Goodacre

CONSULTANCY ▪ EVENTS ▪ RECRUITMENT ▪ TRAINING

SYSTEMS IN THE CITY FINTECH REVIEW

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FOREWORD

Goodacre UK has been closely involved with data, services and systems for the financial services sector for 20 years. There have been many challenges during this time both for the commercial providers and the user firms themselves. The legislative and regulated pressures have been well documented with all sides working hard to overcome each obstacle. These experiences are creating the need for a new operating environment, one which centres on harnessing effective technology.

Trends are changing and interest in outsourcing IT infrastructures, employing Software as a Service (SaaS), cloud solutions and full service clearing is increasing. Many firms are re-assessing the 'benefits balance' of controlling operational systems in-house or transferring processes to third party providers. Confidence in commercial suppliers in these respects is increasing. Similarly, many investment firms now consider settlement operations as an essential utility. There is a growing trend to seriously consider 'buying in' the IT and support for this important and basic need from the increasing number of organisations offering these services.

As important as advances in technology are, the quality of data and systems on offer rely on the people delivering and supporting the solution. With this in mind, I am grateful for the support we receive from commercial providers who respond to our RFI's and go out of their way to ensure our team remains up to speed with knowledge of their products. As always, the consultancy team here at Goodacre are always interested in your views and, of course, are on hand for any support you or your company may require.

Stephen Pinner Chartered FCSI
Managing Director, Goodacre UK

TECHNOLOGY AND THE CITY

Computers have transformed everything. And every industry. Almost!

Tracking the development of computers throws out a number of interesting facts. David Packard and Bill Hewlett started their company in a California garage. Their first product, the HP 200A Audio Oscillator, was used by Walt Disney Pictures which ordered eight of the 200B machines to test recording equipment and speaker systems for the 12 specially equipped theatres that showed the movie "Fantasia" in 1940.

By 1970, the Digital Equipment Corporation (DEC) VAX family of computers rivalled much more expensive mainframe computers in performance and featured the ability to address over 4 GB of virtual memory, hundreds of times the capacity of most minicomputers. The success of the VAX family of computers transformed DEC into the second-largest computer company in the world, as VAX systems became the de facto standard computing system for industry, the sciences, engineering, and research.

In the mid 80's Compaq beat IBM to the market when it announced the Deskpro 386, the first computer on the market to use Intel´s new 80386 chip, a 32-bit microprocessor with 275,000 transistors on each chip. At 4 million operations per second and 4 kilobytes of memory, the 80386 gave PCs as much speed and power as older mainframes and minicomputers

During the 90's, 'handheld' computers were introduced and the first camera phones were launched, as many industries harnessed the benefits of computerisation.
Against this background, IT developments within the financial services sector have performed strangely. In the late 1960's, few firms were attracted to switch from mechanical processing machines such as typewriters, comptometers, stock ticker machines etc. to computerised alternatives. Some firms did install various pieces of equipment to assist investment processing. However, it was not until the early 70's before things started to move forward when the computer bureau became firmly established. By running a telephone line from a company's office to the bureau, an investment company could send and receive information in real time without the need or expense of installing a mainframe within the office. It was just as well as an IBM 360 would cost in excess of $130k, equivalent to over $850k in today's terms – and you needed two for back up!

In more recent years, the cost of hardware has dropped significantly as has the need to accommodate it in an air conditioned 'specially adapted' environment. In parallel, storage capacity has increased as has the speed at which software can be developed.

The role and importance of software within investment services was innovative in the 80's and early 90's. Systems such as Quasar from ACT Financial Systems and HI Portfolio from DST Clarke & Tilley developed all encompassing 'front to back' solutions which satisfied demands at the time. Considerable investment was required and suppliers were open to this on the basis that it would secure new clients. Now, the appetite from commercial providers for investment in software development which is not financially underwritten by exisiting or prospective client companies has reduced dramatically. Most providers want certainty that their developments will generate revenue. This is particularly relevant as consolidation in certain market sectors may increase the size of firms but reduce the number of companies and potential clients.

Generally, technological advances have introduced levels of efficiency to many industrial and personal needs. In manufacturing, cars are built by robots and at home, we can see who is ringing the bell at our front door from our smartphone.
However, within financial services a number of organisations struggle to automate processes and continue to rely on manual resources.

