techUK

Taking the Initiative: Leading with Technology in Financial Services

Contents

Special thanks to the following contributors:

Peter Roe, Research Director, Financial Services, TechMarketView
Keith Saxton, Chair, Financial Services Council, techUK

Acknowledgments:

Jonathan Emmanuel, Bird & Bird
David Kohn, CSC
Atos
CGI
iconUK

Executive Summary

Technology underpins every function across the financial system, from executing trades to making payments into accounts. *Taking the Initiative: Leading with Technology in Financial Services*, expands on a key issue raised by techUK in earlier reports; namely that outdated legacy systems are limiting progress in large sections of the Financial Services sector. The context, however, has changed. New firms entering the market, armed with innovative technology and business models, are challenging the sector's incumbents. At the same time, end-customers now demand 24/7 access through a host of new channels, and regulatory requirements are increasing, as are the threats from cyber-crime and fraud. For incumbent firms in the financial services sector, these additional challenges are occurring in what is a more difficult macroeconomic environment. The outdated technological foundations of many established firms constrain their ability to meet those challenges, impeding the development of a fully digitalised and modern financial services sector.

techUK recognises that although some firms have undertaken change programmes, these initiatives have not yet been sufficient across what remains a vital part of the UK economy. The goal, and challenge, is clear – to ensure the development of a more resilient, competitive and transparent financial services sector, better able to serve the needs of consumers and businesses across the UK.

The legacy problem can be solved. The techUK Financial Services & Payments Programme recognizes the 'technological art of the possible' and advocates a digital modernisation strategy to meet those challenges and maximise the opportunities generated by innovative technologies and business models. In the paper, techUK reinforces that position, outlining the ways in which technology can overcome the challenge of legacy infrastructure in financial services institutions. Further and faster transformation is needed across the industry.

Technology is not a barrier and the techUK view is clearly articulated in this paper, outlining the three levels of transformation required within incumbent financial institutions so as to enable them to meet the challenges and become truly modernized institutions:

Three levels of transformation

- **Transforming core systems**, with an increased role for cloud-based services to facilitate a more agile response to changing customer and regulatory demands.Greater outsourcing and the use of shared services to lower the cost of common processes across the industry

- **Using data and analytics to improve performance**, enabling financial institutions to maximise the value of the data they already have, to better manage their businesses and meet customer and regulatory requirements, as well as to cut costs. This will enable firms to more effectively meet the challenges of cyber security and fraud prevention

- **Improving customer experience** Financial institutions must create the technological foundations so as to better meet evolving customer demand and improve customer satisfaction and, post crisis, trust.

Recommendations

Examining the required transformation leads to several clear recommendations:

- **A more decisive and faster rate of change**. Senior management needs to accelerate the transformation of their operations, underpinned by a clear strategic vision of the financial institution's long term goals

- **Embrace and accelerate the use of Industry utilities**. Financial institutions need to undertake an honest analysis of their capabilities and outsource tasks which do not offer differentiation and where appropriate create industry-wide utilities

- **Build a more structured approach to technology renewal.** The use of cloud services and new technology can facilitate the effective use of data, with end-customer experience at the core of all decisions

- **Work together with the Regulators**: The supplier community and financial services institutions need the support of the regulator to realise the full benefits of the greater use of the new technology,

Introduction

tech UK, in its report '*Towards a New Financial Services*' declared that the financial services industry had reached an inflection point where the old ways of working were no longer compatible with the changing business models of financial institutions. The report repeated the earlier calls for change made in the 2013 report *Financial Infrastructure – can banks afford not to change?* and highlighted how existing technology platforms were limiting the ability of the financial services companies to meet the needs and expectations of their customers, the regulator and shareholders.

Towards a New Financial Services also pointed out that the technology industry was undergoing a paradigm shift with "everything as a service" models enabled by the cloud creating the opportunity to reposition the structure of the financial system. It also declared that the sector, together with the government and the community of suppliers to this industry, needed to get together to formulate a digital modernisation strategy to engender progress.

Over a year later we see that most companies in the sector have formulated new technology strategies and begun initiatives based on the newly available technology. Some are clearly braver than others and have taken bolder steps to integrate new technology into their wider strategies. However, general progress so far is patchy and, in all but a few cases, lacks real momentum, but these moves support our view that many of the major technical barriers have been overcome. This should give a clear signal to the financial services sector to push ahead and implement the new working methods and embrace the new business models that are enabled.

However, the sector and the economy are dependent on the success of the larger, established companies which are under threat and have most to do with respect to renewal. We consider that there is a need for speed as these larger companies face the risk of being increasingly disintermediated from their customers and displaced from profitable areas of the business.

Action now and an acceleration of the rate of change can galvanise many parts of the financial services sector and, by extension, the wider economy. This will lay the foundations for a modern financial services ecosystem, benefiting both established companies and allowing competent newcomers to move to scale. Consumers will benefit from lower costs, new products and greater choice.

