

The Importance of Business Process Maturity and Automation in Running a Hedge Fund

Know Your Score and Get to the “Sweet Spot”

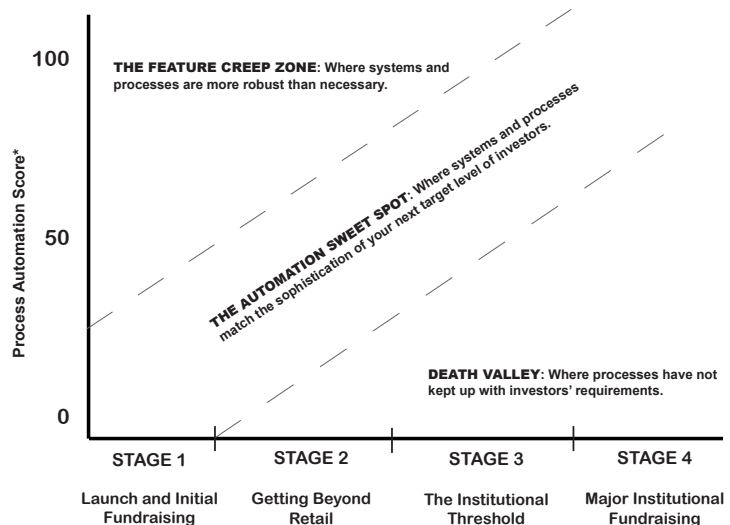
Executive Summary

Over the past two years, Merlin has published several white papers that are designed to highlight and help managers implement industry best practices – from shoring up their business model to identifying their target investors based on the development stage of their fund.

In continuing with this theme, our latest white paper discusses the importance of business process automation within an asset management firm at all stages of development and how these organizations can measure their current processes versus investor expectations.

It is critical that business process maturity and automation evolve over the life of a fund in a disciplined and forward-looking manner as they are key components to maintaining a scalable business. As a firm grows, processes that are maintained manually or with home-grown spreadsheets will stress and may break, adding business risk and overhead to a firm’s operations. This concept is especially important for fund managers because they cannot afford distractions and errors caused by broken or manual processes that affect the viability of the fund.

FINDING THE SWEET SPOT AND OPTIMAL PROCESS AUTOMATION



* As measured by the composite score on the Process Automation Score Sheet.

THE IMPORTANCE OF BUSINESS PROCESS AUTOMATION

Managers, investors and due diligence teams all analyze and measure the business risk and process maturity of a fund. Funds must continually review both their organizational structure as well as the level of automation resident in their systems and procedures. For example, it is easy to see key-man risk if only one person holds all the senior positions in a fund (chief compliance/operating/risk/financial officer, portfolio manager, trader, head of marketing, etc.) versus each role being occupied by a distinct experienced professional. Business process risk is as critical, but can be more difficult to identify. Manual processes, for example, are present in one form or another at all hedge funds. Some of these processes are obvious; trade reporting and position monitoring are done on paper or a home-grown spreadsheet or an operations person is tasked with pulling together reports each night by collecting data from disparate sources such as emails, the Web and prime brokerage reports. Many times, performance, financial, research and investor information are stored in ways that increase the risk of data corruption, loss or simple human error.

THE RISKS OF IGNORING BUSINESS PROCESS MATURITY AND AUTOMATION

A hedge fund's assets, number of strategies, the number and type of its investors, and the amount of people required to run a fund, invariably strain the original processes a fund used when it was a startup. At some point, legacy processes, lack of automation and the lack of delineated roles pose significant operational risk and often impede a fund's ability to scale and succeed.

For example, the use of spreadsheets to track positions, manage investors and calculate performance/risk/attribution, etc., is risky even when a hedge fund initially launches. In fact, because spreadsheets are so powerful – they are visual, quick, iterative, flexible, well-known and inexpensive – many hedge funds errone-

The Risks of Ignoring Business Process Maturity and Automation

Below is a partial list of the many risks a fund faces when it ignores process maturity in terms of Procedure, Workflow, Roles, Responsibilities and Data:

- o Lack of scalability
- o Lack of security
- o Vulnerable to inputting errors
- o Inefficiency
- o Difficult to collaborate
- o Lack of version control / auditability
- o Lack of timeliness
- o Compounding of errors
- o Negative investor perception
- o Difficult to manually build workflow and rules
- o Unreliable / ungoverned technology
- o No third-party validation

ously believe they have the same functionality of mature systems and as such become embedded. However, as a fund grows and its investors become increasingly institutional, the reliance on spreadsheets can be cumbersome and appear unprofessional. Existing investors may ask why their reports seem to be prepared manually and, in the worst case scenario, errors caused through spreadsheet use can seriously jeopardize a fund's credibility.