THE CHALLENGES

Financial services companies have many challenges, even more so since the 2008 'meltdown'. Compared to 30 years ago, the cost of staying in business has rocketed due to regulatory and legislative obligations and managing risks to avoid fines and censures. Many of the systems used still have their roots in technology originally developed over 20 years ago which at the time may have been efficient but are now increasingly costly and difficult to maintain. As pressure on profitability has increased due to rising costs and the need to remain fully compliant, investment companies looking to change systems are concerned with the costs of a transfer and the risks involved with implementation. In addition, and human nature being what it is, management within certain firms puts up strong arguments to stakeholders against changing operational infrastructures as they want to protect their own role and often, the jobs for their subordinates.

Trends also come and go. Some hang around for longer than others but all of them have to be given due consideration or you risk behind left behind the curve. Currently we have Blockchain, Digitalisation, Artificial Intelligence, Big Data and many others that demand attention but Regulation continues to dominate and is here to stay. The financial services industry is awash with it; as soon as we've mopped up the latest tsunami of changes, another huge wave appears on the horizon, dark and foreboding, threatening to wash away all plans, time, budget, resources and energy. And each time a new wave of regulation crashes over us, we wonder "if we can just get through this, then maybe there will be a regulatory hiatus and we can start to look at ways of developing our business, of improving services to our clients..." It really is the industry's equivalent of Brexit! However, that hiatus never does arrive and we need to accept that this is the new norm, 'Business as Usual' if you like, and plans have to be made to keep all the regulatory plates spinning whilst finding new ways to develop, improve efficiency, reduce costs and attract new prospects and delight existing clients with exciting new services.

So what role does Fin Tech play and can they provide all or some of the answers?

In their recent paper "Financial Services Technology 2020 and Beyond", PwC noted that "Fin Tech will drive the new business model" and that firms must:

- update their IT models;
- slash costs by simplifying legacy systems;
- build technology capabilities to get more intelligence about clients' needs;
- be open to connecting to anything, anywhere (interoperability);
- pay due attention to cyber security - your reputation is hard won but easily lost;
- make sure you have the skills and talent to deliver and win.

In another recent study it was noted that technology is no longer an important part of financial services—it is a fundamental element.

Further, PwC's Global FinTech Report called "Redrawing the lines: FinTech's growing influence on Financial Services", reporting that 82% of incumbents expect to increase their FinTech partnerships in the next three to five years.

Fin Tech will play a pivotal role in delivering efficiencies and reducing costs to financial services participants. Digital transformation, in particular, will further empower their clients to engage with them in so many ways we would not have thought possible just a few years ago.

THE CHALLENGES

There are many commercial suppliers to the regulated investment sector and while all are keen for more business, they have their own challenges. Competition among them is fierce for a new client contract and when there is an opportunity, prospective buyers will demand comprehensive functionality commitments together with the lowest possible charges. Often, demands will be made over and above any 'standard offering' where functionality is perceived to be lacking. Should the supplier actually win the order, it is then faced with design, development and implementation obstacles which can, if not carefully managed, interfere with the level of service provided to existing clients. Of course, there is always the possibility of the 'instruction from above' within suppliers to 'get the deal at any cost and we'll deal with the consequences and fall-out later'.

The need for additional developments, however, could be avoided if a system was built on current methodology and taking full advantage of Application Programming Interfaces (API's). Understandably, however, many commercial suppliers have held back from major/complete system re-writes due to the cost and risks involved where such issues are not financially underwritten by existing or prospective users.

This background has introduced a feature known as Shadow IT which represents applications adopted without (necessarily) the company's approval. These days, it is easy to identify an application on the web which may simplify a specific function but on a 'standalone' basis. In other words, a task can be automated without any interface to the organisation's main systems. These applications may not have been reviewed by the company's IT department so no checks have been performed which will ensure compliance, security or avoidance of risk. In many companies, shadow IT is becoming an increasing problem.

Shadow IT empowers users quickly and easily to get tools that make them more productive and to help them interact efficiently with co-workers and partners. However, serious security gaps may result when an IT department doesn't know what services and applications are being adopted. Wasted time, money and collaboration inefficiencies are other common problems. Therefore, while shadow IT may address a need, it may also deliver a significant risk.

Nigel Reynolds
Platform Securities

Nigel Reynolds, Platform Securities CEO makes the point that nearly half of financial firms say their current technology is not strong enough to support their growth plans. With a multitude of other business challenges to overcome in the wealth industry, technology should be a propeller, and not an anchor. He adds that technology alone cannot power you to success. To assist your own evaluation, Nigel sets out four key questions to help you identify how to use technology in combination with people and processes to deliver lasting value to your clients and your firm:

1. What are the gaps between your firm's growth strategy, and your ability to deliver?
2. What processes do not add value or differentiate your client experience?
3. How can you reduce the cost and risk to your operations and new business requirements?