The art of the possible has changed; the sector now needs to seize the opportunity.

The changed reality of Financial Services

A vital contribution to the UK economy...

The UK's Financial Services sector generates GDP to the tune of £140bn p.a., or roughly 9.4% of the country's total output (source: World Bank). This is almost twice the size of the sector in Germany and nearly three times that of France. It also generates revenue for the UK Software and IT Services industry totaling £10.5bn p.a. (TechMarketView estimates).

Over 250 foreign banks and nearly 600 foreign financial services companies have operations in the UK, generally in London. Despite the role of London as a major international hub, this is a truly national sector with two-thirds of the 1.1m people employed in UK Financial Services sector working outside London. Not only is the UK leading the world in many areas of banking, it is also the second largest asset management centre in the world and the UK underwrites 7% of the world's insurance business. (Source: gov.uk/ UKTI).

The UK punches above its weight in terms of Financial Services. It is vitally important that it continues to do so.

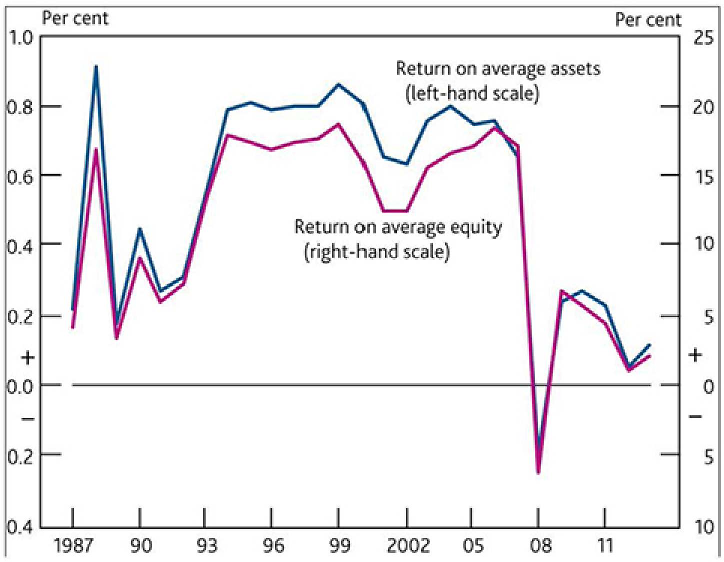
...but the sector faces a new economic reality....

The forces driving change and the voices calling for a significant sector upheaval are mounting at a time of a new economic reality for the sector, the wider economy and the political landscape.

The world economy is growing more slowly, with lower inflation and interest rates and these conditions are likely to persist for several years. This is making it harder for financial services companies to make a return on investment. In addition, overall volumes are depressed, volatility is lower and interest rate spreads and commissions are narrowing. Growth where it is available is focused in specific regions, and even there, recent growth rates are falling, as exemplified in the Chinese and Indian economies as they feel the effects of slowdown in their end customer markets.

As a consequence of these macro factors, financial services enterprises in developed markets are facing the challenge of much lower returns on average assets and on equity. By way of an example, in the 15 years prior to the Global Financial Crash of 2008, returns on average equity for the major UK banks were generally in the high teens. The Crash sent them negative for a year, but after a brief bounce, they have settled into the 2-4% range. (source: Bank of England), as seen in the following chart.

Chart 1. Major UK banks' returns on assets and equity(a)(b)(c)



Financial Stability Report, December 2014

Sources: Bank of England, published accounts and Bank calculations.

(a) Returns are defined as profits attributable to shareholders.

(b) Assets and equity are annual averages.

(c) When banks in the sample have merged, aggregate profits for the year are approximated by those of the acquiring group.

At the same time, cost income ratios across the sector have deteriorated significantly, with the scale of the problem being brought into sharp focus as new competitors report fundamentally better levels of this important ratio.

….with a new regulatory regime, and greater threats

Adding to the sector's problems is the growing burden of regulation, as governments and regulators try to reduce systemic risk and to protect customers, particularly individuals. Regulatory requirements are compelling financial services companies to build larger capital buffers to protect consumers, and economies, from the effects of a major downturn. For example, the amount of money that the global banks have to retain as a capital reserve will rise more than double as a percentage of risk-weighted assets during the next five years, from c.4% to over 10%. (Source Bank of England). A recent report by Morgan Stanley and Oliver Wyman suggested that regulation would shrink banks' capacity to take risk and therefore to make money by a further 10-15% over the next two years.

According to the CBI/PwC Financial Services Survey of September 2014, regulatory compliance is the main factor driving spending plans for the next year. This continues a long history of regulatory requirements accounting for the majority of IT spending. For example, the current regulatory push for better quality in the data used for risk management (BCBS-239) is likely to generate a significant workload for IT teams across the sector.

