

Solving the Data Problem for Asset Managers

Is your firm struggling to meet marketing deadlines and SLAs for fact sheets, pitchbooks, and other content due to lack of good data management?



Robert Juergens, CTO
Synthesis Technology

Synthesis' Chief Technology Officer, Robert Juergens, outlines 8 data best practices to help asset managers improve the overall efficiency of marketing operations.



“The root of the issue lies in the source data.”



Many asset managers struggle to meet their SLAs and time-to-market goals for producing marketing communications.

In order to be competitive, critical sales and marketing materials like factsheets, pitchbooks, and commentaries must be produced as quickly as possible after quarter-end.

So what enables some firms to get their data-driven communications out more quickly than their competitors. What's the secret ingredient?

The secret lies in the quality and timeliness of the source data. This is the paramount determining factor of how successful the document production effort will be. In our work with asset management companies, we have seen a wide variety of source data scenarios ranging from firms with strong internal data collection and warehousing capabilities to firms that are entirely dependent on spreadsheets and third party data sources. These scenarios and the many variations between these extremes can all be successful if good data processes and rules of governance are applied.

In this guide, drawing on over 20 years of deep industry experience, Synthesis' data solutions experts share their best practices for managing marketing data. By taking these practices into account, you can get on track to meeting your production goals and being more competitive in the field.

Best Practice #1

Own Your Data

The most successful marketing operations teams have one thing in common: they really own their data.

Establishing clear ownership and responsibility for the data is critical. In order to take ownership of the data, the first thing to do is to assign data management roles. We recommend building a written matrix defining your data providers (where the data comes from), your data stewards/owners (the person responsible for the data), and the data consumers (all the places it's being used).

The way these roles are organized looks different at every firm. At some firms, there is one data owner, at others it's a handful of people responsible for different data points. For example, there might be a fixed income data owner, a FactSet data owner, an internal data owner, and so on.



Regardless of how the roles are structured, there must be a defined owner for each data set. A specific person (or small team) is then responsible for each data point and is held accountable for delivering the data by an agreed-upon deadline.

Data owners should first and foremost know exactly where their data sets and data files come from and thus who to work with when there is an issue. They know when the data arrives, the format it is in, and the quality standards that need to be applied. This is not a technical role, it's a business role centered on fostering an attitude of ownership around the data, and this role is surprisingly missing at many firms for many data types. Secondly, the data owner should understand the data well enough to help identify and diagnose data problems at the content level, though sometimes this work is delegated.

Data owners should foster relationships with both internal data system operators and external data providers such as Mornistar and Lipper where appropriate. These relationships can be critical to getting problems escalated and resolved. If necessary, the data owner may need to continuously put pressure on the data providers to improve the quality and consistency of their data. The quality of input data is critical to preventing processing challenges downstream from the data source.

Good data owners are problem-solvers. That said, a data owner's longevity and experience goes a long way. One of our most successful clients has a data owner who has been with the organization for 14 years and really knows the data sets and the providers. This is a major advantage when it comes to the data process. However, it also represents key-person risk. What if the data owner leaves and takes the knowledge with them right out the door? To minimize this risk, make sure your data owners are continuously documenting their process, methods, and points of contact so there can be a seamless knowledge transfer if necessary.

Key Recommendations:

- Designate a data owner for each data point
- Set an SLA for the data owners – people are waiting on them!
- Document the process so that the information can be transferred in the event a data owner leaves the firm or moves to another group.

Best Practice #2

Create a Formal Inventory

Creating a formal inventory of your firm's data is a first step and can go a long way toward improving your data management process. We recommend creating an inventory that includes details about every data point including the process for receiving the data, the person responsible for the data, and the primary use cases for the data.

The best way to do this is to take the final PDFs of your fact sheets, pitchbooks, etc and mark-up every data point – where it comes from, where it's going, and who owns it. Document each data point in a spreadsheet to organize all the data points in one place. By doing this, you'll be able to start putting some SLAs around the data points as well as document process and accountability for the data and how it's being used. Using a spreadsheet to do this may sound like an antiquated approach, and there are possibly more sophisticated tools, but frankly, clients we see using human knowledge and a spreadsheets to demonstrate this knowledge are generally more on top of their data than those using other techniques. We suggest keeping this approach simple and focusing on accountability not technology here.

A couple years ago, we onboarded a client who had a remarkable data inventory spreadsheet, which greatly helped our automation implementation run smoothly. The problem was, the inventory was never looked at again after the implementation was over. This is a common issue with documentation – it isn't kept up-to-date. If something changes, the change should be indicated in your inventory document or system of record. If you don't keep it up to date, you will be undermining all the work you put into creating the document in the first place.

If your firm is already using automation you may be thinking, "Why can't my automation vendor give me a live report of every data point on every document and where it came from?" While this is possible, the real issue is that this represents bottom up review of something that should really be understood from the top down. In other words, the usage should not change unless a decision is made at the top of the supply chain, and that is also where troubleshooting of a problem should begin.