THE CHALLENGES

4. How can you optimise resources to meet fluctuating market conditions and demand?

Fast-growing, forward-looking companies answer these questions by combining technology with a new way of working to focus on the client relationship. Having a solid foundation to run operations efficiently allows time to explore emerging technology, and helps differentiate the client experience – all of which are key business components to run, connect and grow a successful wealth management practice.

Luke Hinchliffe
Kurtosys

Luke Hinchliffe, Head of Digital marketing at Kurtosys makes some interesting observations in respect to recent developments. He says that asset management is a known laggard in the realms of 'digital' but we are now seeing a tectonic shift in the race to catch up with other industries. Eight in every ten firms are now prioritising their digital transformation and pushing to avoid being disrupted by leaner and more agile competitors. Luke believes there are four main tenants to achieving success with regard to digital sales and marketing transformation.

Firstly, becoming customer-centric as opposed to product-centric; building digital experiences around your clients. Secondly, building the right 'tech stack' that works with your digital roadmap. Thirdly, making firm investments in digital and committing to the long-term; many digital projects are prone to delay and failure so continued investment is key. Lastly, enabling teams; sales enablement is key but all those who have digital touchpoints with your ecosystem should be enabled to work faster and smarter including customer service and marketing teams.

60% of 200 asset managers Kurtosys surveyed said they were planning on investing more in their website in the coming year. This is just one positive sign in the growing commitment we're seeing in the industry as we near 2019.

IT MANAGEMENT AT USER FIRMS

IT departments within financial services firms often come in for a fair amount of criticism, especially from senior management who are looking for someone to point the finger at and blame when projects overrun or fail. However, it is not as simple as that; IT departments are often under enormous pressure to keep systems running and at the cutting edge.

Some would argue that senior management really do not understand the challenges involved in running IT departments and it is fair to argue that this is even more challenging than it was 20+ years ago, despite technological advances.

Too often, IT projects are under-funded and run by inexperienced management or external resources who quite simply have not done the job before, with inevitable consequences. When implementations fail, the resultant outcome is a patched-up older system, the continued use of Excel and the reluctance to change systems. Reputation, profitability, jobs and regulatory exposure are at stake and it is entirely understandable why the short-term 'no change' option is sometimes chosen as the lower-risk option.

However, disruptors will appear and must be given thorough and due consideration. Current examples include:

- Chatbots for customer service
- Machine learning and AI for fraud detection
- Omni-channel banking and obsolescence of bank branches
- Biometrics for stronger security
- Blockchain for digital transactions

There has also been a seismic senior management power-shift within financial institutions, when it comes to making IT buying-decisions. It can now be argued that the Chief Compliance Officer should be the most important person in these firms, wielding power like never before with a regulatory stick as the weapon of choice. In reality however, how often are the regulatory experts involved within the buying process? Is it the case that they become enfranchised during the latter stages of implementation when changes to processes are more difficult to embrace?

The Senior Managers and Certification Regime will be introduced for all regulated companies in 2019. The actual regulation itself will, in most firms, require a system of its own to establish the required reports for the FCA. However, the new rules allocate specific responsibilities that firms need to give to their senior managers, known as 'prescribed responsibilities'. This is to make sure there is a senior manager accountable for the SM&CR and key conduct and prudential risks. A senior manager must also be responsible for each of the firm's business functions and activities. These responsibilities are called 'overall responsibilities'.

Firms must provide 'responsibilities maps' setting out the responsibilities of their senior managers, and their management and governance arrangements. At least once a year firms need to certify that senior managers are suitable to do their jobs.

It has been estimated that these rules may impact around 70k individuals working in the industry. For firms which have already been involved within the SM&CR regime, it has been estimated that each individual involved is accountable for at least 3 responsibilities. So, going forward, any lack of involvement from compliance personnel in such important decisions such as systems and processes could have serious consequences.

COMMERCIAL PROVIDERS OVERVIEW

SALES PROCESS

The days of being an 'order-taker' when selling software are over. Now it is really tough to get a new order over the finish line.

