SUNGARD® APT

WHITE PAPER

A PRACTICAL GUIDE TO DEVELOPING A HOLISTIC RISK CULTURE IN INVESTMENT FIRMS

CONTENTS

Introduction: The risk gap

85% of participants in the 2012 Buy-side Market Risk Management Trends survey published by PRMIA earlier this year indicated that risk management would become more central to raising assets over the near term. Yet at the same time, the survey also revealed that demonstrating the value of risk management remains the biggest challenge for risk managers within their organizations.

Post-Lehman, risk information has been in high demand amongst the senior staff of financial services firms who interact with sophisticated investors and increasingly inquisitive regulators. Still, evidence suggests the existence of a "risk gap" among risk managers and risk takers like fund managers, traders and others in the front office who continue to view risk management as an 'after the fact' middle office reporting routine for investors and regulators.

In effect, many risk takers are still not making full use of risk information on a pre-trade basis and are thus not integrating risk into their investment decisions. Until the value of good risk management is effectively championed throughout the organization, traders and portfolio managers who are not already risk-aware will continue to go about their business as usual – until an unexpected risk exposure signals the end of their good run and makes them wonder where it all went wrong.

The need to create a culture of risk within firms is a recurring theme we encounter when speaking with our clients, who range from asset management firms in Australia to broker dealers in the USA. The aim of this white paper is to share some of the insights we have gained from SunGard APT's clients in various meetings and presentations, in order to provide you with actionable insight on how to create a culture of risk that puts risk at the heart of the investment process in your organization.

Creating a risk culture: Top down or bottom up approach?

The question is how to create a risk culture that permeates all levels and functions in an organization. While a top-down approach driven by senior management will ensure that all staff are aware of the value attached to risk management by management, this strategy is likely to result in a compliance-focused risk culture that is validated by the written and spoken word, rather than by everyday actions.

Yet a 'bottom up' approach that relies on risk managers taking the lead in creating a risk-aware culture is doomed to failure if they do not have the support of the firm's senior management and front office 'rain makers' – after all, this is where the organizational power is situated within financial firms.

This starts at the top with senior executives including CIO's acting as risk management "champions," ensuring that all business initiatives are evaluated on a consistent risk-adjusted, return-on-capital basis, rather than being driven by prescriptive regulatory requirements.

The five steps set out below are based on feedback we received from SunGard APT's clients and insight shared by participants at SunGard's industry events and in industry surveys conducted by SunGard. The aim is to provide CIOs, CEOs and risk managers with a practical guide to creating an organizational culture that puts risk as well as return considerations at the core of all investment decisions.

Since the beginning of the financial crisis in 2008, many observers have argued that an over-reliance on risk models and risk measures like VaR have contributed to the financial crisis. This white paper proposes that risk tools and technology are important elements to the successful execution of risk management, but that good risk management starts with a culture that encourages risk and return to be seen as one, rather than separate aspects of the investment process.

Step 1: Self-assessment – Does your firm have good risk awareness?

Risk awareness should be a priority for every company, and figure prominently in the formulation of one's business strategies.

Find out if your organization is sufficiently risk aware by asking the following three questions:

1. Is your company's risk appetite clearly defined?
2. What are your company's goals?
3. Is your risk appetite properly aligned with the company's goals?

Action point: If your firm is in the enviable position of answering yes to questions 1 and 3, and has a clear and shared understanding of corporate objectives, the next step is to make sure that the stated risk appetite is communicated within the company as well as externally to clients, investors, regulators and other external stakeholders.

Open communication on this point will help staff gain a shared understanding of risk and risk taking, and investors will be able to use this information to find the right firm to match their own risk appetites, while regulators will find this information useful in terms of expectation setting.

Step 2: Creating an organizational risk culture - To-do list

To prevent silos and inconsistencies across the firm, risk management processes should be established on an enterprise-wide basis, and have clear boundaries.

One of SunGard APT's clients has experienced great success in increasing front-office risk awareness is by creating a risk "to-do" list, based on the organization's unique internal, external and risk-management profile. Tasks on the to-do list include:

I. Identifying risks: documenting all possible threats to the company's achievement of its stated objectives.

II. Analyzing/quantifying risks: the calibration and, where possible, creation of probability distributions of outcomes for each material risk.

III. Integrating risks: the aggregation of all risk distributions, reflecting correlations and portfolio effects, and the formulation of the results in terms of their impact on the organization's key performance metrics.

IV. Assessing/prioritizing risks: the determination of the contribution of each risk to the aggregate risk profile, and appropriate prioritization.

V. Treating/exploiting risks: the development of strategies for controlling and exploiting the various risks.

VI. Monitoring current/future risks: monitoring the performance of established risk management strategies against the current risk environment; keeping tabs on the emerging regulatory environment and possible risks that could develop over the near-term.

Action point: Draw up and implement a risk to-do list for your firm.

Step 3: Putting risk managers on the trading floor and in trading minds

Having senior management buy-in is part of the mission; risk managers can then build on this by drawing up firm-specific risk to-do lists and evangelizing within their firms – by going native. In a well-developed risk culture, pro-active risk managers regularly consult with the organization's key "risk takers," and also have a thorough understanding of the strategies, products and process that are capable of producing risk.

Risk management teams that work in an independent and disconnected way from the investment management teams tend to foster a culture of physical (and perceived) detachment from the front office.

Under these circumstances, it is no wonder that many fund managers think of risk as little more than a control function, rather than something that is capable of bringing real value to the investment cycle. Accordingly, organizations must work to establish the notion that risk is a true value-add proposition—and key to this effort is 'sharing' risk with the front office. After all, fund managers own the portfolio risk; therefore, the goal is to improve their understanding and management of this risk, using internal papers, research projects, as well as ongoing consultations between the front office and risk teams.

