Risk is the element that hedge fund managers above all others, are supposed to thrive on, but members of the industry long ago understood that there are many more facets to the concept than the market volatility that brings opportunities to the strong-nerved. Indeed, the past few years have highlighted the factors memorably described by US Secretary of Defence Donald Rumsfeld, in another context, as “unknown unknowns” – risks that could not be protected against because their very possibility was not conceived of.

A recent white paper from Advent Software on Managing Risk in a New World: Best Practices for Hedge Funds, highlights some of the risks that were unknown in early 2007 but are all too familiar today. “Monitoring and managing historical risks is still crucial for hedge fund managers; however, the scope of what they monitor has grown,” the report says. “While fund risk metrics used to focus primarily on beta and ‘the Greeks’, today funds must also consider risks arising from globalisation, product proliferation, greater trading sophistication and even the financial crisis itself.”

Advent spotlights various historical risks that were familiar to managers and investors before the crisis but to which insufficient attention was paid in some cases. Market risk was illustrated by the correlated meltdown of disparate markets precipitated by the collapse of the US sub-prime mortgage market, and specific risk by the disproportionately severe and sustained impact upon the financial sector.

The crisis also spotlighted credit risk through the default on the part of issuers of collateralised mortgage and debt obligations based on sub-prime mortgages and other overheated areas of the credit market, and by the problems faced by credit default swap counterparties that offered credit protection beyond their ability to pay. Liquidity risk emerged when markets for whole swathes of assets offered by distressed sellers disappeared.

At the same time, Advent says, the crisis brought some of the “unknown unknowns”, or emerging risks, into view. They include counterparty risk, most prominently illustrated by the collapse of Lehman Brothers and the subsequent freezing of substantial volumes...
of hedge fund assets in London, but also the
drying up of stock lending and the curtailing
of leverage by prime brokers; issuer/name
risk, including the complex mix of different
types of security issued by a single company;
operational risk, which was often exacerbated
by the stresses placed on businesses by the
crisis; and reputational risk, which can lead to
businesses failing as a result of redemptions
by investors who no longer trust or have
confidence in the manager.

Already, the report says, best practice has
evolved in the light of these developments.
For example, hedge fund managers
have sought to diversify their range of
prime brokerage relationships to reduce
counterparty risk, or – where possible – to
change the terms governing use of the
assets lodged as collateral. And like it or
not, most managers are having to provide
a much greater degree of transparency into
their investment processes and operational
procedures – including risk management
itself – in order to reassure investors about
their ability to deliver on their promises.

What’s certain is that the ‘seat of the pants’
approach to risk management is history, says
chief executive Liam Huxley of Syncova,
a vendor of margining and financing cost
software to hedge fund managers and prime
brokers. “Hedge funds used to be launched
by traders who came out of proprietary
trading desks, and they tended to be focused
on investment decisions and trading rather
than operations,” he says.

“Amid all the turbulence in the market
over the past two years, there has been an
overall trend toward greater structure, stronger
processes and systems in the middle and
back office, across the board from pure market
risk management to operational and liquidity
risk. We see that trend only accelerating in the
future because of ever-increasing awareness
of the need for control and analytics. Obviously

how much a manager can invest in technology
depends upon the size of their funds, but
we’re also working with third parties such as
fund administrators to provide some of these
services to smaller firms.”

One of the most important areas of focus
for all members of the industry is the due
diligence necessary before entering into
a broad range of business relationships,
from the manager’s examination of a fund
administrator’s or custodian’s systems to the
research undertaken by investors before taking
decisions on where to place their money. And
inevitably, since the crisis shone a light on
numerous cases of negligence and outright
fraud, the honesty and reputation as well as
capability of counterparties is a key focus.

It all means additional work for companies
such as World-Check, which today has
more than 220 people serving the worldwide
customer base of its enhanced due diligence
business. The firm’s Hong Kong-based head
of enhanced due diligence operations, Doug
Nairne, says that even though the crisis
temporarily slowed growth of activity from
banking clients, overall activity has been
boosted by other firms starting to take due
diligence more seriously than in the past.