Knowing when to upgrade processes and technology and when to hire additional people is a common challenge for all businesses.



Furthermore, the sophisticated investors a fund seeks to attract as it grows expect a certain level of process maturity. Investor due diligence will quickly reveal where a fund comes up short. Due diligence teams and investors not only want to see scalable businesses and repeatable performance, but also want to see automated systems, processes and tools that are being used by sophisticated professionals.

As funds grow it is imperative that their business processes have the rules, controls and a level of automation that is commensurate with the growth of the fund and the type of investor being serviced. Funds that ignore the natural progression of process maturity will do so at their peril.

MEASURING BUSINESS PROCESS AUTOMATION

Merlin has created a score sheet for funds to assess and measure their process automation risk. We call it the Process Automation Score Sheet, or PASS.

The PASS analysis extends to:

- The processes and procedures for keeping track of a fund's critical information (performance, attribution, risk, investors, multi-primed assets, etc.); and,
- Reliance on either manual spreadsheets or automated tools that are scalable and not dependent on specific individuals.

Some funds may be perfectly content managing a limited amount of capital for a fixed number of investors. For them, the business process automation analysis is perhaps irrelevant. However, the majority of fund managers aspire to attract larger, higher-quality institutional investors. In order to do that, funds must build out certain processes today that will attract the investors it wishes to have

PROCESS AUTOMATION SCORE SHEET (PASS)

How reliant is your fund on manual processes and spreadsheets?

	TRADING			REPORTING				OPERATIONS & MIDDLE OFFICE			
PROCESS:	Pretrade Analytics and Compliance	Order and Execution Management	Post-Trade Allocations and Reporting	Portfolio Management	Risk Management	Performance and Attribution	Investor Reporting	Reconciliation and Aggregation	Portfolio Accounting	Compliance	TOTAL SCORE
SCORE (1-10)											

How to score each category

For each process, score your process automation levels as appropriate within the following ranges:

1 - 2 = **Manual Processes:** Most tasks are performed by an individual manually or using spreadsheets. There are generally no formal controls, little automation and the process is highly dependent on a specific individual.

3 - 5 = **Basic Process Structure:** Processes are controlled, clearly defined with basic data flows in place and some automation. Controls and rules are generally still manual decisions.

6 - 8 = **Mostly Automated:** Processes are based upon data that is sourced electronically and most rules and controls are driven by automation. Dependency on spreadsheets is very low.

9 - 10 = **Fully Automated Processes:** All aspects of data flow, validation and reconciliation are not manual. Clearly documented processes and automated systems. This process is not dependent on any individual or spreadsheet.

Interpreting the PASS score

10 - 40 Small or startup funds that primarily have friends and family investors. Investors not typically requiring DDQs.

40 - 60 Emerging managers that are preparing their business for growth and the requirements of more institutional investors.

60 - 80 Established funds with significant institutional allocations and separately managed accounts.

80 - 100 Large funds with a mature organization that are targeting large institutional investors.

tomorrow. A process that is tolerated by investors in the early stages of a fund’s lifecycle will likely not be acceptable to investors in later stage funds and will almost certainly be disallowed by the institutional investors who allocate to mature, successful funds (see [Merlin Spectrum of Hedge Fund Investors](#) white paper).

Knowing when to upgrade processes and technology and when to hire additional people is a common challenge for all businesses. The Process Automation Score Sheet (PASS) is a simple tool to help managers identify their current stage of automation across ten high-level process components.