Challenges facing vendors include:

- ensuring they remain 'visible' to all advisers, consultants and firms in the market in order to capture future opportunities
- identifying who actually influences decisions at the buyer's firm
- who could champion their product within the buyer's firm?
- constructing approaches which will influence the

  – CFO, showing cost reductions, opportunities to reduce FTEs
  – CTO, evidencing new technology, sound implementation, testing, training approaches, sensible development paths, sustainability, resilience, reliability, cyber proofing
  – Compliance Officer, RegTech, robust compliant procedures, MI, automated regulatory reports
- keeping the buyer interested through an 18 - 24 month sales cycle
- demonstrating value (translating into prospect needs, wants, desires)
- persuading buyers to change their operating model to fit the system, rather than changing the system to fit their model
- confirming the benefits and not just the features
- demonstrating the power of their solution over and above the competition
- ensuring their best sales executive is not being misled by the buyer

From the prospective buyer's perspective, care should be taken to:

- investigate any claims which may appear to be overstated
- ensure the vendor really understands requirements
- be wary of cheap cost estimates
- involve experienced and expert resources in the selection process. External consultants in the sector will invariably have a current understanding of the supplier landscape. Importantly, they will have recent and accurate knowledge of trends, successes and failures. And the price other firms are paying!

IMPLEMENTATION PROCESS

When the decision has been made on the system, this is the first stage of the cycle. The implementation phase contains many challenges and requires careful management.

Some main points to consider:

- The process MUST include representatives from the business. This is not just an IT project.
- This must be a partnership between supplier and customer
- Ideally involve a third party consultancy which will avoid disruption to your day to day business and have the advantage of resources with actual experience of the selected solution
- Be realistic in what you can achieve - set realistic goals
- Plan and monitor progress carefully; do not be afraid to change the plan
- Use dedicated resources and an experienced project/ programme manager

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DATA

There is no doubting that the financial services industry has always been (and continues to be) well supported with market data services, as effective and efficient data management is vital to their success.

The ability to mine, dissect and manipulate data makes for better informed business decisions about clients and their interests, spending, saving and investing habits.

In addition to the traditional market data and news providers who have dominated the data marketplace for decades, there are an increasing number of smaller niche players offering systems and services aimed at helping firms to master their data in ways previously unimaginable.

As Clive Humby, Mathematician and architect of the Tesco Clubcard, says: "Data is the new oil. It's valuable, but if unrefined it cannot really be used."

Main suppliers in the sector include:

- SIX Financial
- Factset
- Exchange Data International
- Intercontinental Exchange (ICE)
- Thomson Reuters (now Refinitiv)
- Bloomberg
- Markit

CORE SETTLEMENT SYSTEM PROVIDERS

Choosing the right settlement system or service is essential. It will not win you any new clients but a poor settlement infrastructure will lose you business. Guaranteed.

Many firms are still running legacy platforms which, though functionally rich, are difficult and costly to maintain and develop. Rather than going through the challenges of enhancing or replacing these systems, firms have added new components, such as client web portals, client reporting functionality or enhanced KYC, rather than disrupting the intricate 'wiring' in these existing platforms.

Change may not always be for the best, as these settlement systems are often the foundation around which all the other systems are built. Current suppliers include:

- SS&C
- Broadridge
- Murex

WEALTH MANAGEMENT

Wealth Managers want systems that enable them to introduce new products and services quickly and easily, to bring on new clients in a swift and seamless process, and to manage portfolios, trade and settle any instrument.

These solutions can range from full front-to-back systems to individual components, which can be bolted on to facilitate additional services for example, KYC, on-boarding, CGT, reporting.

Ian Woodhouse
Orbium

Ian Woodhouse, head of Strategy and Change at Orbium points out that Wealth Management IT models are often complex, quasi manual and high cost. He says that business models and their cost profiles are evolving fast, requiring concurrent

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technology and business transformation. Ian adds that there are many options, it can be 'big bang' – involving the total replacement of legacy systems in one go – or, it can mean successive modular change by operational function, business line or back office/front office. The motivation for change, budget caps and the size of an organisation all influence the way to go.

Ian's advice is to be clear on your priorities. Given firms have finite resources, investment must be carefully matched with priorities. A clear understanding of where the firm wants to be post-change means it can map out how to get there and the bank can start to look at return on investment cases based on scope, overall budget and the timescale. He suggests that an audit of the IT capabilities and skills that already exist within the firm should be compared against what is needed and it may be worth hiring an external consultancy to help as they bring insights gained from working with organisations that have faced similar situations and they will be familiar with traditional and new options.

Transformation, whether modular or big bang, is hard work and needs strong leadership to succeed. Commitment minimises the risk of project creep and also ensures the undertaking has the momentum it needs and deserves.

Choosing the right priorities and combination of technologies, managing the journey and articulating the impacts on the business operating and organisational models, together with managing the commercial and operational risks, are the new prerequisites for success - this is what we term 'losing the legacy' successfully.