Key Recommendations:

- Start by taking all of your fact sheet PDFs and mark up every data point – where it comes from, where it's going, and who owns it.
- Keep it up-to-date! Your inventory is a living, breathing document.
- Don't "automate" your data inventory. The source of the documentation should come from the top of the supply chain.

Best Practice #3

Establish Deadlines

Once you've created a formal inventory and ownership, you should also establish deadlines. Set a deadline for each delivery of data and reflect those in the inventory. Think of these deadlines as policy that is documented and enforced. The end result should be a holistic schedule showing all inbound data dependencies. Accountability is important here.

We recommend establishing a process to notify the data owners and/or providers when a deadline is missed. If a deadline is missed, the data owner must be held accountable to solving the problem going forward to ensure deadlines are met. Some data control systems can automate this communication.

Taking it one step further, the inventory should provide insight into which documents and material depend on which data. The schedule can also outline which documents should be published and when and who is responsible for the publishing deadline. Downstream consumers can be proactively notified as well when a delay has happened.

If dates are missed, the issue should get escalated and responsible parties must be held accountable. Remember, the documentation is useless without accountability and adherence to these deadlines. The time and cost of implementing and enforcing this process is significantly less than that which can be lost in downstream and recurring data problem solving.

Key Recommendations:

- Establish deadlines for each data point.
- Establish processes for notifying data owners when deadlines are missed.
- Build accountability into your process. Remember, deadlines are useless without accountability.

Best Practice #4

Strive for Automation

It goes without saying, but human intervention with data inevitably causes problems. Throughout your data management process, you'll want to minimize human touchpoints and strive for automation wherever possible.

Automation means things run 'automatically' without manual intervention. If there are human beings making changes to data or templates at run-time, the solution isn't really automated. If a human has to update mappings and synchronise changes or remember the exceptions, the solution isn't really automated. These human dependencies will cause errors, inconsistencies, and delays. There are many solutions available to asset managers that claim to provide 'automation', yet they allow (or require) end users to tweak things on the fly to accommodate their desired output. Sometimes they even allow end users to fix data points in the output file, rather than fixing the problem at the source. These solutions should be avoided at all costs - as they completely miss the advantages of a truly automated

and data-managed process, and can create huge risks and liabilities.

A true automation solution will allow source files of any kind. Then, once the file format has been established it is locked down like a template. In order to achieve maximum efficiency, you should think of your data files as structured and consistent templates, so that the process doesn't break. For example, if an automated system looks for "sector breakdown", but next time the header has been renamed "sector allocation", it can cause the automated system to break if not planned correctly.

This point stands to be repeated; Your operations should never require a human to update, enter, or change data manually. All changes should be made as close to the source file as possible so there is a proper audit trail. When we say "the source" we mean the truest source you can get to. This may not be possible in the case of a data provider like Morningstar or FactSet, but you should always strive to make changes at the original source whenever possible.

In addition, consistency within the data itself will improve success. For example, identifiers like benchmark, fund, or share class IDs should stay consistent across systems and data files. The most successful firms use a central repository to define their metadata. This way, there is less room for errors when using a single source of reference for identifiers.

Key Recommendations:

- Minimize human touch points – strive for a truly automated process
- Make all changes as close to the original source as possible so there is a proper audit trail
- Consistently define and use the same set of identifiers and metadata

Best Practice #5

Incorporate Data Validations

The longer a data problem goes unnoticed, the more expensive and disruptive it becomes to fix. When errors are caught late in the process, the cost to the firm can be significant. That said, the most cost effective time to catch data problems is when the data is received.

To catch errors as early as possible, establish a system to automate data validations. The system should support basic data existence validations as well as more advanced reviews. This kind of toolset must be easily extensible

and allow adding/adjusting validations to match changing requirements over time. The validation results should be actively provided as reports in order to achieve a well-organized and auditable process around automated data checking and reporting. These reports will illustrate both error and warning states on data in the warehouse.

The most basic validations can also be some of the most valuable. Checks for expected file landmarks, “as of” dates, and data existence provide immense value when they are automated and performed as early as possible in the process. Knowing that a 1-month return is missing up front rather than during document approval can trim hours if not days off your production process.

More advanced validations can be used to find more systemic problems in your data that may not be as apparent at first glance. A relatively simple validation that proves very valuable is checking that allocations and/or exposures sum to 100. The check will very quickly highlight an incomplete or incorrect data set having missing data or duplicates. Again, this is caught up front and not by an individual with a calculator checking a document.

Another good example is the Extreme Values validation. This validator sets thresholds to identify values which fall outside of a defined range or variance. This can catch glaring errors such as extremely large performance values or incorrect expense ratios.

All of these validations and others improve the quality of your materials and reduce the time it takes to produce them.