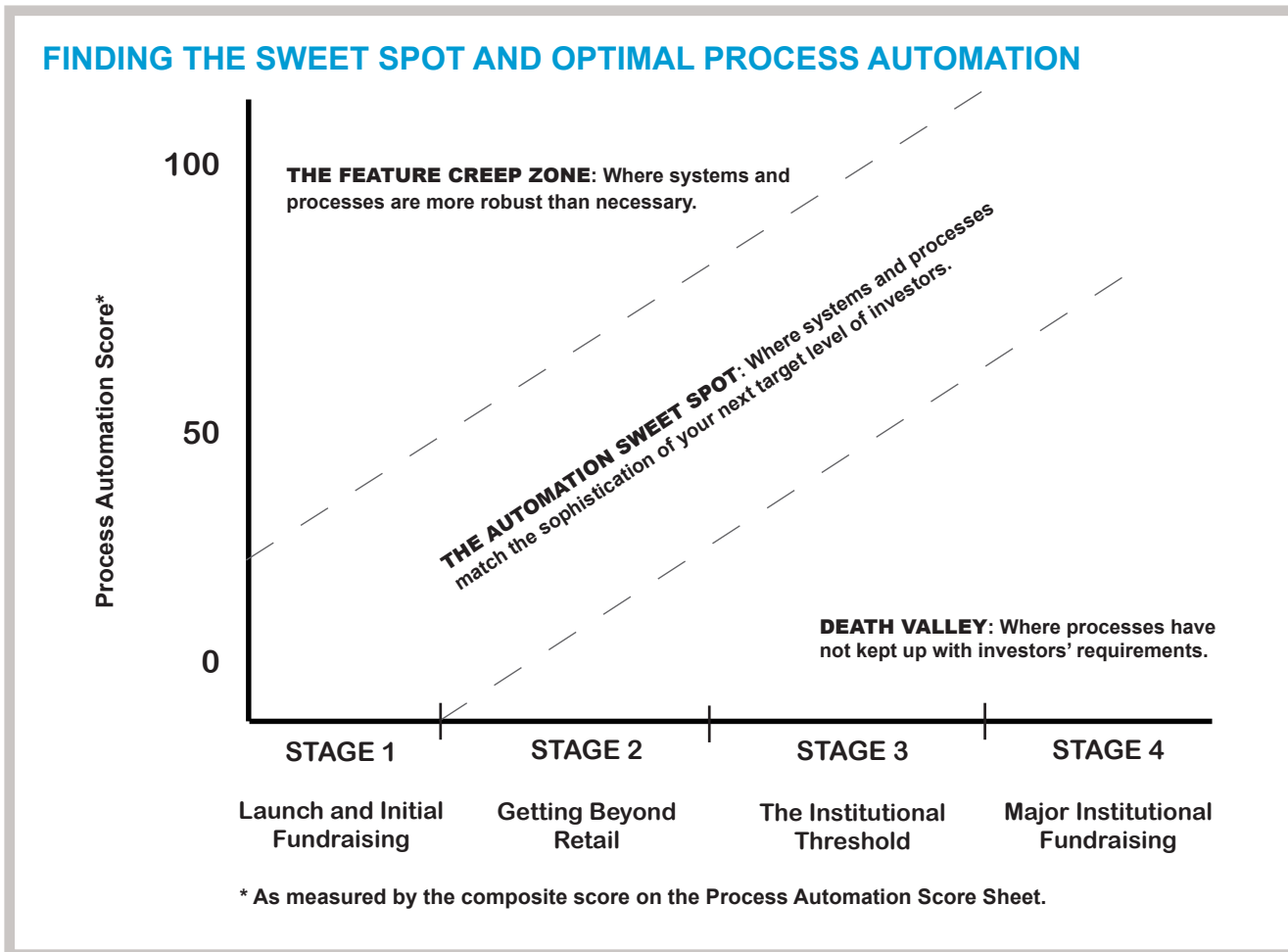
THE BUSINESS PROCESS AUTOMATION SWEET SPOT

Once a fund fills out the score sheet and receives its PASS score, that score is placed on the Automation Sweet Spot chart. Managers can then see whether they are ahead of or behind the curve

when it comes to automating the processes that govern their business based on their fund’s stage of development.