Action point: Sit with the portfolio managers, learn about their products and gain their respect.

Step 4: Measuring risk in many forms and asset classes

In some instances, trading desks have "embedded" risk functions that are designed to exclusively defend their own territory, rather than handle all front-office processes. This is often exacerbated by a lack of understanding as to how risk models function, as well as the perception that one model may be suitable for some asset classes, but not all of the ones invested in by front office. This inability to view risk holistically can result in the creation of risk models that are not capable of properly functioning across multiple asset classes.

Action point: Check if your firm is using different methodologies and models for managing risk in public equities, fixed income, unlisted assets and derivatives and make sure risk is measured consistently.

Step 5: Putting the right techniques, tools and technology in place

Risk dashboards that include pre-trade risk analysis as well as scenario analysis or "war-gaming" have proven enormously effective as a pre-emptive defense mechanism against emerging risk and shocks to the markets. Bringing this technology into the front office is crucial for any company looking for ways to stave off the negative impact of macro events such as a Eurozone break-up or a China slowdown on a pre-emptive basis. Using SunGard APT, portfolio managers and traders can gain insight into the many forms of "actionable risk," while creating an enterprise-wide risk culture that allows firms to steer clear of potential shocks in the making.

Timely reporting is a must and all of this effort will be wasted if risk managers cannot provide the front office with timely and accurate reporting. A risk dashboard that is not regularly updated or a monthly report that is delivered 10 days after the close of the previous month will not meet the stringent demands of the busy fund manager; a daily rundown, made available when the manager arrives for work each morning, is paramount.

Data must be consistently on the mark– if fund managers perceive that the report presented contains inaccurate market data, it will most likely be thrown away rather than acted on. Risk management teams must be prepared to communicate with the front office to ensure that fund managers concur with the data presented; to further add value, risk reports should be combined when possible with other analytical documents in order to give managers a one-shot view of current risks and associated returns generated within the portfolio. Above all, care should be taken to ensure that the statistics presented are properly aligned with the objectives of the underlying investment vehicle.

What-if scenario analysis must be included in any discussion of risk and the front office. Having this kind of forward-looking capability allows fund managers to view potential impacts on portfolio risk directly from their desktop under a number of different circumstances, such as when the manager enacts a proposed trade, tests changes in market conditions, or uses different modeling assumptions. With scenario analysis, managers are privy to a range of shocks that have recently impacted the markets to discover how correlations change during these crises, then subsequently create plausible forward-looking scenarios for shocks in the making.

Conclusion: To the front

One of the most significant challenges that CEOs, CIOs and risk practitioners face is establishing a risk culture that goes beyond regulatory reporting and compliance. Many managers feel that the most effective way of doing this is to take the risk function out of the back and middle offices and bring it directly to those on the frontline. This is no easy task, however. Though market volatility continues to be the order of the day, reduced investment in risk technologies will impact fund managers' ability to obtain the mechanisms needed to mitigate risk in a meaningful fashion. In a recent survey conducted on behalf of SunGard by the London-based Economist Intelligence Unit (EIU), almost one-third of respondents indicated they lacked reliable methods to protect their clients from risk exposure.

In order to create a truly effective risk management environment, those in the front office must have the means to look beyond the here-and-now. The key challenge, then, is to offer fund managers additional sources of information that enable them to view the potential impacts of macro or systematic risk situations.

Managers require technology and tools that can deliver a more holistic view of risk. This can be achieved through the development of a scenario analysis framework that is designed to work in conjunction with conventional risk reporting mechanisms.

Progress is already being made. Some 73% of participants polled during a recent SunGard webinar indicated they were already using risk tools in the front office, while 65% said their firm had a sound risk culture. Given the prospect for continued low returns on risk-free assets, as well as the possibility of more volatility affecting the global markets, it is imperative that that the remaining 35% bring risk into the front office and create a holistic risk culture now.

Risk culture checklist

- Select a set of risk indicators that best fit the company's individual investment profile
- Establish a holistic "risk culture" that underscores the notion of shared risk while emphasizing the value of risk within the entire organization
- Provide risk dashboards for managers and others in the front office
- Create risk reports for the front office that are timely and accurate
- Utilize scenario analysis to help those in the front office better understand the potential impact of macro shocks on the investment portfolio

About APT

SunGard's APT provides investment technology for a broad range of asset classes, countries and regions including data and software for understanding market risk, credit risk, liquidity risk and for portfolio construction and performance analysis. APT provides investors with statistical market risk models, performance and risk analytics and portfolio optimization and construction tools. APT's customers include institutional and retail asset managers, pension funds, private wealth managers, hedge funds, broker/dealers, prime brokers and proprietary traders.

About SunGard

SunGard is one of the world's leading software and technology services companies. SunGard has more than 17,000 employees and serves approximately 25,000 customers in more than 70 countries. SunGard provides software and processing solutions for financial services, education and the public sector. SunGard also provides disaster recovery services, managed IT services, information availability consulting services and business continuity management software. With annual revenue of about $4.5 billion, SunGard is the largest privately held software and services company and is ranked 480 on the Fortune 500.

For more information, please visit:
www.sungard.com/apt/learnmore
www.sungard.com

Contact us
am.solutions@sungard.com

NEW YORK
Tel: +1 646 445 1018

LONDON
Tel: +44 20 8081 3300

PARIS
Tel: +33 1 53 05 95 95

JOHANNESBURG
Tel: +27 11 430 7600

SINGAPORE
Tel: +65 6308 8000

HONG KONG
Tel: +852 3 719 0800

MIDDLE EAST
Tel: +971 4 3911180

SYDNEY
Tel: +61 2 8224 0055