But the real trick to being successful with data validation relates to the ownership topic discussed above. Someone needs to read the validation report, understand it, and take action. We have more than one client who receives thorough and clear validation reports from our system but never actually open the file. Thus, they catch errors during document proofing that could have been caught days earlier.

Key Recommendations:

- Establish a flexible data validation system that can be enhanced over time.
- Ask your automation partner to provide recommendations for validators that can be fine-tuned to your firm’s unique needs.
- Some of these validators might include ways to identify new or missing products, data point existence, or missing data points. They might also be programmed to check for performance relevance, percent change, and risk measures like alpha, beta, and sharpe ratio checks.
- Read the validation reports!



Best Practice #6



Expect Change

As the old saying goes, the only constant in life is change. This is especially true when we're talking about the day in the life of an investment marketer. The market is always changing and so is the data used for sales and marketing content.

Due to the dynamic nature of the data, it's important to be proactive and have a process in place to handle changes.

For example, landmarks and headers in data files can change, but there must be a process for letting people know. Again, this is where documentation comes into play. What happens when a fund name changes? If the data changes after a certain date, do we go back and update the factsheet? The website? If a fund name changes, does it change everywhere? Going forward only, or historically too?

These things should be laid out as policy. There should be a documented process that should be followed so that automated processes don't break down.

If there are going to be a lot of changes, it helps to get all the stakeholders in the room who need to think through the impact. For example, if there's a new benchmark name, the data owner needs to be plugged into this process so they know how this will impact all the source files. By being proactive with your data, you can deal with ongoing changes quickly and seamlessly.

Key Recommendations:

- Have documented processes and policies that outline what happens when something changes
- If there are big changes or a lot of them at once, get all the stakeholders in the room to think through the impact

Best Practice #7

Separation of Concern

The amount of data movement, business rules, and formatting requirements to get a number from an upstream system and properly formatted into a document or website can be overwhelming at times. A key to making the overall process run smoother is to maintain a separation of concern between data transformations and formatting for delivery.

This separation of concern ensures that the complexities of data processing do not bleed into how the data is ultimately to be displayed, and vice versa. Data transformations or manipulations should not take place in a delivery engine. Data transformations should be known and named processes that take place centrally and are understood at a governance level. This creates sets of clean data that can be consumed downstream in any way and format conceivable.

The formatting and publishing of that content downstream is then the concern of the publishing/delivery engine. If a fund has a monthly return of 5.55%, the value is still 5.55% even if it is displayed in France as 5,55%.

Key Recommendations:

- Do not combine data processing and data display or delivery. These are separate disciplines and should be treated as such.
- Do not allow systems to duplicate business rules or transformation functions.
- Don't allow systems or processes to operate as black boxes with little exposure to how they derive their results.
- If there are big changes or a lot of them at once, get all the stakeholders in the room to think through the impact.



Best Practice #8

Establish a Budget for Data Management

In order for a data management initiative to be successful, there should be a budget allocated toward the proper processes and tools. This includes facilities supporting organized stewardship of data feeds, tracking of re-load and data batch processes, and a validation framework able to mathematically and statistically test the data and actively notify data owners and stewards of issues. This investment will pay for itself many times over.

The problem at many firms is that the care and maintenance of data reporting processes is funded as an on-again-off again effort, leaving large gaps. These gaps are filled with risky manual processes by the teams who manage output and delivery. Data governance and reporting should be thought of as critical responsibilities, funded specifically through reduction in the risk liabilities for the organization.

Key Recommendations:

- Data governance and reporting should be thought of as critical responsibilities, funded specifically through reduction in the risk liabilities for the organization.

Conclusion

Strong data management and data governance is the foundation for truly efficient marketing operations.

In order to be competitive, it's critical to create a sustainable data process that fuels your marketing engine and provides a return on investment. That's why leading asset managers are investing in data and content automation technology. And when it's implemented effectively, they get great results.

For a complimentary assessment of your data situation, reach out to us at 312-948-4949. We would be happy to have a discussion.

About Synthesis

Synthesis helps investment companies become more efficient, strategic, and customer-centric through data, marketing, and sales process automation. We work exclusively with investment companies to help them solve problems around the production, distribution, and effectiveness of marketing assets like factsheets, commentaries, sales presentations, email newsletters, and website content.

We offer highly flexible automation tools in tandem with first-class professional services. This model allows us to act as a true business partner to our clients, tailoring our solutions to their specific requirements.

With 18-years of financial industry experience, we are experts at streamlining complex data management, production, and distribution scenarios to maximize efficiency and minimize risk. Our clients range from some of the world's largest financial services organizations to middle-market and boutique firms, including asset and wealth managers, retirement plan providers, TAMPS, and hedge funds.

CHICAGO | NEW YORK | MUMBAI | BULGARIA



For more white papers and resources, visit our [website](http://www.synthesistechnology.com).