If a fund’s score puts it below the Sweet Spot, its processes are overly manual and represent risk to the principals and investors. The scores earned from the PASS will help managers and operators identify where the technology and process gaps exist – in trading, reporting, operations or the middle office. Similarly, if a fund’s score places them above the Sweet Spot, it may become clear that it has invested too much or too early in processes and may need to reassess.

With the PASS results, managers can map expenditures to the achievement of specific fund milestones such as asset growth or number of strategies. As investment management firms grow their assets, having this roadmap makes it much easier for them to invest for growth in the right areas at the right time rather than try to rapidly catch up to it. These tools help managers avoid investing in unnecessary processes that exceed their actual needs or people who will put their firms and their client’s money at risk.



THE CHALLENGE: GETTING A FUND INTO THE SWEET SPOT

The remainder of this paper examines the strategic approaches managers can implement to get their business into the Sweet Spot.

There are three basic ways a fund can institutionalize processes:

- Build new systems in-house;
- Buy prepackaged solutions, integrate and customize them to meet its needs; or,
- Outsource to a third-party technology provider.

Build, Buy, or Outsource? Three Approaches to Automating a Hedge Fund’s Processes		BUILD	BUY	OUTSOURCE
Requirements Profile		High degree of specialization Significant competitive differentiation Larger user base	Low to moderate specialization Low to moderate competitive differentiation Smaller user base	Low to moderate specialization and competitive differentiation Smaller user base Desire to minimize infrastructure Desire to outsource operational functions
Factors	Flexibility	High	Medium	Medium
	Maintainability	Low	Medium	High
	Operational Cost	Medium	Medium	Low
	Cost	High	Medium	Low
Net Advantages		Ultimate flexibility in solution Proprietary differentiation	Time to market Robust feature set at a lower cost Maintain control over infrastructure	Time to market Robust feature set Optimal cost efficiency
Net Disadvantages		High cost to implement and maintain Quality and reliability risk	Complex integration Dependency on vendor Infrastructure and maintenance costs	Fully dependent on vendor for maintenance and controls

Most funds will be guided by a general bias toward one of these options, however, a fund can, where appropriate, utilize a mix of solutions to create the optimal process. As detailed in a previous Merlin white paper called [The Business of Running a Hedge Fund](#), the most cost-effective way for smaller and mid-size funds to implement mature processes is typically through outsourcing. Larger funds, on the other hand, with significant assets, strong recurring revenues and an existing technology infrastructure, may be best served by building their own process solutions alongside the proprietary systems they already have in place.

Even for very large funds, however, the case for third-party solutions is compelling. They can represent a variable rather than fixed cost and can scale in capacity as needed without additional servers and data center space. Funds can also use third-party solutions to lower their overall technology

spend and leverage the scale that those providers have achieved by selling solutions to a broad marketplace of clients. Finally, outsourced technology providers have a very strong market-driven motivation to stay on the cutting edge – to keep pace with changing asset classes and securities, as well as the demands of regulators, investors and, of course, managers.

CONCLUSION

The business landscape has changed dramatically for both hedge fund managers and the investment community over the past several years. The industry has matured to the point where managers must cater to the needs of institutional investors in order to grow and thrive. In addition, new risk, reporting and regulatory requirements, along with volatile markets, make having reliable automated processes essential components to running an efficient hedge fund. Manual work, key-man risk and a reliance on spreadsheets will be clear red flags to investors and prospects alike.

As a result, possessing the optimal levels of process maturity and automation are no longer just a luxury. Rather, hedge funds seeking to retain institutional assets, grow their AUM and attract more sophisticated investors must look ahead and be prepared to invest in and proactively deploy long-term solutions.

“ *Hedge funds seeking to retain institutional assets, grow their AUM and attract more sophisticated investors must look ahead and be prepared to invest in and proactively deploy long-term solutions.* ”

To successfully accomplish this, managers must truly understand where the current and future gaps exist in their businesses' process maturity and automation and what technology solutions they will need to remedy those gaps. Understanding this through the PASS analysis, and then striving to remain in the Automation Sweet Spot, gives managers a navigable plan as to when to commit the capital and resources required to achieve the process maturity and automation that is commensurate with both the current stage of the fund and where they wish to be in the future.

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