

*Measure, Improve, Evolve.*

## Operations Improvement/ Risk Reduction

### THE CHALLENGE

Following a major investment in an operations process improvement and application upgrade project over a three-year period, a \$50+ Billion multi-product investment management firm encountered a series of operational errors requiring significant reimbursements to a number of key client accounts.

All operational measures utilized by the firm and recommended by accounting and other consulting firms indicated that internal operations met high standards for all reasonable audit, control and process integrity measures.

The errors appeared to be random, unrelated and triggered by external events the firm's personnel were unaware of at the time.

After exhaustive internal and external analysis, the firm concluded that it would benefit from the Basis Point Group OPERA® measurement approach and the insight into its operational performance and processing risk that was not available from other, current assessment methodologies.

## Finding the Solution

### ASSESSMENT (ONE MONTH)

An investment management and mutual fund complex subsidiary of a major financial services firm initially retained the Basis Point Group (BPG) to assess the scope, magnitude and risk implicit in the investment management firm's daily operations. BPG was asked to determine the cause of the processing errors, and to design a framework that would allow line managers to recognize, find and correct potential errors.

BPG began the initial assignment by meeting with executive, senior and mid-level management to understand their perceptions of the quality and integrity of the entire operational processing environment of the firm's investment operations.

Based on statements made in these meetings and discussions, BPG recommended a series of OPERA® measures utilizing data already available within the firm to quantify and validate the qualitative statements made in these meetings and discussions.

Working with the firm's operations and technical staff, this data was summarized into executive level quantitative measures of quality and processing risk including:

- The integrity of information provided to or available to clients;
- The accuracy of securities positions and cash balances used by the investment managers when deciding to buy, sell or rebalance a portfolio; and
- The reliability of the 'investable cash balances' received from external parties as an accurate representation of available cash.

BPG reviewed the quantitative findings with the staff prior to a presentation to the Executive Management Committee. The Executive Management Committee presentation provided an understanding of how viewing errors through the prism of standard qualitative best practice measures, the staff could conclude these errors were random. Further, they could also conclude that the errors were not likely to reoccur after additional checks and control procedures had been put in place to address each unique occurrence.

BPG then presented the OPERA® metrics the staff had agreed were valid measures to quantify operations quality and risk. BPG demonstrated that the small cluster of errors the firm encountered might also be warning signs of greater process risk, because these process quality and risk metrics were not utilized in the normal course of business.

BPG further demonstrated the use of absolute quality measures that allowed the firm to quantify not just internal performance, but also the impact external organizations had on the firm's processing environment.

The Executive Management Committee was interested in understanding how these consolidated metrics could be unbundled to identify individual process quality or risk "hotspots", particularly where they might affect the quality of the investment management decisions.

## **THE CHECK-UP (TWO MONTHS)**

### **Diagnosing Potential Errors**

The firm's Executive Management Committee asked BPG to broaden the scope of its assistance into a second stage, diagnostic assignment. The broadened assignment was to work with a team of internal system and operations personnel to identify specific areas of heightened processing risk and to identify actions that would mitigate the immediate and longer-term impact of these risks.

### **Approach**

In tackling the operational diagnostic assignment, BPG started by revisiting the goals of the original assessment project as defined by the Executive Management Committee. Specifically, executives wanted to know that:

- The firm was operating to the highest operational standards;
- The organization was operating with the least possible risk to client funds; and
- The information used in the investment management process and reported to clients was accurate.

BPG cautioned the team and the firm's executives that based upon past experience, the commonly accepted measures of operational quality and risk were unlikely to be a significant help in reaching these goals.

BPG recommended a structured approach to assess the presence of potential errors in the ongoing processing stream in a way that;

- Proved the integrity of internal event posting processes;
- Proved the integrity of the data provided for each event; and
- Verified the quality of event processing.

BPG based its guidance and approach on the fact that the firm had passed all internal and external audit reviews with high marks. Further, experience with accounting controls and actuarial loss measurements show they are measurement frameworks well suited for financial reporting and insurance risk purposes but unlikely to benefit operations management in control of real-time or near real-time investment operations processes.

With this perspective in mind, the team started with a base of data obtained from the recordkeeping, trading and reconciliation process for the prior month's activity.

To identify how the organization of people, process and systems might give rise to the type of unexpected losses the firm was experiencing, BPG led the team in an analysis that assumed a significant error existed that needed to be found quickly using only the data already available inside the firm.

