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Financial IT

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Founders' Letter

As the financial services world emerges from the financial and economic disasters of recent times, it will generate an explosion of change from market structures to regulatory objectives and, perhaps most importantly, a return to meeting the needs of investors and society as a whole.

History will determine if the future years of change are successful, or fraught with anxiety and danger. What is certain is that it will be the most challenging time that the various protagonists in financial IT have experienced in their lifetimes. Technology of all types will be the bedrock of change. To a great degree, it will be the capability of technologists allied with the imagination of management that will be one of the key determining factors of industry success.

There has been criticism of the financial services industry. It has lost the respect of politicians, regulators and the public. It has been accused of being too defensive of change and protective of outdated practices and systems. This might be an unfair reproach for particular financial institutions, but this statement will resonate more or less with everyone to a point. This new publication, Financial IT, intends to be vibrant and to question convention and established practices. It will be an advocate for change where change is necessary. This is an important point to make, as although all in the garden is not rosy, there are certainly many things that financial institutions do well: it is very important that this be recognised and applauded.

The introduction of Financial IT at this time is both daunting and exciting. We are launching at a time of great change and almost revolutionary prospects for the financial services industry, as it seeks to win back lost confidence of all in society. Financial IT will concentrate on technology change for the good. It will provide a unique and valuable forum for people involved in the change process to learn and exchange ideas and knowledge – as technology cements its pivotal role in supporting the financial markets.

Financial IT will also reflect the changing environment in business and operations when appropriate. It will thus enable new ideas and thoughts – and, hopefully, motivations – of key actors, whether in technology or business operations. It has been difficult for the media to reflect accurately the real values of technology, whether old or new, against the backdrop of aggressive development and marketing. This has confused the buyers in the marketplace and has detrimentally elongated the procurement process. Our aim is to attempt to address the industry weakness by assessing in simple-to-understand terms the products, and how they are meant to produce beneficial outcomes.

Financial IT makes a firm commitment to software vendors that are vital to the success of the future to showcase and examine new products and technologies with deep enquiring analysis. That, at the same time, will provide people in financial institutions with the best possible awareness of the latest trends and developments: this should help them reach the business and operational zenith that they aspire too.

Financial IT is launched in association with B.I.S.S. Research as a contributing source of content. This will range from editorials to industry benchmark reports, whitepapers and general areas of discussion that are deserving of debate. The content will be unique in its creation and should form an important and valued source of intellectual stimulus for readers. We are excited to have engaged in this project and believe that Financial IT can become the most important and valued publication in the area of financial technology development – and, most importantly, its application.

Our mission is to provide a publication that is respected, widely read and valued by all those involved with technology in financial services, both vendors and institutions. It will increase awareness and education in relation to the latest developments in the global markets. The magazine will always be cutting-edge and endeavour to project the views of the financial services industry, from the extreme to the conventional. The global financial services industry is made up of thousands of different business communities and product and service offerings. Too many markets look fragmented and dysfunctional. However, with the launch of Financial IT, we hope that we can provide a forum that creates togetherness. We respond to a challenging environment by fostering intellectual provocation, in order to provide an impetus for change and development.

So, finally, we smash the Champagne bottle and launch Financial IT.

Sincerely,

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Editor's Letter

Welcome to the inaugural edition of Financial IT.

Andrew Hutchings
Editor-In-Chief

As our name indicates, we focus on the provision of services and solutions by the global Information Technology sector to institutions within the broadly defined financial services sector. Unlike other publishers, we seek to do this from the point of view of the IT companies.

We like to think that we have identified a space in the trade media that is both important and exciting. More than ever, it is vital for leaders in both the IT and the financial services sectors to collaborate. We seek to promote the dialogue, and identification of key issues, that will facilitate that collaboration.

The challenges facing the global financial services sector are numerous and well-known. With interest rates at extremely low levels in much of the developed world, it is far harder than it used to be for financial institutions to profit from interest margins. Credit growth has been constrained by the desire of households, businesses (and governments) to strengthen balance sheets. Competitive pressures are forcing fees downwards. Customers require greater levels of service. Demands from regulators are also growing: in some cases, they are forcing financial services organisations to rethink their entire business models.

Less well understood is the impact of the legacy systems that are used by financial institutions. Many of them are variants of systems that were originally developed in the 1980s, when the global economy as it is today did not exist. The main limitation of legacy systems is that they will typically not produce information that can be used conveniently as soon as the institution in question moves beyond one country or one activity. Systems that are developed to support small numbers of institutional accounts for an asset management company will not necessary work efficiently with large numbers of smaller wealth management accounts, for instance. Expansion by way of acquisition usually involves the incorporation of different systems. Legacy systems typically do not allow scalability.

Many financial institutions have tolerated having to work with a patchwork of legacy systems. The institutions have done the best that they can by linking the legacy systems with middleware, spreadsheets and other ad hoc solutions. In some cases, the inadequacies of the legacy systems have been left unaddressed because of perceptions that change will be costly and/or risky – if not because of outright bureaucratic inertia.

As the thought leadership interviews in this edition of Financial IT note, the companies that have developed legacy systems have, over time, generally made substantial improvements to them. However, recent events have highlighted how it has become crucial for the financial services industry to address the limitations of legacy systems. In the current global financial and economic environment, it is far easier for institutions to suffer massive monetary losses because senior management did not have all the information that it needed. It is this challenge – of a lack of transparency – which poses a far greater threat than once-in-a-lifetime financial crisis or fraud that is perpetrated by a rogue trader.

In short, the implications for senior management of not having the data they need on a 24/7 basis are much more serious than they were five years ago. However, the world is a very different place to what it was even two years ago. Since 2010, the IT sector has made huge progress with the development of systems-based solutions that can be delivered via the Internet. Cloud computing, for instance, makes it possible for financial institutions to access best-in-class solutions and to link them in order to provide the information that is needed on a continual basis. The new solutions that are available permit scalability. Cloud computing also greatly reduces the risks that can arise from systems failure, the physical destruction of offices and other catastrophes.

In other words, two trends have coincided. The problems for the financial services sector that arise from legacy systems have become critical at the same time that the IT sector has become able to provide radical and positive solutions. The changes that will likely take place in the field of financial services IT in the next five years will be huge relative to those that have taken place over the last 30 years. Financial services institutions that make the substantial investment to take advantage of the solutions that have just become available will dramatically reduce business risk, lower operating costs and enhance their ability to grow – whether organically or by acquisition. IT companies that can provide these solutions will flourish.

The Cloud

A key part of the overall solution

Financial IT magazine spoke with David Csiki of INDATA about the IT challenges facing asset managers – and other buy-side financial institutions.

Dave, if you had to identify the most important challenge arising from IT systems in financial institutions today in no more than three words, how would you respond?

Regulation. Opacity. Inefficiency. The challenges facing asset managers and other buy-side financial institutions whom we serve are multifaceted. Regulatory change almost invariably imposes higher costs – and greater penalties when things go wrong. Yet this is at a time when most of the commercial trends in asset management – and across financial services generally – are consistent with lower prices and margins. Regulatory uncertainty is a problem because it often forces companies to delay important decisions.

And opacity?

Opacity is the opposite of transparency. It is the situation that prevails when the top management team in a business is quite unable to see the company's global situation. It is opacity, rather than criminality or once-in-a-lifetime financial crisis, that typically causes financial institutions to implode. Opacity usually results from reliance on large numbers of legacy systems that are only partially compatible with each other. The people who are tasked with analysing the business are, too often, reliant on spreadsheets and other ad hoc solutions to transfer essential information between the systems. Quite often the profusion of systems arises from the need for different information in different jurisdictions. It also often arises from the acquisition by one company of another. Nevertheless, the opacity that results from incompatible systems is a problem for relatively small and simple asset managers, as well as for highly complex financial services companies.

Of course, incompatible systems don't just give rise to opacity. They also typically ensure that the firm in question operates with less than optimal efficiency.

That is right. Remember also that most buy-side firms are operating in a super-competitive environment at the moment. Fees are being compressed. The absolute returns that are available to investors are reduced in an environment of low inflation and (near-)zero interest rates. It is difficult to achieve real efficiency unless one looks at the organisation's overall information needs in a holistic way: that is something that is very difficult to do if the organisation is reliant on a multitude of legacy systems.

Are you finding that many of the buy-side firms that you are speaking to are continuing to manage with the legacy systems? Alternatively, is there a real desire to find better ways of collecting and processing the information that is needed?

It varies quite widely. At some of the larger firms, decision-making is delayed by bureaucratic inertia. However, I'd

David Csiki is Managing Director and a Principal of INDATA. As Managing Director, he maintains a constant "pulse" on the changing technology and operational needs of investment management firms to support the entire investment management process. He was previously Manager of Marketing and Investor Relations at Trinitech Systems, Inc. (now NYSE Technologies) and was instrumental in developing the product concept and planning the successful launch of the company's flagship product NYFIX, an electronic communications network using the FIX protocol. He is a regular contributor to leading industry publications. His comments have been widely cited in industry research notes published by specialist consultancies and sell-side firms.

INDATA®
iPM – Intelligent Portfolio Management®

INDATA provides software and services to a variety of buy-side clients including asset managers, registered investment advisors, banks and wealth management firms, pension funds and hedge funds. The assets under management of INDATA's clients range from approximately US$25mn to over US$80bn across a variety of asset classes. INDATA's products include trade order management (OMS), compliance, portfolio accounting and front-to-back office technology solutions.

stress that many of our clients, who are predominantly based in the United States or the UK, are actively looking for new systems, new approaches and new solutions. Conventional wisdom might suggest that our industry – the provision of specialised IT solutions to buy-side financial institutions -faces hard times because of the challenges that our customers are facing. However, we are finding that the challenges are encouraging our clients to seek new ways of doing things. This is a tremendous opportunity for us.

You have identified the Cloud as an important dynamic. What role does it play in the delivery of IT solutions to buy-side financial institutions?

The first point to remember is that buy-side financial institutions are in the business of generating superior investment outcomes for their clients. They are not in the business of developing cutting-edge IT solutions – even though many of the legacy systems that are being used were created in-house by the organisations that are relying on them. The Cloud gives buy-side financial institutions ready access to properly integrated tools created by specialists.

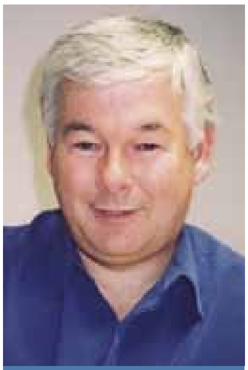
So, the Cloud makes it easier for the financial institutions to leave IT to the specialists?

Correct. But it provides two other advantages. One is disaster recovery. By keeping their data – and the tools that manage that data – in the Cloud – the institution virtually eliminates the risks that arise from systems failure, the physical destruction of their offices and other catastrophes. Operations can be conducted on a 24/7 basis from anywhere in the world where their people have access to the Internet. The other advantage is that the institutions have much greater ability to scale their businesses. Not many companies that are relying on legacy systems can cope with a rapid expansion of activity by, say 100-200%. Scalability is typically written into contracts that financial institutions have with their external Cloud solutions providers.

What are the main changes that you foresee in the next two years or so?

First, I would stress that, for most firms, change will be evolutionary rather than revolutionary. Even when a company's management has a very profound understanding of the limitations of legacy systems and a recognition that it must change its approach to IT, firms very rarely embark on radical and aggressive measures. I think, though, that there will be much more general recognition of how, through the correct approach to IT systems, financial institutions can overcome a lot of the challenges that they currently face. As I noted earlier, those challenges include regulation, opacity and efficiency that is (well) below optimum levels. In particular, I believe that there will be greater recognition that IT is something that can and should be outsourced – if an external specialist can provide a holistic solution. There will also be far better appreciation of the advantages that can be provided by the Cloud. The Cloud will become a crucial channel through which IT consultants provide best-in-class, bespoke, solutions to asset managers and other buy-side institutions.

Technology in the boardroom



Gary Wright

CEO of B.I.S.S. Research, founder of the B.I.S.S. Independent Accreditation for all systems and services provided to financial services companies internationally. Guest Lecturer at Reading University and ICMA. Comentator in the media on Industry Issues.

Over 30 years in the City as Head of Operations with a number of leading Brokers and Banks. Founding member of ISITC Europe and IUG. Member of the SII, founding member of the Operations Management Examination committee.

Being the first of anything is always notable. I am really delighted to have the opportunity to write this article, which I hope will stimulate readers and provide a topic of interest and debate. My aim is always to write in a thought provoking and challenging style, tackling technology issues from a business perspective. Questioning developments and changes will be a big part of the future in financial markets, as the world struggles to recover from the economic disaster that now plagues the industry.

A crucial topic is the (in)capability of boards at financial services firms to understand and manage technology. Technology underpins the financial services industry like no other. It's a mad situation when the people entrusted to protect the company and its shareholders, fail so abysmally in their duty of care. How has this situation been allowed to develop, and why?

One can start with a view of the last thirty years. It is during this period that we have seen the dawn of modern technology. We have witnessed how technology can dramatically change market structures, products, services, regulations and the lives of people that work in global financial markets. Just as importantly, this has also impacted the technology suppliers who support these markets.

Having been at the beginning of the technology revolution when I joined the City in 1969, I have had to adapt to embrace the developments which have created the market we see today. In my career, the range of technology-inspired changes in the UK alone has encompassed central market processing, electronic markets for Big Bang, SWIFT creation and expansion, the entry of PCs, the creation of OTCs and other exotic products, the Internet, globalisation, fragmentation, risk management and anti-money laundering, (the list could go on and on, but I'm sure you have your favourites). It's an amazing list – but the fact is that the future involves even more changes, developments and new technologies.

The financial markets need new developments, innovations and change. This is not only to disengage from the financial crisis, but also to meet the needs of an evolving society. With the future promising even more technology changes, the obvious question is: how have financial services firms coped with market change in the past – and can we learn from the mistakes made and the success achieved? Even more specifically, I would add this: as technology is often the instrument of change, can we rely on the boardroom to be able to manage technology?

The financial services industry is perhaps the most highly rewarded industry on earth, attracting people from all walks of life and with a diverse range of skills. However, technology skills have not been assimilated at all well in the boardroom.