Leading suppliers in this sector include:

- JHC
- Dion Global
- Objectway
- Third Financial
- IRESS
- Investcloud

FRONT END SPECIALISTS

The front office team are at the 'sharp end' of the firm – they are the customer facing team, working with clients to understand financial aims and goals and proposing an appropriate blend of products and services to deliver the required results.

To do so, they need the support of an integrated range of front office systems and tools which include a vast array of functions, such as, CRM, KYC, portfolio management, valuations, modelling and rebalancing, performance analysis, real time trading and order management, automated dealing all supported by real time data, pre and post trade compliance checking and risk management.

Mike Hearfield
Focus Solutions

Mike Hearfield, Head of Digital at Focus Solutions, explains that his company has created client engagement tools that give his customers innovative new ways of delivering initial and ongoing client service, focused around excellent user experiences. He says that his company wants to change the way people engage with their finances, making it easy to 'save smarter rather than harder' - the vision is one where consumers feel calm and in control of their finances, supported by intuitive and engaging tools. His design approach revolves around making digital solutions that feel human, and the best example of this is an inter-linked set of client engagement, acquisition and ongoing service tools. Mike believes that new technology is letting his company solve new problems in new ways, helping customers

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build sustainable lifetime client value through game-changing digital experiences. By putting users at the heart of the software design process; testing, iterating and improving; we are seeing a step-change in usability.

A number of newer suppliers are emerging in this sector and some of the most popular include:

- Focus Solutions
- Crealogix
- Web Financial
- IRESS
- FIDESSA

CLEARING/OUTSOURCING COMPANIES

Outsourcing companies have been around for decades going all the way back to the bureau services of the 1970s but there has never been a wider spectrum of outsourcing services available to Financial Services companies than there is today.

Firms can outsource as much or as little of their business to specialists as they wish and can fix their costs over the term of the contract. Service Level Agreements ensure the outsource provider delivers the service to the agreed standards. Many firms believe that where a component of their service offering delivers no competitive advantage, or is not directly client facing, it can be outsourced to a third party, so the firm can focus on delivering those services which distinguish them from their competitors.

The introduction of Cloud services has also taken outsourcing technology to a new level and most agree that this has been a good thing, especially when cost savings follow.

- Platform Securities
- Pershing
- Societe Generale Securities Services
- Third Financial
- FNZ
- Equiniti
- SEI

ASSET MANAGEMENT/FUNDS/PORTFOLIO MANAGEMENT

The all-encompassing Portfolio Management System is nothing new and, in a world of solutions that focus on specific functions, the best of these are still around and prospering and delivering a valuable service to large parts of the industry.

Whether installed as an integrated front-to-back solution or as its constituent parts, they have proven longevity and ROI for many of their clients who have stayed loyal to these well-established vendors.

- Altus
- Imagine
- Linedata
- Microgen
- Simcorp

REGTECH

The cost of compliance rises every year, as new rules and regulations are introduced. This is unlikely to stop any time soon, so firms need to look at RegTech solutions to help them manage the growing regulatory burden.

These solutions are aimed at automating resource and time-hungry manual processes, so the Compliance team can get on top of the issues and be proactively alerted, rather than spending hours searching for them, whilst also reducing future costs, errors and risk.

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Daryl Roxburgh
BITArisk

Daryl Roxburgh of BITArisk suggests that thought should now be given to an automated approach to regulatory challenges. He says that firms should consider the wider issues of scalability through applying the right resources, human or machine, exploiting changes in IT architecture and embracing disruptive technologies and approaches. All of these he says are relevant to the automation of approaches to regulatory challenges. It will end with an example in the area of suitability and investment governance. Companies offering RegTech services include:

- BITArisk
- Redland Business Solutions
- Heliocor
- AutoRek
- Fundcount
- Kurtosys
- Multrees

BANKING

The focus of the majority of banks is to encourage and empower customers to control their own financial matters and to improve their own operations via the introduction of digital solutions.

Further, they are keeping a very close eye on FinTechs, as they look to make investments into buying solutions for cyber-security, mobile technologies and blockchain.

There is a wide range of companies providing complete or partial banking systems, including:

- ERI Olympic
- Temenos
- Finastra
- Fiserv
- Avaloq
- International Financial Systems
- ICS Financial Systems
- Mambu

Angela Knight CBE, Advisor

GOODACRE MANAGEMENT TEAM

Gary Docherty, Sandra Masanet, Stephen Pinner, Diana Puitel, Bernie Biggs

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The Systems in the City Fintech Directory provides an online catalogue of firm considered 'fit for purpose'. Apply here for access.