This approach added a discipline and urgency to the team's analytic efforts and thought process. The approach forced a focus on the logic used to discover, assess, triage and correct errors that could potentially exist in the many components of the firm's processing infrastructure. Further the approach involved the team in establishing the methods to verify the firm's operational process quality and risk.

Through a series of straightforward analytic steps, directed by BPG staff, team personnel were able to verify expected outcomes, quickly recognizing and isolating potential loss events using data from daily recordkeeping and reconciliation records.

Grouping these events into different process, functional and investment categories the team was able create a multi-dimensional view of the impact these events might have on the firm.

During the analysis process, the project team also identified the frequency and value of the potential impact on eight

key operational functions. Comparing these metrics, (error frequency and value at risk) enabled the team to categorize, compare and recommend organizational, system and process modifications or actions to improve processing quality and efficiency while reducing process variability and overall risk.

## Impact

BPG and the team were able to quantify the specific quality and risk of each function's operational processes, determine the root cause of operational errors, and assess whether the errors represented a clustering of similar errors or a truly isolated event.

The OPERA® measurement framework allowed the team to better understand their operations and derive additional quality information from data they had been using in their day-to-day activities. By structuring this information differently, the team was able to gain insights and knowledge about processing glitches as well as processing improvement opportunities.

## CONTINUOUS MEASUREMENT

During the diagnostic effort, the team met weekly with members of the executive management to brief them on analytic progress. These meetings highlighted;

1. Analytic progress results from the measurement and information consolidation process and opportunities for refinements.
2. Evolving understanding of processing impediments that allowed risk to pool at certain points in the operational process at different times of the month.
3. Action plans to reduce immediate, clearly understood risks.
4. Areas where external factors were impeding operational processes or causing non-value-added work to migrate into the firm.
5. Limitations of the static analysis and potential future value from continuous measurement.

Based on the knowledge the team was able to obtain from a single monthly snapshot of internally available data, the Executive Management Committee asked the Basis Point Group to structure and manage the implementation of a continuous quality and process monitoring capability.

Working with the internal applications and development management and staff, BPG helped design a flexible analytic, measurement and trend reporting database to track proprietary operations performance and risk indexes.

## Conclusion

In just over six months elapsed time, the firm was equipped to assure its internal processes were functioning properly at an acceptable level of risk. Further the firm was positioned to recognize and react to potential internal errors or those introduced by external parties. The reconciliation process had been replaced with a continuous verification process to assure internal quality and continuously monitor risk. This allowed the firm to redeploy 9 of the 12 people employed in this area to higher value operational needs and increase the responsibilities of those that remained.

All levels of the organization now have access to the same quality and risk data, summarizing or disaggregating it to the level appropriate to each individual's oversight, analysis or management role.

The firm has also found that the process of tracking and trending data allows continuous improvement and benchmarking against the ultimate goal of zero errors and minimal processing risk. The firm shares this data not only internally, but also externally with custodians and fund accounting organizations further improving communications and processing efficiency.

BPG was able to counsel the firm during the project about how its quality levels and risk factors seemed to typically compare to the industry as a whole.

Working with Basis Point Group over the three evolutionary projects, the firm's executive management group and its staff vastly expanded their understanding of the complexity of managing their overall operations efficiently and effectively. Management and staff developed a greater knowledge of key operational process risks that were threatening their profitability and institutional reputation. Finally, they learned how to better manage these risks, while improving operations performance.

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## Operations Performance and Risk Consultants

Basis Point Group, LLC (BPG) is a specialist consulting firm focused on managing the critical organizational and systems changes needed to improve competitiveness, quality of client service and mitigating operational risk for investment management and capital markets firms. We are dedicated to optimizing the performance of the people, processes and systems within each client company.

BPG uses an unparalleled, structured discipline to assist Chief Operating Officers and their teams to analyze, measure and improve operational processes, cost-effectiveness and transparency. Our partners work directly with investment management, finance, compliance, risk, securities operations and technology management on productivity and process control improvement projects.

We achieve sustainable results for our clients by combining OPERA<sup>®</sup>, our proprietary operations performance and risk measuring methodology, with our depth of practical knowledge and experience. The result is the delivery of highly effective business support infrastructures and technology solutions across the financial industry, particularly for the largest investment and securities firms.