The financial services industry has a vitally important role to play in society. As we have seen during the last few years it has failed miserably to provide the basic functions that are expected of it or the people that govern it.

It's easy to get drawn into this on-going debate and to vilify financial institutions – especially banks that have been so instrumental in creating the financial crisis and have been a significant cause of shrinking economies. So let's move on and concentrate specifically on technology and how it has been used so far and how it should be used in the future as a force for good and the ultimate benefit of society.

Most of the problem with the management of technology within financial institutions starts with the selection of the CTO or the CIO. In the past, the board has only notionally acknowledged the need for boardroom appointments to manage technology. In practice, this has been badly handled universally.

It is pointless appointing a board member with technology knowledge if they are exclusive in their knowledge, understanding and background. For example, all members are expected to have the capability to understand and read financial statements. So, although the finance director will have specific responsibilities, all board members will have some degree of financial understanding. The same cannot be said for technology. This is because knowledge will not be equally shared around the boardroom table, often leaving the CTO isolated. As a result, his/her impact will be limited.

It is also common that the CTO or CIO will have in-depth appreciation of technology, but be weak in terms of his/her business expertise. This is also an isolating factor. The result is that technology will hardly feature on the agenda, unless there is specific purpose: this is normally driven by regulatory requirements or because a major investment is called for. At the crucial moment, key decisions are delegated, due to lack of board understanding.

This is not exactly the best way to run a financial institution, when technology virtually underpins all the business and its supporting operations. More specifically, this situation can lead to quick fixes and the contracting out to consultants to prepare the board for future decisions, rather than ensuring that the board has a better understanding.

This lack of knowledge by the board is one reason for the long list of bad developments and procurements over decades. This, in turn, has resulted unfortunately in the continuing mistrust that today's boardrooms have concerning technology.

Technology in financial institutions has been allowed to reach legacy status. It is therefore a ticking time-bomb. Bad things happen when market structures change or regulatory pressure puts more strain on systems that should have been incrementally phased out, over an extended period of time. This legacy problem has been perpetuated because the old adage – "If it's not broken why fix it?" – has been allowed to prevail. Or cheap, quick fix solutions have been implemented to solve the immediate problem, but which rarely fulfil long term needs.

The short-termism that has entered the financial markets over the last thirty years also breeds quick and dirty solutions. CTOs move on, often, on a continual basis. Why then take the risk of introducing a long term technology strategy if the current CTO won't be there to see it finished? The short-term CTO is very unlikely to introduce strategy. Even if he/she did, his/her replacement would most likely change it.

This has created a picture of an industry at board level that has simply never come to terms with systems or how they should be managed.

The future of the financial markets is going to be even more reliant on technology, so it's important that we learn from the errors of the past. Selection of board members and selection of senior managers, with the correct capabilities throughout financial institutions, should include an understanding of both business and technology: this should be mandatory, just like adequate comprehension of financial matters. That is not to say that boardroom directors have to be able to write code: they just need to understand how technology is used and can how it can be used to benefit the business and its customers. Anything else will look like a dereliction of duty and a failure of corporate governance.


A question that too few can answer:
What are the bank's positions right now?

Financial IT magazine spoke with Pamela Pecs Cytron to discuss what are the fundamental issues in back- and middle- office accounting.

Pamela, if you had to identify the main challenge facing executives within financial services businesses who depend on back- and middle- office accounting systems in no more than three words, how would you respond?

Lack of transparency. Many financial services companies are highly complex organisations that have numerous businesses across multiple jurisdictions. In many cases, they are using multiple and basically inadequate accounting systems that date back to the 1980s. Financial IT as we know it really began back in that era. I think that there were several catalysts for its growth at that time. One was the defeat of inflation in the USA by the Federal Reserve under Paul Volcker. That provided the basis for a strong and consistent rise in financial asset prices. Another was the pro-business approach of the Reagan administration and several like-minded governments elsewhere – such as that of the UK under Margaret Thatcher. There was also a general move towards financial liberalisation in many countries. These factors gave rise to the great boom in financial services. Meanwhile, the global Information Technology industry was developing rapidly: the Personal Computer was the new product of the era. In other words, the demand for management information surged at precisely the time that the technology to deliver the information improved markedly – relative to what had been available in the 1970s.

We are talking about what was happening in the world 30 years ago. Is this really relevant? Surely back- and middle-office systems have been improved enormously since then?

There have, undoubtedly, been huge improvements. However the improvements have not addressed the fundamental issues – and they date back to the early 1980s. One problem, obviously, is that the global economy as we know it today did not exist in those days. Investment gurus spoke about the global economy, but it was really a series of partially linked regional economies – North America, UK/Continental Europe (with substantial differences between the financial services industries of each of the countries) and Greater Japan. Within any one jurisdiction, international financial services companies would have various businesses, each of which had its own peculiar requirements. Many systems did what was required of them reasonably well. However, they usually had limitations. Any company that was running small numbers of institutional accounts and large numbers of wealth management accounts would need separate systems for each, for instance. The bottom line is this: as soon as any company moved beyond one country, or one activity, it had to use multiple accounting systems that would not naturally produce information that could be used conveniently.

But banks, investment managers, pension plans, insurance companies, brokers, trading desks, and fund administrators all coped, surely?

They did, but too many relied – and still rely – on ad hoc measures. They would work with their system suppliers to make alterations to legacy systems that catered to particular businesses in single countries – and with some positive results. However, too many financial services companies relied on homemade reports that would attempt to reconcile the information that was coming from the various systems. None of the systems were naturally organisation-centric: this meant it was, and is, quite difficult for the top management, or the experts who control risk for them, to see the bigger picture. Further, the legacy systems tended not to cope too well with swaps, derivatives and short-positions, all of which have become far more important thanks to the growth of alternative investments over the last 20 years or so.

What were the barriers to the evolution of accounting systems that had the globality and the flexibility that was, and is, needed?

You must remember that even medium-sized financial services organisations are usually complex bureaucracies. There is a natural bias in favour of the status

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Pendo Systems' core product is BasisPoint®, a fully-integrated global investment accounting solution and fund administration system that services multiple financial verticals – on both the buy-side and the sell-side. The database design provides the core foundations to support customers across all lines of businesses with a single view.

Pendo Systems won the "Top Innovator" award at the Singapore leg of the Innotribe Startup Challenge, organised by SWIFT, in early 2012.

quo. The rise in regulatory pressures (and costs) reinforces this. Managements have a reluctance to embark on major administrative changes which, they believe, could have unexpected consequences. Meanwhile, the major suppliers of the accounting systems have had every incentive to introduce minor changes and improvements to the products that they have developed, but little incentive to come up with really revolutionary solutions. IT budgets have been directed towards front-office products that have been seen as being likely to provide revenue-enhancing outcomes.

If financial services companies have lived with this situation for so long, why do they need to make radical changes now?

When things go wrong now, the actual and potential costs are much greater than was the case even five years ago. In much of the world, financial services is no longer a growth industry. The requirements of regulators, the demands of litigants and expectations of customers are much higher. In most developed countries, interest rates are at very low levels: this means that the margins that are available to banks – and many other kinds of financial services companies that are associated with them – are much less than they used to be. The question that matters more than ever before, on a 24/7 basis, is: "what are the bank's positions right now?" It is easy to find examples of global players who have suffered multi-billion dollar losses in the last year or so because they were not able to answer that question.

Therefore, what changes do you suggest?

Most of the problems arise because legacy accounting systems look at the gathering and storage of data in a "top down" way. The question that they ask is: what is needed for the business in this particular jurisdiction? I look at the entire issue of accounting for back and middle offices in the opposite direction. The question that I ask is: what is the individual position, be it a stock, a bond a derivative or whatever, that needs to be valued? Provided that each individual position is correctly identified – according to its price, its currency, industry and fund, it should be possible to prepare insightful reports for all businesses and all portfolios, regardless of where they are operating and regardless of the requirements that they may have.

So you advocate that each organisation maintain a central, unified database, in which it maintains information about all the positions that it maintaining globally – for all its businesses and all its various client types?

Exactly. I'd stress that there are three key differences in relation to the legacy systems that are still widespread today. The first is that overall risk is reduced, because the top level of management can see, on a continuous basis, what is the global picture. A "bottom up" regime that focuses on individual positions provides much greater communication and control than does a "top down" regime which looks at individual jurisdictions. Of course it also means that the top management are also much more accountable. The second is that efficiency gains are huge. A "bottom up" system never has to be stopped at a particular "cut-off" point. It operates continually. The solution that Pendo Systems has developed can perform the all the fund accounting that is needed for US$100bn of assets under management, across a wide variety of jurisdictions and client types, taking feeds from over 50 different sources, in three minutes. If errors occur, they can quickly be fixed – at source – in a system that is focused on individual positions. In a "top down" system, the errors have to be addressed account by account: that can take months of work. The third is that a "bottom up" system is totally scaleable – regardless or how or where a business develops.

If you had one message for executives who are responsible for the acquisition of accounting systems for middle and back offices, what would it be?

Remember that pressures for change – whether for good or ill – often come from left field. In five years time, the global financial services industry will look completely different to what it does today. Do not put off essential changes to accounting systems until such time that the changes are forced upon you. Innovation is as important in the back office as well as the front. To date, silos of data and silos of issues have been addressed by silo-like solutions such as the Dodd-Frank Act. It is time that the entire financial services industry worked collaboratively to address the lack of transparency.


THE NEW FACE
OF INVESTMENT
ACCOUNTING

FATCA – a Play in 200 Acts

Ross McGill is Managing Director of GlobeTax and a Subject Matter Expert (SME) on FATCA, operational aspects of regulatory compliance and cross border withholding tax. Mr McGill has authored seven reference books for financial firms and institutional investors. He sits on several prominent international committees related to withholding tax, standards and regulation including ISO20022 Securities Evaluation Group and the European Union Tax Barriers Business Advisory Group. Mr McGill is based in London but is responsible for all GlobeTax offices outside the USA.

Financial services' expenditure on technology tends to wax and wane with macro-economic cycles. So, naturally, you'd expect the stage to be set for banks, brokers and other financial institutions to be tightening their belts as they drive cash into capital liquidity instead of into technology or, even retail or corporate lending.

There are however some counter-cyclical factors at work, not least of which is the global increase in regulation that, like QE, is driven by the state of the economy. Flat lining and low growth economies need revenue to reduce debt-GDP ratios and that only comes from taxes or debt reduction. Debt effects are easy to see, tax effects less so.

In cross border taxation, it's clear. Increasing tax rates and complexity of cross border reclaim processes are leading to a much smaller proportion of investors being able or willing to claim their entitlements. Financial services firms are already mired in paperwork in this area that automation is only partially able to address. Decreasing efficiency resulting from these trends, means more, almost invisible, free money for governments – paid by foreign investors.

There's also a new actor in this play in the form of inter-governmental agreements ("IGAs') for "information sharing" designed to target tax evasion of investors with accounts overseas. While it has always been popular to target "rich" investors for tax; squeezed economies and political pressure have led to a rapid increase in regulation aimed at repatriating massive tax revenues. The Tax Justice Network recently reported that there's an estimated $32 trillion in assets hidden in foreign bank accounts that would generate around $280 billion a year in tax revenues. Enter, stage left – FATCA.

FATCA is the hot topic of the moment. It's a complex set of rules based regulation designed to force all non-US financial institutions to identify, document and report any US person or entity that's effectively controlled or substantially owned by Americans, so that any that have not met their obligation to report their assets, can be assessed for current and up to six years of back tax owed on global income generated by those assets.

FATCA is rules based regulation so, as you can imagine with rules versus principles based regulation, the more complex the issue, the more complex the rules – and tax is complex at the best of times. That's what is currently triggering a frenzy of development and positioning in the vendor community aimed at financial services firms. The kick in the pants is also that the IRS took the opportunity in FATCA to re-define the term "financial institution" to include virtually all collective investment vehicles. This new definition of a "Foreign Financial Institution" (FFI) increases the number of firms affected by FATCA globally from around 100,000 firms to over a million.

Virtually every vendor with applications that intersect processing of financial transactions and/or customer data is going to have to do some work to ensure compliance with FATCA. This particularly affects firms that produce KYC or AML software, firms that sell corporate actions processing software, client on-boarding, document management, transfer agency, network management, securities lending…the list is extensive. Their problem is simple. The regulations require a substantially different way of looking at customers and financial counterparties. New data elements; new data structures and relationships; new terminology; new tax forms and new functionality are all fundamental to FATCA.

In FATCA there are two primary types of risk. The first is making sure that technology adequately addresses the main identification and documentation challenges (reporting and withholding being deferred until 2014 and later). This can, to some extent, be offset by the standardised use of the new US tax forms W-8 and W-9. However, the W-8 series is moving from a single page to many pages. Given that over 90% of these forms are delivered as paper and the validation failure rate is well over 60%, it is unlikely that these new forms will improve underlying compliance, without the kind of automation provided by firms like GlobeTax with their eCerts platform. The second risk is making sure that your counterparties in the financial chain are also capable of being compliant. If we look at the severity of fines imposed on other firms found to have hidden US accounts, the degree to which your counterparties and vendor systems are actually capable of meeting a base level benchmark of FATCA compliance, should be a major cause for both financial and reputational concern. The launch last month by B.I.S.S. Research in the UK of a FATCA Accreditation, as a standardised benchmark, is therefore to be greatly welcomed. The Accreditation takes the form of a detailed questionnaire with supporting evidence and analyst interviews, ultimately resulting in a Compliance Capability Report and, FATCA Accreditation for those who meet the benchmark.

FATCA's cross border information sharing and penalty model is controversial. In response to concerns over data privacy and legal issues associated with the US forcing foreign institutions to close their customer accounts or penalise them by withholding, the IRS implemented the concept of "inter-governmental agreements" or "IGA's." Financial institutions in markets with IGAs in place can file reports domestically rather than directly to the US, and also avoid any account closures or financial penalties.

This has two effects. First, it adds yet another layer of complexity for the technology support infrastructure, separating the different functional and data models for firms and counterparties in IGA markets and those not. Second, it sets the stage for other governments to recognise the tax revenue implications of FATCA and use it as a model of their own. Several European governments are already framing FATCAesque regulation.

