



A CENTRALISED DATA HUB:
THE KEY TO ACHIEVING
ENTERPRISE-WIDE
PERFORMANCE MEASUREMENT

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In order to calculate performance measurement, attribution, and risk statistics successfully and accurately, today's global organisations need access to consistently clean and comprehensive accounting, benchmark, and security data.

Most performance measurement professionals will agree that the main challenge to calculate meaningful performance measurement and innovative portfolio analysis is the inability to access and maintain high quality input data. The problem exists because the transaction, pricing, analytic, and security master data required comes from disparate sources, including multiple internal and external vendors, most of which the performance analyst has little control over. The problem is amplified by the trend of firms moving from calculating monthly portfolio or segment level analysis to daily security level. Many firms are rapidly adding strategies, serving additional markets, and participating in M&A activity, which makes the data sourcing issue a persistent topic.

To alleviate this challenge, we have found a data hub to be the most effective solution to validating and consolidating the data used as inputs for performance calculation and analysis. By employing a data hub, data from multiple sources can be fed into a central database. On the way in, the data is checked for quality and completeness. The analyst defines the particular checks and tolerances, good data is allowed in, and returns are automatically calculated using this qualified data.

Problems such as missing pricing data, transactions that don't reconcile to positions, and incomplete benchmark data can be identified and resolved before the data enters the database. The concept of a "data hub," versus a data warehouse, is that a hub continuously interacts with upstream and downstream systems, automating the flow of data between sources. The result is a single, clean and complete body of data that can be relied upon. Once the data hub is in place, it facilitates the requirement for quality internal and client reporting.

Custom Calculations

Once the data is in the hub, firms are able to analyse absolute and relative performance with a high degree of flexibility. The data hub allows users to define, using rules in much the same way as spreadsheet formulas, how they want to derive additional data to store in the database. For example, calculations can be defined to produce local, base, pre-tax or post tax returns where the fund, benchmark, and security classification and valuation inputs and output statistics are defined across multiple strategies. Portfolio and index entities are augmented with carve-out, custom benchmark, and composite entity statistics, where the derived entities are also defined by rules. The return, contribution to return, and other statistics are stored at the security or benchmark constituent level to facilitate flexible multi-period and comparative analysis. Multi-period absolute and relative return analysis leverages the user-defined single-period returns and weights stored in the data hub. The analyst defines the period and can use any periodicity of single-period return stored in the hub, to derive contribution, benchmark relative attribution, and risks statistics, with the confidence that the input data has been checked.

Flexible Reporting

Using a fully integrated OLAP query tool and calculation engine, analysts create interactive queries to look at absolute and relative returns, attribution, and risk statistics. These allow each analyst to define sources, components, and groups of data on their particular report. For example, fixed income, equity, and multicurrency portfolios can be analysed using completely different pricing sources, return calculations, and comparison benchmarks, while still using the same database and reporting tools. New reports are defined by user-defined rules, which are stored in the data hub, and do not require programming. These reports can then be filtered through a report writer to add presentation quality elements required for client reporting and marketing. Web-based queries against the database are also defined by rules, so an organisation can provide secure access to its data and reports within the database, with that access set on a client-by-client basis.

Business Benefits

With a data hub at the core of an organisation's business, its systems can deliver the performance measurement and analysis with great speed at the highest volumes. Ongoing maintenance of high-quality data at the centre of the performance system is the key to achieving automated, high frequency, accurate analysis, and reporting. We believe the Eagle's data management solution, with its fully integrated performance calculator, is the most robust technology solution available today that fully meets the flexibility, reporting, and volume requirements of investment organisations engaged in multiple lines of business and a range of product types and markets served. Our solutions support the performance measurement needs of investment managers, plan sponsors, banks, treasury departments, insurance companies, and index publishers. Our solution is truly an enterprise-wide performance measurement and reporting offering.

EAGLE INVESTMENT SYSTEMS

Eagle Investment Systems LLC is a global provider of financial services technology, serving the world's leading financial institutions. Eagle is committed to providing enterprise-wide, leading-edge technology and professional services for data management, investment accounting, and performance measurement and attribution. Eagle's performance measurement solution is a fully integrated suite, which provides multiple solutions, including portfolio performance, retail fund performance, GIPS® composite management, equity and fixed income performance attribution, analysis and reporting. Rules-based composite membership maintenance, standard verification reports, flexible disclosure management, and standard presentation reports provide end-to-end GIPS composite management. Exception-based workflow management provides tight integration of accounting, performance and GIPS composite presentation reporting. Eagle's Web-based systems support the complex requirements of firms of any size including institutional investment managers, mutual funds, hedge funds, brokers, public funds, plan sponsors, and insurance companies. Eagle's products are offered as an installed application or can be hosted via Eagle ACCESS, Eagle's application service provider. By deploying Eagle's world-class solutions over the internet, Eagle ACCESS can help firms minimize the risk and expense associated with maintaining hardware and software internally. Eagle Investment Systems LLC is a subsidiary of The Bank of New York Mellon Corporation.