



## Automating Performance Composite Construction through Integrated Workflow

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The CFA Institute created the Global Investment Performance Standards (GIPS®) to provide a common standard for performance reporting that levels the playing field across the investment management industry. Although being GIPS® compliant is not a SEC requirement, claiming that you are when you are not can have dire consequences. One of the most basic building blocks of GIPS® compliance is the performance composite. However, basic does not always mean simple, and automating composite maintenance can be a tremendous benefit for companies trying to maintain their profit margins while remaining GIPS® compliant. The key to easily and consistently maintaining performance composites is to fully integrate their construction with core operational workflows.

According to the CFA Institute, “Defining and constructing composites is one of the first steps in implementing the GIPS standards. Composites are the primary vehicle for presenting performance to a prospective client.”<sup>1</sup> Therefore, composites and composite construction rules are commonplace in the asset management world. However, automation of the processes supporting accurate composite maintenance is not widespread. Despite faster computers, cheap memory storage, and the near ubiquitous use of portfolio management and performance measurement software, many firms still struggle with timely, accurate, and cost efficient composite maintenance. What begins as a straightforward commonsensical set of rules defining a composite can end in a highly manual and complicated process. Here is how many firms presently must handle composite construction:

1. Following the end of a reporting period, a query of account profile data is run to create an initial composite membership list. The underlying data is often only available as a current snapshot, so the membership list must be run as close as possible to period-end to ensure accurate membership for the reporting period.
2. When final performance is available for the initial membership list, it is reviewed for outliers.
3. Exceptions to the initial membership list are identified. Exceptions can be caused by investment restrictions, large cash flows, investment style changes, or special trade requests. Composite membership is then manually adjusted to capture the exceptions.
4. Composite performance statistics are then calculated on the revised membership.

Not only is this process inefficient from a resource perspective, but it also often delays the availability of composite results. Furthermore, this process does not address the need for documentation, an essential step for performance verification. Integrating rules-based composite construction with workflow is not only more efficient, but also provides results that are more accurate, easily verifiable and fully documented. Here is how an integrated performance composite process can work.

### Basic Composite Requirements

The first rule for composite construction requirements is straightforward enough:

3.A.1 All actual, fee-paying, discretionary PORTFOLIOS MUST be included in at least one COMPOSITE.

Although non-fee-paying discretionary PORTFOLIOS may be included in a COMPOSITE (with appropriate disclosures), non-discretionary PORTFOLIOS are not permitted to be included in a FIRM'S COMPOSITES.<sup>2</sup>

This rule mentions discretion. At its most basic, discretion is defined as, “...the ability of the firm to implement its intended strategy.”<sup>2</sup> The Standards go on to note that, “Firms make the ultimate decision as to whether or not portfolio restrictions render a portfolio nondiscretionary. Firms should also document the reasons for classifying each portfolio as nondiscretionary.”<sup>2</sup> Since discretionary status is key to composite maintenance, workflow integration needs to account for cases where accounts can switch from discretionary to nondiscretionary, and back again. Here is an example.

1 CFA Institute, Global Investment Performance Standards (GIPS®) Handbook, Second Edition 2007, p. 99-100

2 Op. cit., CFA Institute, p. 97

### Temporarily Nondiscretionary: Tax-Loss Selling

It is a common practice for investment managers with taxable clients to accommodate requests for a tax-motivated trade, such as tax loss selling. Such a request can cause an account to be categorized as nondiscretionary. The trade may alter the portfolio's allocation to such an extent that the particular investment strategy is disrupted. Additionally, the trades are account-specific as opposed to being part of the overall investment strategy and objective. Yet, the period for which this account should be considered nondiscretionary is likely only temporary. After the wash/sale period has been satisfied, if the account is once again invested according to its investment strategy and objective, then the account becomes discretionary again and should return to the appropriate composite.

Simplifying this composite construction example by ignoring all other requirements, the rule for inclusion is simple: If the account is discretionary, include it in a composite; if it is nondiscretionary, do not include it. Consider the following conditions for a sample case:

- A tax-sell request is received, and trades executed on November 10.
- The wash/sale period being satisfied, "buy back" trades are executed December 15.
- The firm's composite construction rules stipulate that an account must be fully invested for an entire performance reporting period to be included in its composites, with the reporting period established as one month.

As previously mentioned, many firms use separate processes to implement the above request. Using the conditions established for the sample case, here is an illustration of the specific steps and the separate processes.

- November 10 - The initial client-requested trade is entered, and the account is manually identified as non-discretionary.
- Then, "ticklers" are created to trigger both the sale of a replacement security and the buy-back of the original sometime after December 10.
- December 15 – The buy-back trades are executed.
- Finally, another tickler has to be set to switch the account back to discretionary status after month-end to ensure that it is not included in a composite for December.
- At each month-end, a query is run to extract only discretionary accounts, so if each of the underlying manual changes has been made correctly, the account will be excluded in November and December, then once again included in January's composite.