The irony is that the very existence and contagious capacity of FATCA is stimulating new products and services on which financial firms cannot avoid spending. Regulatory compliance, after all, is not an optional activity. Some might say that all this is an interesting alternative to lending as a way to get cash flowing in the global economy again.

Modern, standards-based systems: Unlocking the hidden value of the business

Financial IT magazine spoke with Roland Slee of Bravura Solutions about how modern, standards-based systems can transform a financial institution.

Roland, if you had to identify the most important challenge arising from IT systems in financial institutions today, in no more than three words, how would you respond?

Lack of flexibility. In an industry where change is constantly accelerating, most institutions have IT environments that are a serious impediment to change and hence frustrate business success.

Financial institutions typically rely on a patchwork of IT systems built with hardware and software components that, in general, ceased to be cutting-edge years ago. This collection of connected systems has usually evolved over decades and provides sufficient functionality to support the business today, but is not able to adapt so that the institution can remain competitive and relevant for tomorrow.

As business requirements change, the standard IT response has been to bolt on additional components to this existing tangle. Such "bolt-ons" might, for example, enhance existing core systems by adding document management, business intelligence, workflow or web interfaces. A complex web of interfaces and middleware holds all this together. This patchwork of IT systems is costly to maintain, prone to producing inaccurate data, performs poorly and, worst of all, is almost impossible to change without substantial cost, risk and business disruption. The true legacy of legacy systems is a profound lack of business flexibility.

The global financial services industry has been exposed to brutal change ever since it was liberalised in many countries from the early 1980s onwards. Why do financial institutions persist with legacy systems?

Financial institutions are complex and risk-averse organisations. In the financial services industry, as elsewhere, there is a tendency for management to resist real change until it is absolutely necessary. The patchwork of IT systems that underpins most financial institutions has traditionally had a dependable and reliable legacy core. Most financial institutions have been very reluctant to replace this core because, until recently, alternative technologies were not sufficiently robust or scalable and modern applications were not sufficiently functional or complete to allow a business case to be made.

Put another way, financial institutions just coped with the patchwork of systems they had in place. Why can't they just keep on coping? Why is there a need for action now that didn't exist, say, two years ago?

We are seeing a significant number of institutions take on core systems replacement projects now because of a convergence of several powerful forces. The first is that business conditions in the global financial services industry have become much more challenging. This is forcing institutions to take bold action to remain competitive. Interest rates in most developed countries are at historic lows and look set to remain there for years. There is downward pressure on fees in virtually every area and regulators are demanding greater transparency and efficiency. There will not be another massive bull market for global fixed income markets because yields on government bonds are already at very low levels and inflation is clearly no longer falling. Credit growth is slow or slowing in much of the developed world. For most institutions, responding to this squeeze on revenue streams demands a level of streamlining that is all but impossible while the business remains in a legacy IT tangle.

And the second powerful force?

An inexorable rise in customer expectations. In the Internet era, customers have become far more demanding. Business models in financial services and elsewhere have shifted beyond nine-to-five, face-to-face interactions. In the new paradigm business is conducted at all hours and wherever customers happen to be. This change has had a huge impact on the airline, retail, telecommunications and media industries – but the financial services industry is not immune. Customers now expect assisted self-service, with instant gratification as the norm. The modern customer expects to receive consistent, informed service across all channels – online, mobile, call centre and branch – at their convenience, day and night. Customers will not accept being kept on hold, receiving out-of-date information or being offered unsuitable products.

So, what is different now relative to the world of 2010?

That comes down to the third major force that creates the tipping point we are seeing today, technology. New technology meets the need for business change head-on with capable, risk appropriate business solutions. Modern, standards-based, Internet technologies were not proven – even two years ago -as a suitable foundation for a financial institution's core business processing needs. Today, that picture has changed entirely.

- ***Bravura Solutions is a leading global supplier of superannuation and pension, life insurance, investment, private wealth and portfolio administration, transfer agency and financial messaging software applications, as well as business and strategic consulting services. Bravura's software is employed globally, with a range of corporate clients in the Asia-Pacific region, South Africa, the UK and Europe.***

- ***Roland Slee is Managing Director, APAC, of Bravura Solutions. He has broad experience in consulting, sales and management gained in Europe, Africa, the US and Asia. He joined Bravura Solutions in November 2011, after nearly 20 years at Oracle Corporation, where he held a number of Vice President roles in the Asia-Pacific region.***

Modern systems now allow financial institutions to not only deliver the real-time experience customers demand, but also to extract more value from narrow margins and create opportunities for growth, all without compromising the traditional IT requirements of security and business integrity. Enhanced business flexibility arises from the simplicity and agility of modern software environments. Efficiency and customer service benefits arise from their openness and seamless integration.

The development of Facebook over the last two years provides a good example of what happens when a compelling application is combined with the scalability and global reach of the mobile Internet. In 2010 Facebook was already a massive, worldwide phenomenon. What really enabled it to surge, though, was the broad adoption of smartphones and tablets connected to fast networks. These new technologies have given people the opportunity to use Facebook on the move. The new devices give people 24x7 access and a rich user experience that could not be achieved with even the best and most portable laptop computers in 2010. This new technology gives people an experience they clearly value.

What, in your view, are the key features of these modern, standards-based systems?

In brief, modern, standards-based systems combine boundless scalability with a truly open architecture. Unlike proprietary legacy systems, which can be expensive to maintain and difficult to upgrade, modern systems based on web technology scale easily as a business grows and upgrades can be achieved with little or no downtime. Business functionality can be rapidly enhanced as customer needs change, through the integration of additional software modules. These are built in short iterations that match modern business cycles. Open architectures ensure there is none of the fragility that is commonly experienced when legacy systems are patched together. Web Services allow interfaces to work reliably even when the systems they connect are rapidly changing.

Modern systems can also leverage the best risk management approaches out-of-the-box, providing the disaster recovery and data security protections that financial institutions demand. Our Sonata wealth management and life insurance application provides a good example of what is possible. Sonata is written in Java and runs on a Java application server, so it inherits the high-availability, scalability and reliability of Java. It keeps its data in an Oracle Database, so it inherits security, portability and high-performance provided by Oracle. Each component in the technology stack is taken from the best available source, in the same way that businesses seeking to maximise competitiveness outsource discrete functions to best-of-breed providers. In this sense, the principle that the whole can be much more than the sum of its parts applies equally well to business and IT.

So, these new systems clearly are flexible. What are the other benefits for the businesses that use them?

For a start, modern systems largely eliminate the need for batch processing that is typical of legacy systems. Modern systems support straight-through-processing and real-time transactions on a 24x7 basis. They reduce human intervention and provide a substantial boost to productivity; fewer errors and exceptions mean less waste, and software that is fast and easy to use creates a better experience for all. Standards-based systems are also better placed to provide a complete view of multi-faceted client relationships. Because each client relationship is more visible, it is easier for the business to identify profitable market segments and to engage each segment more appropriately. Modern systems are also more easily managed by third-party service providers, leveraging offshore resources, giving financial institutions fresh opportunities to reduce costs and improve service levels. Some providers have reported reductions in IT costs of up to 50% using this approach.

Therefore, the benefits include scalability, flexibility, reliability, lower costs and greater insights about the underlying business – on a global basis.

Yes, but more than that, modern, standards-based systems also unlock the value that is hidden in the data held by the business. In a financial services business, this means modern systems unlock value hidden in the business itself. We are working with numerous institutions that are looking to simplify, standardise and automate their IT environments in order to unlock business value and enhance competitiveness. This trend of core systems modernisation and IT simplification will only accelerate as next-generation technologies and their business implications become more widely appreciated.

Intelligent trading software and professional support as a guarantee for satisfied clients

Introduction:

icubic, the software developer for the international financial sector, has equipped a Russian investment bank with a high-performance, complete solution for bond and CDS trading. The global investment banking traders at the bank have been working with icubic technology since March 2011.

The client:

The client is a leading Russian investment bank. It operates regional offices distributed across the globe, including London, New York and Hong Kong. Their core sectors are equity and debt financing as well as advisory services in M&A trading, amongst others.

The initial situation:

Before the implementation of the icubic solutions, the bank settled electronic trades in the fixed income area using a competing application. This system was scheduled to be replaced by a new system in 2011. The investment bank explained that this was due to lack of support, which ceased completely after the competing application was taken over by a new provider. “The new owner suggested an alternative, but it did not match our requirements,” explains a Business Manager. The offer was missing many functions. “In addition, we would have had to expect delays, uncertainties and lack of service,” adds the manager. It was for this reason that the financial institution began searching actively at the end of 2010 for a higher performance, more reliable and a more comfortable solution for the traders that could be integrated quickly. During their research, the bank heard about icubic’s range of services via market contacts and a marketing campaign. Its suitability was then tested internally and positively confirmed during a proof of concept study supported by icubic employees. The investment bank states the fundamental reasons for the confirmation were the appropriate price/performance ratio, the assurance of a rapid and uncomplicated software implementation by a set date as well as the guaranteed strong support services.

The process:

The client chose iQbonds, which is the central software component and driving force of icubic AG. It offers traders rapid access to a variety of markets, exchanges and information platforms and guarantees quick, secure and simple pricing, quoting and trading of securities.

After the order was placed by the customer, the establishment of a test environment began in December 2010. This primarily functioned as a compatibility check and a user acceptance test before the software was uploaded into the production system. Common challenges that occur during the test phase for such projects, such as firewall settings, security guidelines, legal structures and market access difficulties were able to be solved by the icubic experts together with the colleagues from the investment bank. Martin Graßhof, the Support Center and System Integration Manager at icubic says, “The prerequisite was a tight and structured process according to the agreed upon project plan.” Thanks to the superb expertise and personal commitment of the colleagues on-site, the operation start date, which was a clearly defined milestone for the customer due to deadlines, was never at risk.

icubic began finally with the software implementation into the production system in January 2011. Within 10 weeks, the new system was operational. By this time, a comprehensive analysis done by the business analysts and product managers at icubic provided valuable information for the system installation that was naturally used during integration. Functions, automatisms and advanced system settings from the previous application were adapted by IT employees and product experts and successively transferred to the new system. There were also adjustments to the graphic user interface and data records from the previous application integrated. Coinciding with the software adjustment,

icubic
The Solution

icubic develops specialised software solutions for all electronic market trading sectors and offers installation as well as maintenance services to accompany its products. The company was founded in 1999 and currently employs over 100 people. In the past year, a record turnover was achieved. Eight of the top twenty German financial companies as well as many banks and investment firms in Europe and Asia depend on the know-how of icubic AG. Their mission is to provide a future-oriented improvement of product performance under quality, client benefit and market development considerations.

icubic AG makes electronic trading at a leading Russian investment bank more efficient and places value on a full-service mentality.

Dietmar Jakal,
icubic

new interfaces were developed as well in order to provide specially requested functions. These steps leading up to the establishment of a fully automatic booking of trades (STP) at the bank demanded a close cooperation of the highest level between client and provider. Jens Lippoldt from Business Development at icubic AG states, “Such additional services associated with a longer test phase are normal for this type of conversion. Accurate time management, extensive experience and specialised know-how are also required here. We have acquired these skills in the over 12 years that icubic has been successful in the market and make them available to our clients.”

The result:

The comprehensive test phases enabled a problem-free software integration into the production system of the investment bank. The replacement of the previous software was finalised in March 2011, as planned. Furthermore, the project remained within the agreed upon time frame and budget. There have been no application problems documented by the client so far. In fact, a clearly stronger market perception in the targeted bond trading segment and higher volumes have been the result. Optimised workflows in the response to RFQs/RFOs and the automatic booking of trades have also produced larger profits. The number of iQbonds users at the new customer has doubled since the implementation.

The software solutions from icubic have been running stable since over 18 months. Regular maintenance work and updates continue to keep the system up to date. In comparison with the competing application, it utilises system resources more efficiently. “Software products that function economically and fit optimally together are utilised, making their use simpler and more straightforward,” says Dietmar Jakal, icubic Board Member. In addition, a selection of new trading options not offered by the previous product became available, making the work processes of the users, traders as well as administrators easier and better.

The conversion to the new system required a close cooperation. Dietmar Jakal explains, “Our customers and icubic AG are not just user and vendor. They are partners.” The challenges that arose were confronted together. This was the only way towards a quick and effective implementation. “With a view to the future, we look forward to a long and successful cooperation,” adds a Business Manager of the investment bank. Without a doubt, icubic provides an impressive service package with intelligent products and excellent customer service.

Vladimir Kurlyandchik,
Director of Business Development of ARQA Technologies

QUIK*est* pre-trade solution – risk control for broker-dealers and management companies

About a year ago, ARQA Technologies started to introduce the broad possibilities of pre-trade checks developed within its trading platform QUIK to clients abroad. Numerous Russian and CIS clients, as well as Russian subsidiaries of international houses, have been using the tools of risk control developed for the QUIK platform for quite some time now.

Functional description – and some history

QUIK is a risk-control solution that works across currencies, instruments and jurisdictions. It keeps multi-level positions in real time. The versatile system uses a variety of approaches: it may be customised to suit particular needs.

QUIK's development reflects the history of the Russian financial markets. Since the mid-1990s, trading in the emerging Russian marketd demanded that brokers be particularly prudent. Brokers had to make sure that clients had deposited required resources before trading. These resources had to be watched closely, so that negative account balances would be avoided. Because they are relatively new, the Russian markets have only ever used electronic trading only: position-keeping has always taken place inside trading platforms. Another key feature of trading in Russia has been strict market regulation and the need for compliance control. QUIK's development has reflected these issues.

For example, QUIK handles margin trading with a dynamic evaluation of collateral and preset credit parameters. It allows for extension of loans, within fixed restrictions for cash instruments and securities, Alternatively, it marks the client's portfolio to market and makes sure that margins remain within acceptable parameters.

Another tool is a modified SPAN-approach for dynamic mark-to-market portfolio evaluation. A maximum probable change of portfolio is calculated, on the basis of the correlations of the returns from its various components.

For trading in spot and derivatives markets, QUIK is able to consider various settlement dates within one unified cash account.

All the tools may be used individually or collectively. . Combinations of risk filters may be set for all clients, for groups of clients or on a case-by-case basis.