“Money laundering is still as important
as ever, it’s always an ongoing issue,” he
says. “Most of the financial industry is now
alert, sophisticated and prepared enough to
be much better at detecting and countering
money laundering than they would have
been 10 years ago. Huge strides have been
made, but it will probably go on as long as
criminals have money and there are banks in
which they can launder it.”

Nairne says a turning point was the 9/11
attacks on the US, which suddenly brought
home the importance of monitoring financial
flows and added preventing the financing of
terrorism alongside efforts to counter money
laundering as a key priority for the financial
industry, regulators and law enforcement
agencies. “The attacks brought home that it’s
not just narco-trafficers that attempt money
laundering but other sorts of criminal, and
terrorists too. Often they can be one and
the same.”

Internally, IT security has also become
a bigger focus – ironically, in part because
of the theft of data from private banks and
wealth managers that was subsequently sold
on to national tax authorities. But there has also been increased concern about identity theft and the online manipulation of customer accounts, on top of the longstanding desire for confidentiality shared by many hedge fund managers with their investors.

“Security is clearly viewed as extremely important in the hedge fund industry and elsewhere,” says Paul Compton, head of product management for alternative investments business at software provider SunGard. “However, the financial world has become a lot more comfortable with the idea of very commercially sensitive data being held off-site and being exchanged through the wires.

“It’s now very standard for firms to hold customer relationship management data offsite, because the CRM space is an application service provider model” in which services are provided over electronic networks. “Five years ago hedge funds might have been reluctant to put their positions on someone else’s server, but most attitudes have changed. Today sensitive files don’t get sent over the internet without being encrypted and scrambled. There is no way anyone intercepting one of those files could make any sense of the data unless they had the context and the key for it.”

Compton notes that while the crisis has pushed more managers to employ third-party administrators, especially in the US where the practice used not to be as prevalent as in Europe, it has also prompted managers to monitor the work of their independent service providers more closely. “Most funds have a third-party administrator responsible for independently calculating and verifying their NAV, but we find that more and more hedge fund managers are effectively shadowing that process.

“There will be a daily process of reconciling the positions with the administrator’s view of those positions and conducting analysis if there is any variance between the numbers. That can be a time-consuming process, and that is one of the areas where technology can help a lot. We have accounting systems that enable managers to do this.”

Lance Smith, chief executive of Imagine Software, cautions that judgement must be exercised about some of the risk measurement techniques upon which managers rely, notably value at risk. “VaR does have some usefulness because you run it every day, so if it changes suddenly, something’s happened in your portfolio that you need to investigate,” he says. “It can be an early warning that something has changed, or that you have perhaps unknowingly taken on some directional exposure. But you still have to go in and figure out what it is.

“It’s critical to accompany VaR with other ways of looking at risk. The risk in a portfolio is not just single numbers but multidimensional. One of the things you do to complement VaR is to conduct stress tests, but what people don’t talk about is how exactly to design them. You want to look at something that is unlikely, but not so unlikely that that you can ignore it.

“Some of the stress tests people carry out don’t seem on target. They move the market and the volatility up and down and see what happens. That traditional method can mask what’s going on because you’re looking for a grain of sand on the beach. You have far too many numbers and you don’t know which ones matter.”

Smith argues that more work needs to be done to design stress tests according to the trading strategy in question. “It’s very important to take into account all the underlying factors - for example, equity prices, yield curve, credit spreads and defaults,” he says. “You need to be able to experiment with all the underlying factors. A risk practitioner with experience of the market has access to a lot of historical data to help them design a meaningful test.” But he adds: “All the same, you don’t want to over-engineer stress tests. The market always surprises you with something new.”

Readiness to manager unforeseen risk is part of the challenge facing the industry, according to the Advent study. “In light of the inevitable risks that come from the pursuit of superior absolute returns, hedge funds have long recognised the need for effective risk management and monitoring capabilities,” the report says. “Yet as the 2008-09 crisis illustrates, events can get out of control quickly. In the face of faster trading speeds, increased volume, growing instrument complexity and greater globalisation, hedge funds must manage a wider array of risks today than even five years ago.”