instances, reporting obligations may fall into a regular and predictable cadence, but banks must also be able to respond to ad hoc requests. Without a centralized system that can allow flexible, granular reporting, these can be particularly painful for banks, as demonstrated

by the difficulties many experienced when faced with stress testing a few years ago.

Strong data management is key to effective compliance and business efficiency

The expansion of data archiving and monitoring obligations mean that banks can no longer avoid implementing a compliant system that provides sufficient scalability, storage and performance. Key features of a compliance-ready risk management and aggregation system should include five core capabilities:

- **Data Integrity:** Aggregating, monitoring and storing all data from across the organization to create an accurate and holistic view of risk exposure. The potential for error rises as the number of reportable instances grows and the high level of detailed information needed per transaction increases.
- **Real-Time Processing:** Processing and analyzing high-volume transaction data in near real-time in order to carry out analytics and reporting in a timely manner. Firms must exponentially expand the scope, flexibility and speed of their transaction reporting capabilities, including a wider range of data fields in the transaction reports they submit to competent authorities.
- **Scalability:** Maintaining a centralized, real-time picture of homogenized transaction, risk and finance data, with full analytic capabilities. This will help drive better and more efficient decisions through more timely risk management, while ensuring the flexibility to meet current and future regulatory, compliance and reporting requirements.
- **Agility:** Responding to new regulations or ad hoc requests from regulators with on-demand analysis from the transaction level.
- **Simplification:** Minimizing costs and reducing complexity, for example by storing all critical risk, finance and regulatory data within a single in-memory platform in order to eliminate the need to create and maintain aggregate tables and data replication.

Combating and controlling risk with Intel® technology

Financial organizations seeking a risk aggregation and analysis platform that will meet these requirements must ensure it is built on the right technological foundations, prioritizing the features that will optimize its data management and analytics processes. These include:

- **Performance:** Needing to provide granular analyses of large and complex data on-demand, banks need strong and reliable processing power.
- **Memory:** Fast, non-volatile memory is key to ensure that data can be accessed quickly for more timely analytics, while minimizing the risk of losing data and visibility of risk exposure in the event of a system failure.
- **Flexibility:** With multiple applications, databases and workflows, the underpinning technology must be widely compatible and easy to integrate with multi-vendor environments both now and in the future.
- **Scalability:** The volume of data that needs to be processed, monitored and analyzed for risk reporting is growing

constantly, so the technology needs to allow for large-scale and potentially rapid growth.

Intel works closely with its ecosystem to build best-of-breed solutions for its financial services customers which fit their specific risk aggregation needs and priorities. This ecosystem not only provides processing, fabric and networking technologies but also a range of software tools and optimization methodologies to address the need for developing scalable, agile, secure data management and analytics platforms.

To access the knowledge base about Intel® technologies and tools including Intel's, visit:

Intel® Cloud Builders: <http://www.intel.co.uk/content/www/uk/en/cloud-computing/cloud-builders-provide-proven-advice.html>

Intel® Network Building: <https://networkbuilders.intel.com/>

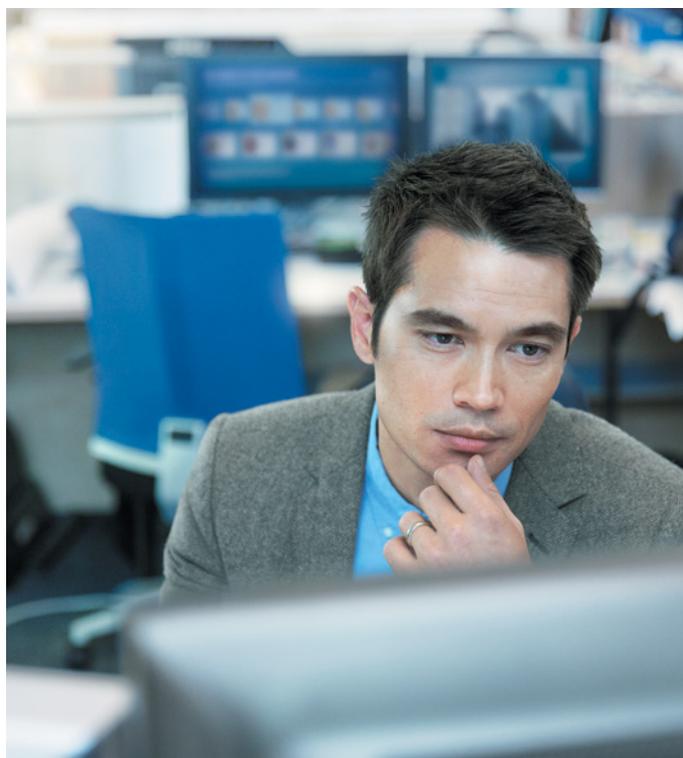
Big Data and Analytics: <https://software.intel.com/en-us/bigdata>

Machine Learning: <http://www.intel.ie/content/www/ie/en/analytics/machine-learning/overview.html>

Intel® Modern Code: <https://software.intel.com/en-us/modern-code>

Anti-Money Laundering: <http://www.intel.com/content/www/us/en/financial-services-it/financial-services-it-banking.html>

Regulatory Reporting: <http://www.intel.com/content/www/us/en/financial-services-it/financial-services-it-banking.html>



An Example Regulatory Program and Its IT Impact

Fundamental Review of the Trading Book (FRTB)

The Fundamental Review of the Trading Book (FRTB) is intended to harmonize the treatment of market risk across national jurisdictions and is expected to result in higher global capital requirements, as estimated by the Basel Committee on Banking Supervision (BCBS).

Banks will need more data and stronger data analysis capabilities to meet new risk measurement and reporting requirements. The final standard imposes new internal and external reporting requirements, including monitoring market risk on an intraday basis and measuring market risk capital as of the end of the previous day.

Institutions that want to rely on their internal market risk models will now need to use an Expected Shortfall (ES) measurement for capturing risk rather than the current Value at Risk (VaR) and Stressed VaR (SVaR) measures. This shift will result in expanded data requirements, computational capacity and operational complexities.

Conclusion

Organizations can perform in-depth analysis of real-time transaction data to provide a clear, concise and holistic view of risk. These powerful tools can help them meet the demands of the emerging programs driven by financial regulators.

Find the solution that's right for your organization. Contact your Intel representative or visit www.intel.com/fsi



All information provided here is subject to change without notice. Contact your Intel representative to obtain the latest Intel product specifications and roadmaps. Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software, or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer, or learn more at intel.com.

Copyright © 2016 Intel Corporation. All rights reserved. Intel, the Intel logo, and other Intel trademarks are trademarks of Intel Corporation in the U.S. and/or other countries.

* Other names and brands may be claimed as the property of others.

2016/0816/EW/CAT/PDF

Please Recycle

334754-001US