Of course all risk calculations rely on timely market data which comes directly to the system. QUIK is fed data from trading venues where it has direct access. These include MICEX-RTS stock and currency markets, FORTS, RTS Standard, WSE, UX, MOSENEX, SPIMEX. Data comes from foreign exchanges via SunGard Global Network.

Fast pre-trade control

Our software developers saw that their solutions could be used for fast pre-trade control. The idea was born during an international conference, where one of the discussions was about High Frequency Trading and the fast pre-trade checks it required. The key question for our people was: why not employ a separate module to make a fairly straightforward check? The sole decision would be to let through or block an order on the basis of previously processed data that had been supplied automatically by the QUIK server. The module therefore ensures that the client's account has sufficient resources before orders are submitted (or replaced). The module wastes no time because it is not engaged in keeping the client's position. Nor does it freeze money that is needed for outstanding trade orders. At the crucial moment, the necessary parameters of the client's position (including outstanding orders) have already been computed by the separate server. All previously executed trades have been accounted for and relevant market parameters have been adjusted by QUIK. Whenever required, the assessment may also include portfolio analyses. This scheme may, therefore, be described as a pre-trade check based on post-trade data.

This may well be an alternative approach to the two commonly used methods of pre-trade risk control. These methods are a very fast approach of using preset limits ("fat fingers"), and a complex analysis and statistical modelling process that consumes much more time. Indeed, the QUIK-based system combines the best of the two approaches: it provides both meticulous assessment of current positions including portfolio analysis models and a simple but sufficient fast pre-trade check of orders.

How it works

New orders are forwarded to a trading venue as long as the client has a positive balance in his/her account. Meanwhile, the assessment of his position is updated: his/her outstanding orders are accounted for, because real time data from that trading venue and other relevant market data are continuously fed into the QUIK server from the trading system.

The module of pre-trade control intercepts an order message inside the technological infrastructure of a broker handling the transaction. If the transaction is allowed by the module, it is forwarded for execution to a trading venue. If not, it is rejected and the trader is promptly informed with appropriate explanations.

This approach may be recommended when pre-trade control is applied to low-latency infrastructures or used for HFT clients. It may also be used to manage risks in external systems where direct integration with a principal risk server is not possible.

The checks by the separate module may involve more than just validation of a transaction at a moment in time. Additional checks may also include restricted securities lists or limits on volumes.

Settings may be adjusted to stop an order for an account, as a precautionary measure, when there is still some reserve of buying power in the account. Another setting of the module may limit a number of orders per second which are allowed to pass through it. Such adjustments guarantee sufficient protection without noticeable slowdown of transaction flow.

Some applications

Practical applications of QUIK's pre-trade control mechanism have been extensively tested by a large number of ARQA clients in situations of direct sponsored access.

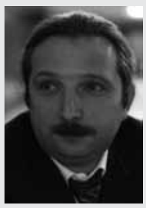
FIX2Market is a low latency solution that lets a broker make a direct connection between the client's trading platforms and the exchange.

The FIX2Market family of interfaces developed by ARQA Technologies includes FIX2CETS (for Currency market MICEX-RTS), FIX2MICEX (for Stock market MICEX-RTS) and FIX2Plaza2 (for FORTS and RTS Standard).

A very popular solution is FIXPreTrade, the module which is built into the broker's technological infrastructure based on FIX protocol. It may be regarded as a FIX proxy-service integrated into the broker's infrastructure.

The MICEXPreTrade module is a result of a joint project with the exchange and represents a solution for trading at MICEX-RTS. This module is integrated with MICEX Bridge (incorporated within the exchange's own protocol).

The challenge of vast possibilities of pre-trade control developed in QUIK, and the necessity to use them for low latency infrastructures, is solved by using a separate module to control current order flow. The fast pre-trade solution relies on intricate risk control assessment calculations, which are performed simultaneously by a powerful risk server. The order check itself adds a fractional delay to order placement.



Following his graduation from the Novosibirsk State University Vladimir started working in the Technical Directorate of the Siberian Interbank Currency Exchange. Soon he was a leading software developer and later became the head of the Software Department. Working at the Exchange Vladimir acquired a vast experience of creating trading platforms for various assets – equities, bonds, derivatives, FX instruments.

In 2000 Vladimir became one of the founders of ARQA Technologies in his new position of Business Development Director. ARQA Technologies develops "front to back" solutions for banks, investment and management companies. Today the company is a leader in Russia and Ukraine in the field of solutions for trading and risk control. It offers to its customers global connectivity solutions via direct gateways to the trading venues or using the partners' networks. In the last few years the company's focus has been solutions for fast access to trading systems with online pre-trade control.

In the last 8 years Vladimir has been a member of the MICEX-RTS's Technical Committee.

Alaric Launches a Unique "On-Premises" Solution for Optimal CNP Fraud Prevention

Global fraud prevention and payments company, Alaric International, has announced the launch of its "on-premises" Fractals Fraud Integration Hub (FIH). Primarily targeted at Online Merchants and Payment Service Providers (PSPs), FIH enables such organisations to take a best-of-breed approach to detecting and preventing Card Not Present fraud. When used by a PSP, FIH protects its merchants and the PSP itself against cardholder fraud and the PSP against fraud perpetrated by merchants. When used by an Online Merchant, it protects the merchant against cardholder fraud.

FIH enables clients to write fraud detection rules and to use intelligent fraud detection models that span data from clients' internal systems and from specialist third-party SaaS data providers for key fraud indicators, such as device identification/reputation, IP geolocation, mobile location and address verification.

FIH is the only system to adopt this "on-premises" approach. It incorporates Alaric's renowned Message Mapper product, which greatly simplifies the process of integrating FIH with clients' internal systems enabling it to be put into live use quickly and cost effectively. Fractals FIH is also the only fraud prevention system to be PA-DSS (Payment Application–Data Security Standard) certified.

Using FIH, clients can configure fraud rules on-the-fly, without disrupting their workflow by breaking out and setting rules in multiple SaaS providers' web portals. FIH can be tightly integrated with clients' payment systems to maximise fraud prevention via true real time, in-flight blocking of fraudulent transactions. FIH also includes a fully configurable alert and case management capability and a centralised transaction data warehouse, which clients can use for data mining, research and CRM purposes.

With the increasing levels of internet and mobile payments, CNP Fraud is now a major issue for payment service providers and online retailers alike. The likelihood of a CNP transaction being fraudulent is far higher than for card present transactions. To date though, most fraud prevention vendors offer only limited "single-aspect" datasets such as geolocation, address verification or device information to check transactions against.

As Fractals FIH integrates data from a client's own internal systems and multiple "best-of-breed" external datasets, the highest possible levels of fraud detection and prevention are ensured.

For clients with a bricks-and-mortar as well as online presence, FIH's multi-channel integration capability makes it unique in its ability to monitor and prevent fraud across both in-store and online channels holistically via a single system.

Commenting on the launch Mike Alford, Alaric's CEO said, "CNP fraud is a serious and growing threat to Online Merchants and PSPs. Indeed, there have been a number of spectacular mass data breaches recently which have lead to large numbers card details getting into the hands of criminals who then use these for fraudulent online purchases. What PSPs and online merchants really need is an on-premises solution which enables them to handle usage of best-of-breed commercially available data feeds and relevant data from their own internal systems and to be able detect and block frauds in true real time, in-flight before any loss is incurred. By having Fractals "on-premises" fraud prevention solution in place, they can achieve this. As far as we are aware Fractals is the only fraud prevention product available that takes this "on-premises" approach. We expect, therefore, given the far superior detection performance possible with Fractals FIH, that this new system will soon set the standard for combating CNP fraud in the market."

Mike Alford, *CEO*

Mike has extensive experience running international systems house operations and has developed a special career interest in fraud detection. Prior to joining Alaric in 1997, Mike built and ran the 320-person Commercial and Financial Division at Software Sciences. He subsequently ran the Finance Divisions at Anite Systems where he became the Managing Director of debis IT Services. Mike has a D.Phil. in Mathematics

Headquartered in London, with International offices in the US, Malaysia and Australia, Alaric is a leading provider of advanced payment and fraud solutions technology for financial institutions with high performance payments authorisation and switching, payments integration and fraud detection solutions.

For further information visit www.alaric.com

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Financial IT

Investment Management Technology Survey

This year, RFPConnect for the first time conducted a survey of 31 leading vendors of technology to the investment management industry. The purpose of our Investment Management Technology (IMT) Survey 2012 is to measure the levels of satisfaction of the vendors' customers. We did this through original research, by way of questionnaires that were completed by 118 technology buyers around the world.

Key findings

As we explain below, Advent Software Inc. is the technology vendor that dominates this survey. Although the quantitative ratings for its various products mean that we can, according to our methodology, only describe it as a Silver Provider overall, it stands out for other reasons. These include the number of different products assessed (six), the number of survey categories for which Advent was considered (four out of six), the number of respondents who commented on the company (41%) and the favourable qualitative comments.

SunGard, another industry leader with a broad product offering in multiple service categories, is the other vendor which we consider to be a Silver Provider. The other four that are profiled meet the quantitative requirements of the Survey to be considered Gold Providers. They are Risk 101 LLC, CYMBA Technology LLC, Linedata PLC and SS&C GlobeOp PLC. Each of these is highly rated across the four service areas, but are active mainly in one or two of the six survey categories.

We stress that the reason why the other 25 technology vendors are not mentioned is that they were not mentioned by the necessary minimum number of survey respondents (four). It is emphatically not because of deficiencies in their products in relation to the four service areas that they considered.

We highlight a number of other conclusions. The leading technology vendors are able to provide satisfaction across all four service areas – and often in several survey categories with multiple products. Sometimes customers have criticisms or suggestions –but these are the exception rather than the rule. In general, the customers understand and appreciate the key features of the products and services that are being provided. The technology vendors generally understand and appreciate the needs of the client. However, as the detailed profiles of the six companies show, it is quite common for technology buyers in one part of the world to have different views of a particular company than technology buyers in another part of the world.

In 2013, we hope that we will be able to rerun the survey, including greater numbers of respondents and companies. As we explain elsewhere in this launch edition of Financial IT, the industry is likely to experience a huge amount of change in the next five years relative to that which has occurred over the last 30 years. The Survey should prove to be an insightful tool as to how the world's leading investment management technology companies are handling the challenges and the opportunities.

Methodology

The Survey is aimed to provide reliable and accurate information about how the buyers view the vendors, and the products and services which the vendors provide.

Key aspects of our methodology are as follows:

- We consider the market for IMT products and services to consist of six geographic regions: Asia/Australasia, Europe, Latin America & Caribbean, North America, South Africa and Other.
- There are six main survey categories in which technology vendors may be considered: Order/execution management, Portfolio management, Fund accounting, Transfer agency, Data and Compliance (reporting, tax and/or risk management).
- In order to be eligible for an overall rating, a technology vendor had to: (a) receive at least four votes from the survey respondents; (b) receive votes in more than one survey category.
- Survey respondents assessed each technology vendor across service areas using a specified scale: 1 – unacceptable, 2 – very weak, 3 – weak; 4 – satisfactory, 5 – good, 6 – very good, and 7 – excellent. The four service areas are: (a) Product/System

GLOBAL BENCHMARK SCORES BY REGIONS

SERVICE AREA	Asia/Australia	Europe	Latin America & Caribbean	North America	South Africa	Other
Product/System Capabilities	4.67	5.65	3.83	4.24	5.57	3.38
Reporting, Integration (APIs), Data Feeds and Customisation	4.70	5.52	4.00	4.30	5.77	3.10
Relationship Management, Support and Maintenance	4.71	5.62	4.17	4.41	5.98	3.17
Cost, Value and Reliability	4.61	5.54	4.13	4.39	6.02	3.13
Total	4.67	5.58	4.03	4.34	5.84	3.20

GLOBAL BENCHMARK SCORES BY SERVICE AREAS	
Product/System Capabilities	4.77
Reporting, Integration (APIs), Data Feeds and Customisation	4.76
Relationship Management, Support and Maintenance	4.87
Cost, Value and Reliability	4.83
Total	4.81

Capabilities, (b) Reporting, Integration (APIs), Data Feeds & Customisation, (c) Relationship Management, Support & Maintenance, and (d) Cost, Value & Reliability.

- A survey respondent was allowed to vote on no more than eight different technology vendors. In order to gain further insights, we categorised the respondents according to the approach that they took to their purchases of technology. A respondent following a single-provider strategy is one that only uses products and services of one technology vendor. By contrast, a respondent following a multi-provider strategy is one that deals with more than one technology vendor. In relation to respondents following a multi-provider strategy, we considered the portion of the annual IT budget that was spent with each provider identified: less than 5%, 5-10%, 10-25%, 25-50%, and over 50%.
- Technology vendors are eligible for the following ratings: Gold Provider, Silver Provider, Underperformed ○, and Not Rated ✕. A Gold Provider is any vendor whose total weighted average score equals or betters the global benchmark score (see GLOBAL BENCHMARK SCORES BY SERVICE AREAS Table). A Silver Provider is a vendor whose total weighted average score is close to the global benchmark and which stands out for easily identifiable qualitative features. A provider that received enough responses but an insufficiently high score is rated as Underperformed, while a provider that failed to get enough responses is Not Rated.
- Regional ratings are based on the average weighted scores received by provider in a single geographic region. A vendor that achieves an average score equals or betters the global average score in at least one of six regions is marked as ▲ – Above the average global score. A vendor that achieves an average score less than the global average in one of the six regions is marked as ▼ – Below the average global score. See GLOBAL BENCHMARK SCORES BY REGIONS table.
- Technology vendors are also eligible for ratings (Gold Provider, Silver Provider, Underperformed, Not rated) by regions.

We are very grateful to those technology providers who supported our initiative and helped to conduct the survey successfully. We will be glad to hear any feedback. We welcome suggestions for further improvements.

All details of the findings published at www.RFPConnect.com and are available from RFPConnect Survey Team at surveys@rfpconnect.com.

The opinions expressed in this survey are those of the respondents and survey team and do not claim to represent positions of any of the listed providers.