All this manual intervention dramatically increases the probability of error. Additionally, if an account's discretionary history is not recorded within a system, a re-run of a prior month's composite would provide incorrect account membership. Here's why: If the account is coded as discretionary immediately following the buybacks on December 15, any re-run of November's composite after December 15, or December's composite run following month-end, would inaccurately show the account as included in the composite when it should be excluded. This is because, in both cases, the query looks only at the data as reflected on the date it is run, which shows the account as discretionary. Essentially, an account's discretionary history has to be captured and stored in order to allow for automated composite maintenance. All too often, an account's change in status is saved to a spreadsheet that must then be referenced when running composites.

By using a single workflow instead of multiple, separate processes for transactions, account coding, and composite construction, both accuracy and process efficiency are greatly improved. With fully integrated systems, the initial recording of the request alerts trading. Then logging the date for completed trades automatically notes the beginning of a nondiscretionary period and sets a future alert for when the wash/sale period is satisfied. Then, logging the dates for the related sales and buy-back trades records the end of the nondiscretionary period. In this case, the workflow *informs* the composite construction process. Running the performance composite for any month-end automatically extracts data based on predetermined rules, looking at the recorded dates for the tax-sells and buy-backs within the workflow to determine whether an account should be included or excluded from the discretionary composite for that month.

Separate workflows require multiple steps, increasing chance for errors and delaying the composite performance availability.

Integrated workflows minimize steps -- note there are no separate processes for composite management or changing profile fields.

Another benefit to a fully integrated process is that documentation is automatically “attached” to the composite change from the time the initial request is recorded. From an audit perspective, if an account drops out of a composite for a period of time, one would need only to go to the workflow history for that period to see the cause and to view a copy of the original request. This satisfies the portion of composite construction rule 3.A.5 that stipulates, “PORTFOLIOS are not permitted to be switched from one COMPOSITE to another unless documented change in client guidelines or the redefinition of the COMPOSITE make it appropriate.”<sup>3</sup>

November	10	December	15	January
Operations Workflow	<ul style="list-style-type: none"> <li>Record trade request</li> <li>Record documentation</li> <li>Notify Trading</li> <li>Set profile to “non-discretionary”</li> <li>Create “tickler” notification</li> </ul>		<ul style="list-style-type: none"> <li>Notify trading (buy-back trades)</li> </ul>	<ul style="list-style-type: none"> <li>Set profile to “discretionary”</li> </ul>
Composite Management		<ul style="list-style-type: none"> <li>Run November composite query</li> <li>Save membership list</li> </ul>		<ul style="list-style-type: none"> <li>Run December composite query</li> <li>Save membership list</li> </ul>
Performance Reporting		<ul style="list-style-type: none"> <li>Run November performance</li> </ul>		<ul style="list-style-type: none"> <li>Run December performance</li> </ul>

November	10	December	15	January
Integrated Workflow	<ul style="list-style-type: none"> <li>Record trade request               <ul style="list-style-type: none"> <li>- Documentation attached</li> <li>- Trading automatically notified</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>Trading automatically notified (buy-back trades)</li> </ul>	
Performance Reporting		<ul style="list-style-type: none"> <li>Run November composite performance report</li> </ul>		<ul style="list-style-type: none"> <li>Run December composite performance report</li> </ul>

In a simplified version of a fully integrated process: The original client request document *becomes* the alert for trading, for which the completion date that is logged *becomes* the start of the nondiscretionary period and sets the alert for the buybacks, for which the completion date *becomes* the end of the nondiscretionary period. There is no separate process required for pulling account records to determine composite membership. Because a copy of the documentation is already embedded in the workflow, both internal reviews and external verifications are greatly simplified.

#### Additional Benefits

Looking once again at rule 3.A.1, the first line states, “All actual, fee-paying, discretionary PORTFOLIOS MUST be included in at least one COMPOSITE.” This means that even if a manager has discretionary composites that are not used for marketing, they must meet the same accuracy and timeliness tests as a marketed composite. Once a firm establishes rules for *all* of their discretionary composites, a fully integrated system consumes fewer resources because less time is spent on composite maintenance. Furthermore, as our example illustrates, it can also greatly streamline performance review work for the manager and for external verification.

While this discussion has been focused on how a fully integrated system can simplify specific aspects of the GIPS® composite construction requirements, integration also provides the same principal benefits to many other aspects of an asset management business. Data accuracy, accessibility, and timeliness are equally important to portfolio management, trade order management, reporting, and compliance. Instead of continuing to operate with multiple, unrelated and often redundant, highly inefficient processes, asset management firms should seek to simplify their operations through integration. Today’s faster computers, more sophisticated financial technologies, and more powerful communications networks allow for actual, and complete, integration of systems and workflow.