FINAL PRODUCTS RATING

	Rated Products	Provider	Score
1	Linedata Longview	Linedata	7.00
2	TNR	SS&C & Globa Op	7.00
3	GlobeOp Portal	SS&C & Globa Op	7.00
4	Fund Administration	SS&C & Globa Op	6.90
5	CYMBA Athena	CYMBA Technology	6.38
6	Geneva World Investor	Advent Software Inc.	6.15
7	Risk 101	Risk101	6.03
8	Kondor+	SS&C & Globa Op	5.81
9	Advent Portfolio Exchange (APX)	Advent Software Inc.	5.28
10	Advent On Demand	Advent Software Inc.	5.15
11	FIX	SunGard	5.13
12	Rules Manager	Advent Software Inc	5.00
13	Moxy	Advent Software Inc	4.57
14	Addvantage	SunGard	4.38
15	Axys	Advent Software Inc	4.20
16	GL OMS	SunGard	4.19
17	Linedata Global Hedge	Linedata	4.17
18	Asset Arena Transfer Agency	SunGard	3.91

Not Rated Providers	
Charles River Development	3
Fascet	3
Investment Technology Group, Inc.	3
3i Infotech	2
Bravura Solutions	2
Broadridge Financial Solutions, Inc	2
Compliance 11	2
Fidessa	2
Tradar	2
AIM Software	1
CAPSCo	1
Vitech Systems Group	1
CSSI	1
Digia	1
DST Global Systems	1
Eagle STAR	1
Epicor	1
Eze Castle	1
FCC	1
Fi-Tek -Investment Manager	1
Intuit	1
Morningstar	1
MSCI RiskMetrics	1
Net 360	1
Trust Right / Trust Portal	1

Advent Software Inc.

Advent Software Inc. received votes in four out of the six main survey categories. It stood out for the number of responses, and positive feedback, that were received from survey respondents.

The company's six flagship products were identified and assessed by 48 buy-side respondents, the majority of whom are located in North America (77%) and Europe (19%). Most of the clients (52%) have chosen the provider as a part of their multi-strategy business approach, spending from 5% up to 25% of annual IT budget on Advent's solutions. Advent has been working with investment management companies of all types and sizes since 1983. Globally, it has over 4,500 customers.

43 % of the survey respondents who considered Advent voted for its portfolio management, reporting and accounting solution, Advent Axys. However, the product is sometimes seen as being adequate, but undistinguished. "We wish Axys was updated with more features (i.e. ability to produce better reports; be more flexible)", commented one of the survey participants. Another of Advent's products – Geneva World Investor – was more highly regarded. 9% of Advent's respondents rated the product as being very good, exceeding expectations. However, one respondent suggested that "more flexibility on currency account structures will be very helpful". A few survey respondents mentioned Advent's Rules Manager Solution – particularly in relation to Relationship Management, Support and Maintenance.

In North America, Advent Software is admired in all four service areas. Meanwhile, European respondents cited Cost, Value and Reliability of the products as the main attractions of Advent's solutions. However the Latin American & Caribbean respondents were rather less impressed with the Cost, Value and Reliability of the products.

As we indicate in the table, Advent's scores mean that it is a Gold Provider in relation to Product/System Capabilities and Reporting, Integration (APIs), Data Feeds and Customisation. It is a Silver Provider in the other two service areas, and overall. Of all technology vendors considered in the Survey, it has received high ratings across multiple service categories from the greatest number of respondents. As noted above, qualitative comments have been positive. For these reasons, we believe that it is fair to see Advent as the leading company of the 31 considered in the Survey – even though it is only a Silver Provider overall.

As we discuss elsewhere in this launch edition of Financial IT, the modern industry dates back to the early 1980s – which, as it happens, was when Advent was founded. The survey highlights how Advent is not just an established player, but a technology vendor that has exploited a broad product offering, and a large client base, to establish an enviable leadership position across most service areas. It is very difficult to envisage that Advent will not make further gains in the years ahead, when the changes that take place in the investment management technology space will be dramatic. In coming surveys, we will be interested to see whether Advent can replicate the strong positions that it has in North America (especially) and Europe in the Asia-Pacific.

COMPANY PROFILE	
Company type	Listed Corporation
Annual turnover	$500 Million
Number of Customers Total	4 500
Number of Employees	200
Inception	1983
Geographical coverage	North America, Europe, Middle East, Africa, Asia Pacific

SERVICE AREAS ABOVE/BELOW THE GLOBAL AVERAGE SCORE

SERVICE AREA	Provider Score	Global Score	Rating
Product/System Capabilities	4.82	4.77	
Reporting, Integration (APIs), Data Feeds and Customisation	4.77	4.76	
Relationship Management, Support and Maintenance	4.79	4.87	
Cost, Value and Reliability	4.73	4.83	
Total	4.78	4.81	

Table 1. PRODUCT SCORE BY SERVICE AREAS

PRODUCT NAME	Percentage of Respondents	Product/system capabilities	Reporting, integration (APIs), data feeds and customisation	Relationship management, support and maintenance	Cost, value and reliability	Total
Advent On Demand	4.26%	4.83	5.50	4.00	6.25	5.15
Advent Portfolio Exchange (APX)	21.27%	5.21	5.40	5.26	5.25	5.28
Axys*	42.55%	4.32	4.20	4.18	4.09	4.20
Geneva World Investor	8.51%	6.16	6.00	6.26	6.19	6.15
Moxy	21.28%	4.38	4.50	4.78	4.63	4.57
Rules Manager	2.13%	4.25	5.25	6.50	4.00	5.00

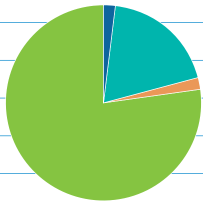
* The sales of Axys is limited at the moment. Advent Software Inc. only supports and upgrades the product on a regular basis.

Total Number Of Responses	48
Total Number Of Rated Products	6

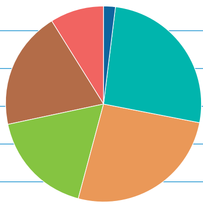
STRATEGY	
Single Strategy	23.7%
Multi-Strategy	76.3%

SURVEY CATEGORIES	PRODUCTS LISTED BY SURVEY CATEGORIES
Order/execution Management	Moxy
Portfolio Management	Geneva World Investor, Advent Portfolio Exchange (APX) , AXYS*
Fund Accounting	Geneva World Investor
Compliance (reporting ,tax, risk management)	Advent On Demand, Rules Manager

GEOGRAPHICAL ORIGIN OF RESPONDENTS	
Asia/Australia	2.0%
Europe	19.0%
Latin America & Caribbean	2.0%
North America	77.0%
South Africa	0.0%
Others	0.0%



ANNUAL IT BUDGET SPENT WITH THIS PROVIDER	
Less than 5%	2.17
5%-10%	26.10
10%-25%	26.10
25%-50%	17.38
More than 50%	19.57
Not Answered	8.68



LIST OF PRODUCTS

Moxy

Moxy is a trade order management system with more than 800 clients worldwide. The platform enables greater connectivity and integration with third party applications, networks, data, and other Advent solutions.

Geneva World Investor

Geneva World Investor, portfolio management and investor accounting and servicing platform, enables firms to achieve better transparency, fully support onshore and offshore investors, and meet the reporting requirements.

Advent Portfolio Exchange

Advent Portfolio Exchange® (APX) platform is an end-to-end portfolio management solution that integrates the front-office functions of prospecting, marketing, and customer relationship management with the back-office operations of portfolio accounting and reporting.

Axys

Axys, Advent's industry-leading portfolio management, reporting and accounting solution. Axys' tools enable clients to easily manage an expansive number of accounts and a wide range of investment instruments.

Advent On Demand

Advent OnDemand® offers Advent's award-winning suite of investment solutions through the Software-as-a-Service model (SaaS), with or without data management and reconciliation.

Advent's Rules Manager

Advent's Rules Manager, a solution for trading compliance and portfolio monitoring, help to turn manual policies and procedures into automated processes. The product can be integrated with Advent's Moxy®, allowing users to implement the proactive controls demanded by the SEC and manage client's complex restrictions.

Table 2. AVERAGE SCORES BY REGIONS AND SERVICE AREAS

SERVICE AREA	Asia/Australia	Europe	Latin America & Caribbean	North America	South Africa	Other
	○	○			×	×
Product/System Capabilities	▼	▼	▲	▲	n/a	n/a
Reporting, Integration (APIs), Data Feeds and Customisation	▼	▼	▲	▲	n/a	n/a
Relationship Management, Support and Maintenance	▼	▼	▲	▲	n/a	n/a
Cost, Value and Reliability	▼	▲	▼	▲	n/a	n/a
Total	4.03	5.46	3.88	4.64	n/a	n/a

Risk 101

Risk 101 came in second place after Advent in terms of its overall amount of responses. Risk 101's eponymous risk management product was well regarded in the Compliance (reporting, tax, risk management) survey category. Risk 101 is a comprehensive market risk management system, handling trades across all asset classes and currencies with full back-office reporting. Complex risk analytics may be bolted on (or onto other systems), offering stress testing, VAR, liquidity and exposure tests that handle derivatives as well. The survey also found that 75 % of the respondents using Risk 101 do so as part of a single-provider strategy and generally spend less than 5% of their IT budget with the company. Risk 101's clients are clustered in South Africa, Asia, Australia and Europe. Risk 101 is well regarded across all service areas and, in particular, Relationship Management, Support and Maintenance. Only one respondent commented on "inability to run the software over the Local Area Network with no degradation in performance." Risk 101 is an excellent example of how the most successful vendors of technology are not necessarily large organisations. Having developed a product that works extremely well to meet the needs of investment managers in South Africa, Risk 101 has shown that it is globally competitive.

COMPANY PROFILE	
Company type	Limited Liability Company (LLC)
Annual turnover	$1.25 Millions
Number of Customers Total	50
Number of Employees	15
Inception	2004
Geographical coverage	Europe, Australia, New Zealand, Africa

Total Number Of Responses	12
Total Number Of Rated Products	1

STRATEGY	
Single Strategy	75.00%
Multi-Strategy	25.00%

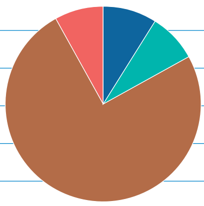
SERVICE AREAS ABOVE/BELOW THE GLOBAL AVERAGE SCORE

SERVICE AREA	Provider Score	Global Score	Rating
Product/System Capabilities	5.81	4.77	
Reporting, Integration (APIs), Data Feeds and Customisation	5.84	4.76	
Relationship Management, Support and Maintenance	6.26	4.87	
Cost, Value and Reliability	6.21	4.83	
Total	6.03	4.81	

SURVEY CATEGORIES	PRODUCTS LISTED BY SURVEY CATEGORIES
Compliance (reporting ,tax, risk management)	Risk 101

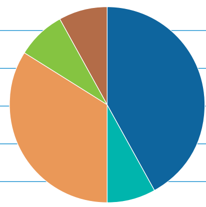
GEOGRAPHICAL ORIGIN OF RESPONDENTS

Asia/Australia	9.00%
Europe	8.00%
Latin America & Caribbean	0.00%
North America	0.00%
South Africa	75.0%
Others	8.00%



ANNUAL IT BUDGET SPENT WITH THIS PROVIDER

Less than 5%	42.0
5%-10%	8.0
10%-25%	34.0
25%-50%	8.0
More than 50%	8.0
Not Answered	n/a



PRODUCT SCORE BY SERVICE AREAS

PRODUCT NAME	Percentage of Respondents	Product/system capabilities	Reporting, integration (APIs), data feeds and customisation	Relationship management, support and maintenance	Cost, value and reliability	Total
Risk 101*	100.00%	5.81	5.84	6.26	6.21	6.03

* The data is coincided with Table " SERVICE AREAS ABOVE/BELOW THE GLOBAL AVERAGE SCORE".

Table 2. AVERAGE SCORES BY REGIONS AND SERVICE AREAS

SERVICE AREA	Asia/Australia	Europe	Latin America & Caribbean	North America	South Africa	Other
			×	×		
Product/System Capabilities	▲	▲	n/a	n/a	▲	▲
Reporting, Integration (APIs), Data Feeds and Customisation	▲	▲	n/a	n/a	▲	▲
Relationship Management, Support and Maintenance	▲	▲	n/a	n/a	▲	▲
Cost, Value and Reliability	▲	▼	n/a	n/a	▲	▲
Total	6.76	5.78	n/a	n/a	6.14	4.52

SunGard

Most of the 31 technology vendors that were considered in the Survey put us in touch with survey respondents. SunGard was unable to do this. Nevertheless, SunGard's well-known leadership at a global level as a technology vendor meant that it was considered in relation to two survey categories – Order/execution management and Transfer Agency. In relation to the former, SunGard's FIX solution stood out for its high scores. Interestingly, 60% of the respondents who use SunGard's products said that they use the company as a single-provider: they do not try to combine SunGard's solutions with those of other companies. SunGard is most highly rated by its customers in North America. We consider that it is reasonable to see SunGard as a Silver Provider and we look forward to the company's active participation in surveys that we conduct in 2013. SunGard is a newer company than Advent, and – on many metrics – a much larger one. Many of the strengths that will stand Advent in good stead in the years ahead are enjoyed by SunGard. These advantages include a broad geographic footprint in terms of clients and a broad product range. We accept that our definition of survey categories is somewhat arbitrary and that other commentators would segment the industry in a different way. Nevertheless, we would be surprised if, in coming years, SunGard did not extend its leadership beyond the two survey categories – Order/ execution management and Transfer Agency – in which it has already built formidable positions.

SURVEY CATEGORIES	PRODUCTS LISTED BY SURVEY CATEGORIES
Order/execution Management	AddVantage, FIX, GL OMS
Transfer Agency	Asset Arena Transfer Agency

COMPANY PROFILE	
Company type	Private company
Annual turnover	$4.5 billion
Number of Customers Total	approximately 25,000 customers
Number of Employees	more than 17,000 employees
Inception	2008
Geographical coverage	more than 70 countries

Total Number Of Responses	6
Total Number Of Rated Products	4

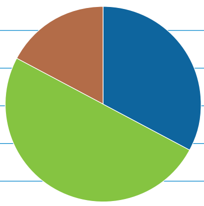
STRATEGY	
Single Strategy	60.0%
Multi-Strategy	40.0%

SERVICE AREAS ABOVE/BELOW THE GLOBAL AVERAGE SCORE

SERVICE AREA	Provider Score	Global Score	Rating
Product/System Capabilities	4.22	4.77	
Reporting, Integration (APIs), Data Feeds and Customisation	4.56	4.76	
Relationship Management, Support and Maintenance	3.99	4.87	
Cost, Value and Reliability	4.18	4.83	
Total	4.24	4.81	

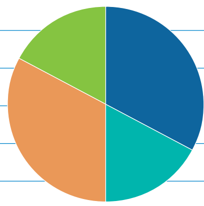
GEOGRAPHICAL ORIGIN OF RESPONDENTS

Asia/Australia	33.00%
Europe	0.00%
Latin America & Caribbean	0.00%
North America	50.00%
South Africa	17.0%
Others	0.00%



ANNUAL IT BUDGET SPENT WITH THIS PROVIDER

Less than 5%	33.0
5%-10%	17.0
10%-25%	33.0
25%-50%	17.0
More than 50%	n/a
Not Answered	n/a



PRODUCT SCORE BY SERVICE AREAS

PRODUCT NAME	Percentage of Respondents	Product/system capabilities	Reporting, integration (APIs), data feeds and customisation	Relationship management, support and maintenance	Cost, value and reliability	Total
Addvantage	16.00%	4.40	4.60	4.50	4.00	4.38
FIX	16.00%	5.00	5.00	5.00	5.50	5.13
GL OMS	16.00%	4.38	4.40	4.00	4.00	4.19
Asset Arena Transfer Agency	50.00%	3.90	4.50	3.44	3.79	3.91

Table 2. AVERAGE SCORES BY REGIONS AND SERVICE AREAS

SERVICE AREA	Asia/Australia	Europe	Latin America & Caribbean	North America	South Africa	Other
	○	✕	✕		○	✕
Product/System Capabilities	▼	n/a	n/a	▲	▼	n/a
Reporting, Integration (APIs), Data Feeds and Customisation	▼	n/a	n/a	▲	▼	n/a
Relationship Management, Support and Maintenance	▼	n/a	n/a	▲	▼	n/a
Cost, Value and Reliability	▼	n/a	n/a	▲	▼	n/a
Total	4.25	n/a	n/a	3.86	3.03	n/a

CYMBA Technology

"A truly customer-focused organisation – with knowledge, flexiblility and excellent partnership"-, commented one of CYMBA's clients. The hard numbers support this view. The company was considered in two out of six main survey categories: Order/execution Management and Compliance (reporting ,tax, risk management). CYMBA was represented by only one product- CYMBA Athena. CYMBA Athena provides a number of trading, liquidity and data connectivity solutions. The product includes extensive support for almost all asset classes, derivatives and collective investment vehicles. Although CYMBA has clients globally, the survey respondents who mentioned it all came from Europe. 83% of the participants said they bundle CYMBA Athena with EMSX & Trading Screen, Fidessa, Calastone, Bloomberg and Libris. 29% of the customers regularly spend from 25-50% of their annual IT budget on CYMBA Athena. The company has gained the highest scores for Cost, Value and Reliability. However, it also rated well across the other three service areas. Given CYMBA's overall score, we see it as a Gold Provider. An uncharitable view of CYMBA would describe it as a small company with one product that is operating mainly in one part of the world (but across two survey categories). However, the quantitative and qualitative data provided by the survey indicate that CYMBA will likely flourish in the years ahead – possibly in collaboration with a partner that is well established in North America.

COMPANY PROFILE	
Company type	Private Company
Annual turnover	£ 1 Million
Number of Customers Total	15
Number of Employees	Less than 10
Inception	Feb 2006
Geographical coverage	UK, US & Asia

Total Number Of Responses	7
Total Number Of Rated Products	1

STRATEGY	
Single Strategy	17.00%
Multi-Strategy	83.00%

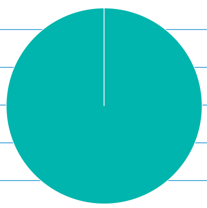
SERVICE AREAS ABOVE/BELOW THE GLOBAL AVERAGE SCORE

SERVICE AREA	Provider Score	Global Score	Rating
Product/System Capabilities	6.21	4.77	
Reporting, Integration (APIs), Data Feeds and Customisation	6.34	4.76	
Relationship Management, Support and Maintenance	6.46	4.87	
Cost, Value and Reliability	6.50	4.83	
Total	6.38	4.81	

SURVEY CATEGORIES	PRODUCTS LISTED BY SURVEY CATEGORIES
Order/execution Management	CYMBA Athena
Compliance(reporting ,tax, risk management)	CYMBA Athena

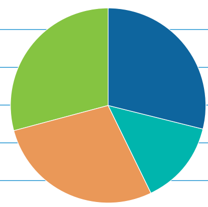
GEOGRAPHICAL ORIGIN OF RESPONDENTS

Asia/Australia	0.00%
Europe	100.00%
Latin America & Caribbean	0.00%
North America	0.00%
South Africa	0.00%
Others	0.00%



ANNUAL IT BUDGET SPENT WITH THIS PROVIDER

Less than 5%	29.0
5%-10%	14.0
10%-25%	28.0
25%-50%	29.0
More than 50%	n/a
Not Answered	n/a



PRODUCT SCORE BY SERVICE AREAS

PRODUCT NAME	Percentage of Respondents	Product/system capabilities	Reporting, integration (APIs), data feeds and customisation	Relationship management, support and maintenance	Cost, value and reliability	Total
CYMBA Athena*	100.00%	6.21	6.34	6.46	6.5	6.38

* The data is coincided with Table " SERVICE AREAS ABOVE/BELOW THE GLOBAL AVERAGE SCORE".

Table 2. AVERAGE SCORES BY REGIONS AND SERVICE AREAS

SERVICE AREA	Asia/Australia	Europe	Latin America & Caribbean	North America	South Africa	Other
	×		×	×	×	×
Product/System Capabilities	n/a	▲	n/a	n/a	n/a	n/a
Reporting, Integration (APIs), Data Feeds and Customisation	n/a	▲	n/a	n/a	n/a	n/a
Relationship Management, Support and Maintenance	n/a	▲	n/a	n/a	n/a	n/a
Cost, Value and Reliability	n/a	▲	n/a	n/a	n/a	n/a
Total	n/a	6.38	n/a	n/a	n/a	n/a

Linedata

Linedata was considered in the Fund Accounting survey category, where it is represented by its two leading products: Linedata Global Hedge and Linedata Longview. Linedata Global Hedge is a modular platform for hedge funds. Linedata Longview is a fully integrated front office trade order management platform for buy side institutions. As such, it supports the business requirements and workflows of portfolio managers, traders and compliance officers. The Survey found that rated more highly for its Product/System Capabilities in North America than in Europe. One of the European respondents underlined that the provider should work more closely with hedge funds and better target their expectations. 25% of participants marked Linedata Longview with the highest seven points for excellence. Linedata's leadership in its field means that, in our view, it is a Gold Provider. Although there were relatively few survey respondents who commented on Linedata, it is clear that its products set standards in the Fund Accounting survey category. Linedata scores more highly than its peers in all four service areas. However, it is in relation to Product/System Capabilities that the leadership is greatest. In coming years, we would expect Linedata to extend its client base in the Asia-Pacific.

COMPANY PROFILE	
Company type	Listed PLC
Annual turnover	Undisclosed
Number of Customers Total	700
Number of Employees	900
Inception	1998
Geographical coverage	Asia, Europe, North America

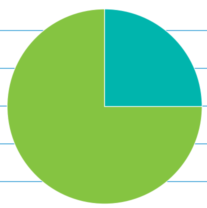
Total Number Of Responses	4
Total Number Of Rated Products	2

STRATEGY	
Single Strategy	33.0%
Multi-Strategy	67.0%

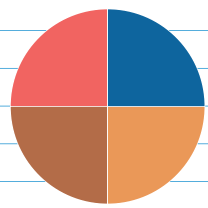
SERVICE AREAS ABOVE/BELOW THE GLOBAL AVERAGE SCORE			
SERVICE AREA	Provider Score	Global Score	Rating
Product/System Capabilities	5.18	4.77	
Reporting, Integration (APIs), Data Feeds and Customisation	4.95	4.76	
Relationship Management, Support and Maintenance	5.07	4.87	
Cost, Value and Reliability	4.88	4.83	
Total	5.02	4.81	

SURVEY CATEGORIES	PRODUCTS LISTED BY SURVEY CATEGORIES
Fund Accounting	Linedata Global Hedge, Linedata Longview

GEOGRAPHICAL ORIGIN OF RESPONDENTS	
Asia/Australia	0.00%
Europe	25.00%
Latin America & Caribbean	0.00%
North America	75.00%
South Africa	0.00%
Others	0.00%



ANNUAL IT BUDGET SPENT WITH THIS PROVIDER	
Less than 5%	25.0
5%-10%	n/a
10%-25%	25.0
25%-50%	n/a
More than 50%	25.0
Not Answered	25.0



PRODUCT SCORE BY SERVICE AREAS

PRODUCT NAME	Percentage of Respondents	Product/system capabilities	Reporting, integration (APIs), data feeds and customisation	Relationship management, support and maintenance	Cost, value and reliability	Total
Linedata Global Hedge	75.00%	4.40	4.68	4.27	4.49	4.17
Linedata Longview	25.00%	6.94	6.75	7.00	7.00	7.00

Table 2. AVERAGE SCORES BY REGIONS AND SERVICE AREAS

SERVICE AREA	Asia/Australia	Europe	Latin America & Caribbean	North America	South Africa	Other
	×	○	×	○	×	×
Product/System Capabilities	n/a	▼	n/a	▲	n/a	n/a
Reporting, Integration (APIs), Data Feeds and Customisation	n/a	▼	n/a	▼	n/a	n/a
Relationship Management, Support and Maintenance	n/a	▼	n/a	▼	n/a	n/a
Cost, Value and Reliability	n/a	▼	n/a	▼	n/a	n/a
Total	n/a	5.28	n/a	4.26	n/a	n/a

SS&C GlobeOp

SS&C GlobeOp's leadership as a global vendor of products and solutions to the investment management industry is reflected in the fact that it was considered in five of the six survey categories. Further, it is very highly rated, across all four service areas, by clients in North America and Europe. Its TNR and GlobeOp products were very consistently rated as excellent. The very high ratings mean that SS&C GlobeOp is a Gold Provider. Excellence of products is a necessary, but not sufficient, condition for large scale success in the investment management technology space. SS&C GlobeOp stands out for the variety of its products, and competitiveness across multiple survey categories. In spite of the small number of survey respondents, it is clear that SS&C GlobeOp serves diverse clients, and across different geographic regions. In coming surveys, it will be interesting to see if the scores that are received by the Kondor+ product rise to the levels of SS&C GlobeOp's other products.

COMPANY PROFILE	
Company type	Listed PLC
Annual turnover	Undisclosed
Number of Customers Total	5.500
Number of Employees	1200
Inception	1986
Geographical coverage	Global

Total Number Of Responses	4
Total Number Of Rated Products	4

STRATEGY	
Single Strategy	50.00%
Multi-Strategy	50.00%

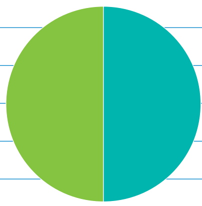
SERVICE AREAS ABOVE/BELOW THE GLOBAL AVERAGE SCORE

SERVICE AREA	Provider Score	Global Score	Rating
Product/System Capabilities	6.69	4.77	
Reporting, Integration (APIs), Data Feeds and Customisation	6.65	4.76	
Relationship Management, Support and Maintenance	6.75	4.87	
Cost, Value and Reliability	6.63	4.83	
Total	6.68	4.81	

SURVEY CATEGORIES	PRODUCTS LISTED BY SURVEY CATEGORIES
Order/execution management	Fund Administration
Portfolio management	TNR
Fund Accounting	Fund Administration
Transfer Agency	GlobeOp Portal, Kondor+
Compliance (reporting ,tax, risk management)	Kondor+, TNR

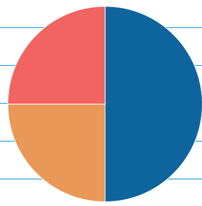
GEOGRAPHICAL ORIGIN OF RESPONDENTS

Asia/Australia	0.00%
Europe	50.00%
Latin America & Caribbean	0.00%
North America	50.00%
South Africa	0.00%
Others	0.00%



ANNUAL IT BUDGET SPENT WITH THIS PROVIDER

Less than 5%	50.0
5%-10%	n/a
10%-25%	25.0
25%-50%	n/a
More than 50%	n/a
Not Answered	25.0



PRODUCT SCORE BY SERVICE AREAS

PRODUCT NAME	Percentage of Respondents	Product/system capabilities	Reporting, integration (APIs), data feeds and customisation	Relationship management, support and maintenance	Cost, value and reliability	Total
Fund Administration	25.00%	6.60	7.00	7.00	7.00	6.90
TNR	25.00%	7.00	7.00	7.00	7.00	7.00
GlobeOp Portal	25.00%	7.00	7.00	7.00	7.00	7.00
Kondor+	25.00%	6.00	6.00	5.50	5.75	5.81

Table 2. AVERAGE SCORES BY REGIONS AND SERVICE AREAS

SERVICE AREA	Asia/Australia	Europe	Latin America & Caribbean	North America	South Africa	Other
	×		×		×	×
Product/System Capabilities	n/a	▲	n/a	▲	n/a	n/a
Reporting, Integration (APIs), Data Feeds and Customisation	n/a	▲	n/a	▲	n/a	n/a
Relationship Management, Support and Maintenance	n/a	▲	n/a	▲	n/a	n/a
Cost, Value and Reliability	n/a	▲	n/a	▲	n/a	n/a
Total	n/a	6.41	n/a	6.95	n/a	n/a

June-September 2012 saw plenty of Mergers and Acquisitions activity among top financial IT providers. We highlight what corporate press releases said about some of the deals. We also note some of the recent moves by executives and a number of high profile mandates that have been awarded.

IN THE NEWS DEALS

Temenos Agrees To Acquire edge IPK

September 24, 2012

The leading provider of integrated modular core banking systems, Temenos has signed an official agreement to purchase edge IPK, a provider of user experience platform (UXP) software to the financial services industry with the overall revenue of $5.7m (in 2011). The combined business will create a clear UXP market leader in financial services and generate significant opportunities for its customers and employees. The transaction is expected to close at the beginning of October. Terms and conditions of the deal have not been disclosed.

SAP Buys Ariba Inc.

August 30, 2012.

SAP's subsidiary, SAP America Inc. has bought the leading cloud-based business commerce network, Ariba Inc. for approximately $4.3bn ($45 per share or 20 percent more than Ariba's May 21 closing price).

The transaction has been finally approved by Ariba board of directors on August 30, 2012. At the present time, the company operates as an independent business under the name "Ariba, an SAP company.'

As the positive result of acquisition, SAP AG has significantly boosted its cloud applications portfolio with the addition of Ariba's leading cloud-based procurement solutions.

Conifer Securities Is Acquired By JonesTrading

August 15,2012.

Agreement has been reached for JonesTrading to acquire Conifer Securities and manage the business as a wholly owned subsidiary. According to the agreement, the Conifer Group will obtain an equity stake in JonesTrading and Jack McDonald, President and CEO of The Conifer Group, will join JonesTrading's Board of Directors. The transaction is expected to close in the fourth quarter of 2012.

"This partnership will provide a comprehensive and powerful set of tools that will enhance the superior trade execution services both firms currently provide," said Jack McDonald, President and CEO of The Conifer Group.

Correlix is now a part of TS-Associates

July 30, 2012.

TS-Associates has bought the assets of Correlix, a latency management service provider. With this acquisition, TS-Associates currently offers the most comprehensive range of instrumentation solutions for electronic trading systems, with best-of-breed latency monitoring and trade flow analysis capabilities: it appeals to both technology and business users and with proven features at every layer in the technology stack.

As a result of the acquisition, TS-Associates has added data centre and enlarged office facilities in Wall Street, New York together with a development centre in Herzliya, Israel.

Wolters Kluwer Financial Services Acquired FinArch

July 16, 2012.

Wolters Kluwer Financial Services announced the acquisition of FinArch, a leading provider of integrated finance, risk and performance measurement solutions that enable financial institutions to manage, measure and report all financial activities. The acquisition strengthens Wolters Kluwer Financial Services' leading global risk and compliance position and extends its capabilities into integrated finance, risk and performance management. In doing so, the combined company can provide financial institutions with better control, insight and management of their financial data, and ultimately, a clearer enterprise view and enhanced management of their risk and performance.

The FinArch management team joined Wolters Kluwer Financial Services. Other terms of the deal were not disclosed.

SS&C Acquires GlobeOp

June 27, 2012.

This deal cost SS&C approximately £572 million (for £4.85 per GlobeOp share). The acquisition is, by value, the largest in SS&C's history and significant for the whole fund services industry.

As a business group, the new entity is one of the market's leading fund service providers with the ability to deliver complete lifecycle capabilities for hedge funds, fund of funds, private equity and managed account managers. The combined entity services more than 6,700 funds with $424 billion in assets under administration.

Misys merges with Turaz to create the number one provider of financial services software

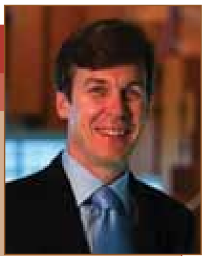
June 1, 2012.

As part of this transaction, Misys and Turaz, the business that includes the Kondor+ product line, are now one company officially operating as one under the name "Misys'. By combining these two award-winning enterprise software companies, the new Misys will offer its customers access to an unrivalled pool of expertise and domain knowledge, in combination with the most comprehensive portfolio of software solutions available on the market today.

"By combining Misys with Turaz the new organisation will stand out from the crowd in terms of both the breadth and completeness of coverage across banking, and sell-side and buy-side institutions.', stated the newly appointed Misys CEO, Bret Bolin.

IN THE NEWS PEOPLE MOVES

OpenLink has a new CEO



21 September 2012

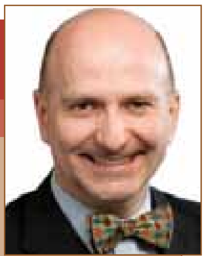
Dr. Greene, 58, is a financial technology veteran with 30 years of global executive expertise at leading institutions including the Federal Reserve Board, Citigroup, IBM, and FICO. He served as FICO's CEO for five years, before leaving earlier this spring. Prior to that, he was Vice President of Financial Services, Sales and Distribution at IBM.

Citi appoints Andrew Gelb as the head of North America treasury and trade solutions

September 12, 2012

Citi appointed Andrew Gelb the new Head of North America Treasury and Trade Solutions. Andrew succeeds Amol Gupte who has been named Asia Pacific Region Head for Citi Transaction Services. Mr Gelb has worked in Citi's transaction banking business for nearly 15 years in locations including London, New York and Tokyo. His most recent position was Regional Head of Citi's Securities and Fund Services (SFS) business for Europe, Middle East and Africa.

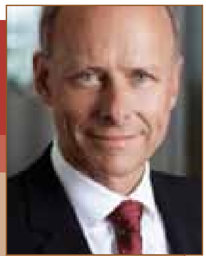
WHIPTAIL Appoints Former SunGard CEO to Its Board of Directors



September 19, 2012

WHIPTAIL has appointed Cristóbal Conde to the company's Board of Directors. As the former President and CEO of SunGard, Mr Conde's global leadership experience will help WHIPTAIL continue its aggressive growth trajectory and capitalise on global opportunities in the flash storage market. Conde served as president and CEO of SunGard for nine years and at the time of his departure in 2011 SunGard had revenues of $5.6 Billion, employed 26,000, was ranked #380 on the Fortune 500 list.

Former President of Microsoft's activities in Western Europe Appointed New CEO of SimCorp



September 3, 2012

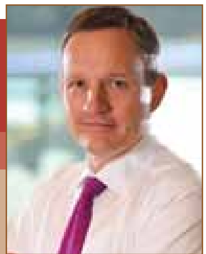
SimCorp welcomed its new CEO, Klaus Holse, the former President of Microsoft's activities in Western Europe, whom earlier this year was appointed the successor of Peter L. Ravn. In parallel to Mr Ravn's handover, an expected adjustment to SimCorp's management and organisational structure for the SimCorp Group was announced. The adjustment is a further step towards SimCorp's vision of becoming "the number one provider of investment management solutions globally."

Fidessa strengthens North American buy-side business with new president

September 1, 2012

Fidessa group plc (LSE: FDSA) has further invested in and strengthened its Boston-based North American buy-side business with the promotion of Megan McKeever Costello to President. In her new role, Ms. Costello will drive and manage the growth and development of Fidessa's buy-side business, a key part of Fidessa's strategic, global expansion plans. She reports to Paul Nokes, Fidessa's Global Buy-side CEO.

Antony Jenkins appointed as a Director and as Group Chief Executive of Barclays



August 30, 2012

Barclays PLC and Barclays Bank PLC ("Barclays") announced that Antony Jenkins has been appointed as a Director and as Group Chief Executive of Barclays with immediate effect. Mr Jenkins currently leads Barclays Retail and Business Banking (RBB) business. He has been a member of the Group Executive Committee of Barclays since 2009. As CEO for RBB he was responsible for retail banking in Barclays Africa and Absa.

IN THE NEWS MANDATES

Union Bank of Nigeria turns to Misys to strengthen international trade operations

Provider: Misys
Client: Union Bank of Nigeria
Mandate value: Undisclosed

September 24, 2012

Union Bank of Nigeria PLC. has selected Misys to enhance its international trade operations. The bank will implement an integrated front-to-back solution from Misys with the bank's existing applications, supported by the highly skilled implementation team from the provider.

The solution combines the strength of the e-business solution, Misys Trade Portal, a fully-featured platform for trade finance managers to connect to their banks to complete their international trade transactions, with the robust Misys Trade Innovation, which efficiently processes trade finance transactions.

Oak Bank Selects Fiserv for Account Processing and Digital Banking Solutions

Provider: Fiserv
Client: Oak Bank
Mandate value: Undisclosed

September 21, 2012

Oak Bank, a $218-million Chicago-based institution, has selected the Premier® bank platform, outsourced processing services and an array of additional Fiserv solutions to enhance the products available to its customers. The flexibility and integration of Fiserv solutions, in addition to the leading-edge digital banking solutions offered by Fiserv, were cited as key factors in Oak Bank's decision. Located in the heart of Chicago's Gold Coast neighborhood, the bank plans to use the technology to expand its footprint.

Lien Viet Post Bank, Vietnam goes live on electraSWITCH

Provider: ElectraCard Services (ECS)
Client: Lien Viet Post (LVP) Bank
Mandate value: Undisclosed

September 17, 2012

ElectraCard Services (ECS) has partnered with Lien Viet Post (LVP) Bank, enabling the bank to rapidly add ATMs with multiple value added services and issue cards.

The electra™ payments suite, which includes the electraSWITCH™, electraPREPAID™ and electraCREDIT™, will enable LVP Bank to offer to its customers access to a range of delivery channels including ATMs, POS, the Internet, mobile and IVR. The bank also plans to leverage the electra suite to roll out innovative and effective ways to deliver value to its credit, debit and prepaid cardholders. The Bank is planning to issue one million cards by 2014, enlarge its terminal network up to 500 ATMs and grow to 1,500 POS-terminals over the next five years.

Dutch-Belgian Bank Selects Wolters Kluwer Financial Services to Bolster Risk Management Strategy

Provider: Wolters Kluwer Financail Services
Client: Delta Lloyd Bank
Mandate value: Undisclosed

September 11, 2012

Delta Lloyd Bank is expanding the use of its offerings, having selected Wolters Kluwer Financail Services' ALM and Liquidity Risk Management solutions for the bank's Belgian and Dutch divisions.

Delta Lloyd Bank chose Wolters Kluwer Financial Services for its efficient and integrated ALM and liquidity risk management analysis, which has helped the bank centralize both ALM and liquidity for its Belgian and Dutch operations in one risk portfolio.

Miles Capital Upgrades To Indata iPM Cloud For Institutional Asset Management

Provider: INDATA
Client: Miles Capital
Mandate value: Undisclosed

August 29, 2012

Miles Capital, based in Des Moines, IA is now live with INDATA's iPM – Intelligent Portfolio Management® platform via the cloud for its growing institutional business.

PM Cloud contains the best of class functionality required by institutional investors. The system provides a built-in data management engine that assesses data on a real-time basis and alerts designated end users before issues become problems.

BPC Banking Technologies Wins Fraud Management Contract In USA

Provider: BPC Banking Technologies
Client: Crystal Clear Payments
Mandate value: Undisclosed

July 30, 2012

BPC-USA announced a new contract signing with US processor, Crystal Clear Payments (CCP) to implement its fraud management solution, SmartGuard. CCP is a best-of-breed payment processing solution for community financial institutions who want the best of technology and service excellence.

Speed to market and business agility are two crucial ingredients in CCP's strategy; in selecting SmartGuard they were confident that the solution could be implemented rapidly and would deliver the flexibility needed to combat the growing threat fraud poses to their customers. With their deep understanding of the solutions currently available in the marketplace, CCP also selected SmartGuard because of its proven ability to significantly reduce the impact of fraud.

Financial IT

Financial Technology Buyers' Guide

2012

ARQA is a part of a global structure. It connects brokers' technology operations with those of exchanges and trading platforms. The company offers comprehensive solutions for automation of front- middle- and back- office operations. The company provides outsourcing, hosting and backup services for its QUIK program complex (with additional modules from the company's technical centres located in Moscow, Kiev and Novosibirsk). ARQA's key product is the QUIK Information and Trade Systems Family, a leader among Russian Internet-trading systems. QORT, a new software platform intended for end-to-end automation of standard broker operations, has been developed since 2007, as has its application midQORT, a middle-office software for brokers.

COMPANY PROFILE	
Company type	LLC
Annual turnover	Undisclosed
Number of Customers Total	250
Number of Employees	100
Inception	2000
Geographical coverage	Estonia, Kazakhstan, Russia, Ukraine, United Kingdom

COMPANY CONTACT DETAILS	
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Telephone number	+7 (383) 219–1619
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Beta Systems Software AG provides high-quality software products and solutions in the IT security and transparency area, as well as for the automated processing of ultra-large data and document volumes. In its 'Data Center Automation & Audit', 'Identity & Access Governance' and 'Document Processing & Audit' business areas, the company supports customers from the financial services, industrial, retail/wholesale, logistics and IT services areas in the optimization of IT security and the automation of business process, and with an extensive range of products, solutions and consulting in the 'GRC – Governance, Risk & Compliance' area for legal and business compliance requirements.

COMPANY PROFILE	
Company type	PLC
Annual turnover	See annual financial report
Number of Customers Total	1,300
Number of Employees	270
Inception	1983
Geographical coverage	Global

COMPANY CONTACT DETAILS	
Contact	Peter Fuhrmann
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Homepage address	www.betasystems.com

Bravura Solutions is a leading global supplier of superannuation, pension, life insurance, investment, private wealth and portfolio administration, transfer agency and financial messaging software applications, as well as business and strategic consulting services. With over 30 years of experience in developing and maintaining large scalable financial systems, over 650 Bravura Solutions employees support clients from sixteen offices around the world. Bravura Solutions' software is installed globally, with a range of corporate clients in Australia, UK, New Zealand, Asia, South Africa and Europe.

COMPANY PROFILE	
Company type	PLC/Listed firm
Annual turnover	$120.7 Million
Number of Customers Total	Over 150
Number of Employees	650+
Inception	2004
Geographical coverage	Australasia, Ireland, Luxembourg, Norway, South Africa, United Kingdom

COMPANY CONTACT DETAILS	
Contact	Ben Faulkner
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Homepage address	www.bravurasolutions.com

Comada provides the alternative funds industry with technology solutions that revolutionise operational processes and the way the industry communicates. Our vision has always been to deliver system solutions that make a real difference to our clients and the way they do business. At the core of this offering sits our award-winning M.A.T.ware technology. Our experience provides us with unique insights into the way alternative investment firms and their service providers can use technology to introduce new efficiencies and tools, helping them to focus on their own mission critical deliverables and reduce costs.

COMPANY PROFILE	
Company type	Corporation
Annual turnover	Undisclosed
Number of Customers Total	Undisclosed
Number of Employees	Undisclosed
Inception	1983
Geographical coverage	Global

COMPANY CONTACT DETAILS	
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Compass Plus provides proven software and services for financial institutions, including retail banks and payment processors across the globe that operate in complex and rapidly changing business and technology environments. Compass Plus builds and quickly implements comprehensive and integrated payment technologies that allow customers to increase revenue and profits, and improve their competitive position by implementing flexible systems that meet market demands. With hundreds of successful projects spanning card, account and merchant management, card personalisation, mobile and electronic commerce implemented in record breaking time, Compass Plus ensures its customers make the most of their technology investments.

COMPANY PROFILE	
Company type	Limited Partnership
Annual turnover	Undisclosed
Number of Customers Total	Undisclosed
Number of Employees	Undisclosed
Inception	1989
Geographical coverage	Global,

COMPANY CONTACT DETAILS	
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Email	enquiries.uk@compassplus.com
Homepage address	www.compassplus.com

ElectraCard Services, a subsidiary of Opus Software Solutions, provides products and third party processing services for credit and payments management industry across the world. ECS is a PCI DSS certified Third Party Processor (TPP) for MasterCard® and VISA® across the issuing and acquiring spectrum of the electronic payments business. MasterCard Worldwide also has a strategic investment of 12.5% in ElectraCard Services. ElectraCard Services enables financial institutions, retailers, finance companies and corporations to electronically process, in real-time, any type of payment transaction, including credit, debit, pre-paid, and ACH. In addition to typical back office processing, ECS also offers ecommerce gateway and switching solutions.

COMPANY PROFILE	
Company type	Limited Partnership
Annual turnover	Undisclosed
Number of Customers Total	80
Number of Employees	1100
Inception	1997
Geographical coverage	Asia, Europe, North America, Africa, South America

COMPANY CONTACT DETAILS	
Contact	Sharad Somani
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FERNBACH is a niche market provider for IFRS (multi-GAAP) accounting and risk management solutions in accordance with Basel II / III. Our modular software packages and our best-practice methodology can be integrated quickly into our customers' existing environments. By using our flexible reporting tools it is possible to quickly perform any analysis required. The design logic incorporated in our application allows rules and formulas to be adjusted and optimised quickly and easily. The FERNBACH solutions enable our customers to meet their business and technical requirements for everyday operations in the finance, risk and compliance sectors at highly competitive prices and implementation timeframes.

COMPANY PROFILE	
Company type	PLC/Listed firm
Annual turnover	Undisclosed
Number of Customers Total	More than 50
Number of Employees	150
Inception	1986
Geographical coverage	Asia, Europe, Africa

COMPANY CONTACT DETAILS	
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Founded in 2006, iCreate is a "Business Intelligence for Banking" specialist that focuses on Business Intelligence, Reporting, Performance Management & Analytics solutions for banks. iCreate's data modeling, data warehousing and reporting capabilities allow banks to align data with business needs and build enterprise reporting and performance management scorecards to direct management attention. iCreate also works on building analytics and rules engines that provide banks with crucial insights into their business thus enhancing their performance. iCreate has been funded by IDG Ventures – a venture capital investment major to augment the company's growth strategy including continued product development and enhancement.

COMPANY PROFILE	
Company type	Partnership
Annual turnover	$2.5 Million
Number of Customers Total	15
Number of Employees	120
Inception	2006
Geographical coverage	Global

COMPANY CONTACT DETAILS	
Contact	Naresh Kurup
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informa

Informa Investment Solutions, a subsidiary of Informa plc, is a leading provider of solutions and custom services to financial institutions and investment professionals. For over 30 years, Informa Investment Solutions has supplied valuable data and offered tailored performance measurement, wealth management tools, reporting, and communications solutions to brokerages, money management firms, investment consultants, independent advisors and pension plan sponsors. We serve more than 1,300 clients and track data in our widely-used PSN database for more than 2,000 investment management firms and 12,000 products worldwide. For more information on Informa Investment Solutions, visit www.informais.com.

COMPANY PROFILE	
Company type	PLC/Listed firm
Annual turnover	$30 Million
Number of Customers Total	1,200
Number of Employees	250
Inception	1983
Geographical coverage	Europe, North America

COMPANY CONTACT DETAILS	
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INFRONT

Infront is a financial information technology company that provides market data and real-time trading solutions to buy and sell-side financial players across Europe. Its flagship product – the Infront terminal – has grown to support over 9000 users. Infront solutions enable sell side players to provide their clients with professional level information terminal functionality and cost efficient electronic trading on over 50 exchanges worldwide – with a direct impact on increased trading volumes. Infront solutions offer unmatched performance, comprehensive trading integration, market data flexibility, straightforward user administration and white labeling possibilities.

COMPANY PROFILE	
Company type	Limited Liability Company (LLC)
Annual turnover	$20 Million+
Number of Customers Total	300+
Number of Employees	50+
Inception	1998
Geographical coverage	Europe

COMPANY CONTACT DETAILS	
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microgen

Founded in 1974 and listed on the LSE (MCGN) since 1983, Microgen is an established leader in the delivery of software, solutions and consultancy services. The Group implements bespoke applications, product software solutions for the world's largest financial institutions, multi-national corporations and public sector organizations. The Group's portfolio of proven products and solutions, many of which are based on its proprietary Microgen Aptitude technology, enables the intelligent application of technology in a range of sectors including financial services, energy, asset & wealth management, commercial, transport & logistics and the public sectors.

COMPANY PROFILE	
Company type	PLC/Listed firm
Annual turnover	£38.8 Million (2011)
Number of Customers Total	1,000 +
Number of Employees	273
Inception	1974
Geographical coverage	Global

COMPANY CONTACT DETAILS	
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Email	marketing@microgen.com
Homepage address	www.microgen.com

OptionsCity

ELECTRONIC TRADING SIMPLIFIED

As developers of the award-winning Metro electronic trading and market-making platform, Chicago-based OptionsCity Software has helped options traders make markets and trade on the world's leading derivative markets since 2006. OptionsCity products are built on power, speed and reliability that options traders require to have full control over trading, safety, and risk management. OptionsCity is a certified Independent Software Vendor on leading global derivative exchanges and markets.

COMPANY PROFILE	
Company type	Corporation
Annual turnover	Undisclosed
Number of Customers Total	Undisclosed
Number of Employees	45
Inception	2006
Geographical coverage	North America

COMPANY CONTACT DETAILS	
Contact	Tommy Twomey
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Pendo Systems is a premier provider of investment accounting software solutions for global financial institutions. Focused on the investment management community, Pendo Systems provides a superior solution that specifically addresses accounting needs across multiple financial verticals. The company is the must-have solution for these problems due to its superior architecture, extraordinary customer focus and efficient deployment of its solutions. BasisPoint®, built on Microsoft technology, is a global enterprise-grade investment accounting engine that is multi-currency, multi-basis and multi-client. It is also the first cross vertical, global investment accounting application to enter the market in over 20 years.

COMPANY PROFILE	
Company type	Corporation
Annual turnover	$5 Million
Number of Customers Total	20
Number of Employees	12
Inception	2006
Geographical coverage	North America

COMPANY CONTACT DETAILS	
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COMPANY PROFILE	
Company type	Corporation
Annual turnover	$350 Million
Number of Customers Total	150
Number of Employees	10,500
Inception	1987
Geographical coverage	Global

COMPANY CONTACT DETAILS	
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Pricing Partners SAS is an international software developer of derivative pricing analytics and a service provider of independent valuation for all OTC derivatives ranging from vanilla to the most complex exotic and hybrid structures. Founded in 2005, Pricing Partners develops its proprietary financial library, Price-it®, in stand-alone or SaaS mode, covering all major asset classes: interest rates, equity, inflation, credit, foreign exchange, commodities, life insurance and hybrid products. Pricing Partners' intrinsic knowledge and innovative solutions empower financial institutions to achieve accurate and transparent valuations on their derivative products.

COMPANY PROFILE	
Company type	Limited Liability Company (LLC)
Annual turnover	Undisclosed
Number of Customers Total	Undisclosed
Number of Employees	Undisclosed
Inception	2005
Geographical coverage	Asia , Europe , North America

COMPANY CONTACT DETAILS	
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COMPANY PROFILE	
Company type	Corporation
Annual turnover	Undisclosed
Number of Customers Total	more than 500
Number of Employees	more than 350
Inception	1999
Geographical coverage	Asia, Europe, North America, Global, Australia, Africa, South America

COMPANY CONTACT DETAILS	
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COMPANY PROFILE	
Company type	Partnership
Annual turnover	Undisclosed
Number of Customers Total	More than 1000
Number of Employees	150
Inception	1992
Geographical coverage	Global

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SAGE SA, a privately-held software publisher, develops leading financial software that satisfies the needs of global financial organizations and assists them in improving their productivity while focusing on their core competence. SAGE SA, which was founded in 1986, has its headquarters in Switzerland, and has branches in Dubai and Singapore. Over the years, it has developed a cutting-edge front to back-office banking system, called Prospero, the Global Banking & Wealth Management System.

COMPANY PROFILE	
Company type	Private company
Annual turnover	Undisclosed
Number of Customers Total	Undisclosed
Number of Employees	80
Inception	1986
Geographical coverage	Asia, Europe

COMPANY CONTACT DETAILS	
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Both a software publisher and an Application Services Provider, SLIB is a trusted partner to the financial services industry, always on the lookout for changes in the European securities landscape, by supplying its customers with innovative software solutions to streamline their securities processing and improve their performance, whilst mitigating their risks. SLIB solutions support securities order and trade, clearing, settlement, custody, online vote prior to General Meetings and risk control. To date 50 securities services providers throughout Europe are using SLIB solutions.

COMPANY PROFILE	
Company type	Limited Partnership
Annual turnover	More than $18 Millions
Number of Customers Total	50+
Number of Employees	110
Inception	1988
Geographical coverage	Europe

COMPANY CONTACT DETAILS	
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Surecomp is a leading provider of global trade solutions for banks and corporations. Established in 1987, Surecomp is a market pioneer with a proven track record delivering innovative solutions worldwide. With a global network of regional offices and six state-of-the-art development centers, Surecomp successfully supports hundreds of installations in over 80 countries. Surecomp's integrated portfolio of trade finance, supply chain and treasury confirmation matching solutions streamlines the transaction lifecycle to minimize costs and maximize profits. For additional information, visit www.surecomp.com.

COMPANY PROFILE	
Company type	Private company
Annual turnover	Undisclosed
Number of Customers Total	300+ installation sites globally
Number of Employees	235 globally
Inception	1987
Geographical coverage	Global

COMPANY CONTACT DETAILS	
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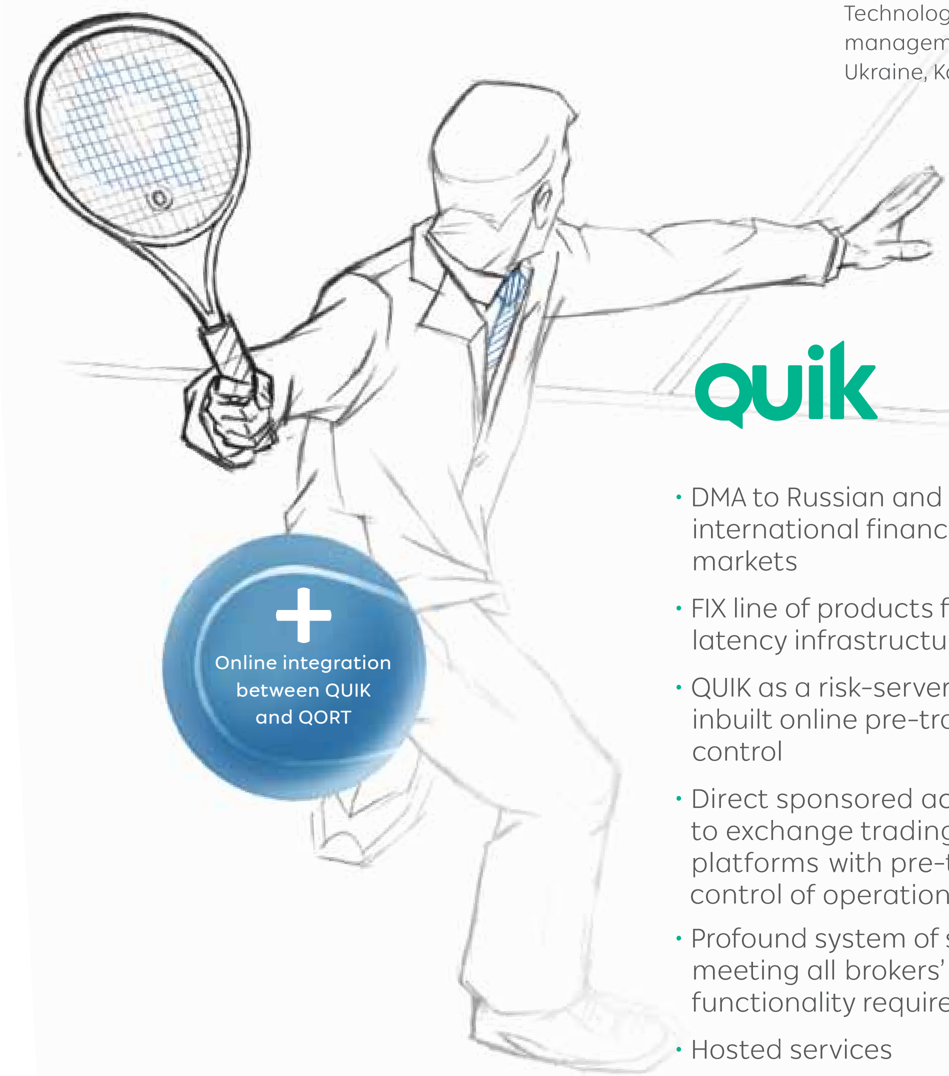
ARQA TECHNOLOGIES

ARQA Technologies is a leader in Russian and Ukrainian IT for financial institutions. The company provides front to back solutions to a wide range of market participants. Today the clientele of ARQA Technologies includes more than 270 banks, asset management and investment companies from Russia, Ukraine, Kazakhstan, Great Britain and Estonia.



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