The regulator has also stopped being the bulwark for the established players against the onset of competition. Previously, new entrants to the market had to carry the same regulatory burden as the established companies. However, many of the sector's new disruptors work by connecting people with capital to those who need it, taking little risk themselves, thereby avoiding most regulation, remaining more agile, more responsive to customer needs and more cost-efficient.

The financial services business is also prey to a growing crime wave. Fraud, identity theft and hacking are now big business, resourced by well-organized international groups. Cyber-crime is growing at all levels of the economy and the financial services sector is a very lucrative target. There are no clear estimates of the scale of the problem, as many banks are down-playing its effect. At a techUK conference in April of this year, the City of London Police claimed that the banks are failing to report up to 80% of online crime.

As consumers demand access via multiple channels, as more business is conducted across national boundaries and as new competitors emerge, the scope for cyber-crime and data breaches continues to rise. The cost of coping with these breaches and threats is also on the increase.

Thus the increasing occurrence of fraud and the mounting concerns about cybercrime are adding weight to the argument for a technical renewal within the sector. One large global investment bank, under threat of a Fed investigation, commissioned a scan of all their systems and found over one million vulnerabilities. Newer architectures can be adapted much more easily and cheaply to combat the latest fraud or cyber threat and more quickly introduce the innovations being made to deliver better security in this increasingly digitalised world.

The market has changed as well

Financial services enterprises have also seen a huge amount of change with respect to their customer base. In the seven years from the Crash, the number of people in the UK using the Internet daily has risen from 23m to 38m (Source: Office of National Statistics). The penetration of Internet banking has doubled since 2007 to over 53% and a similar proportion of adults now engage in social networking. In June 2014, RBS reported that around half of its customer contact was through mobile and online logins, whereas only 13% was through branch visits. In 2017, according to its forecasts, the proportion through mobile and online is expected to grow to over 75%, dominated by mobile, with branch contact falling to around 5%. Branch transactions are expected to roughly halve in number, but the company maintains that even in 2017, roughly half of customers' "more complex, higher value needs" would be supported by the branch network. The corresponding figure in 2013 was 63%.

The most important change in the way people interact has been due to the growth of mobile, such that 58% of adults who access the internet do so via mobile phone or smartphone and mobile access to the Internet is now approaching the level of online PC usage.

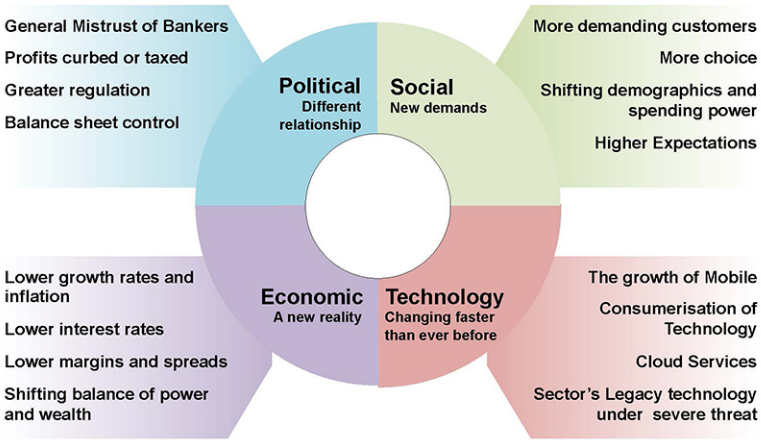
The rise of mobile has important implications for the financial services industry. Customers now expect that the quality, reliability and immediacy of the mobile apps they use and the intimacy and personalisation of the social networks they inhabit are replicated in the wider systems of the financial services companies that vie for their business.

Although established financial services companies are putting on a brave face about new technology and the rise of mobile, many of them are dissembling. For example, customers of several big banks may well have a mobile app, telling them their real-time bank balance, but this is enabled by a new piece of software sitting on top of a core system, obscuring the fact that bank balances are still calculated once a day, usually, using an ageing overnight batch process with software that is older than many of its customers!

Consumers are also looking to the internet as another source of financial services, and other relevant advice. On their part these newcomers can easily extend their own offerings into financial services - just look at how Apple Pay is addressing the mobile commerce business and what Google could do with all the data it is collecting about its users.

All these changes have happened within the space of a few short years and at a time when there are significant pressures on the established financial services companies in terms of volumes, margins and returns due to macro-economic issues, as summarised in the following chart.

Chart 3. External forces on the FS sector



Source: TechMarketView

The incumbents have an important role to play

Despite all the change, the competitive pressures and the problems of their present predicament, the incumbents, whether they be banks or insurance companies, have an important role to play in the provision of a workable and scale advantaged financial services ecosystem.

In the UK, the established banks represent the lion's share of the market, with the top four banks holding 77.2% of the personal current-account base nationally (source: CMA, PCA Market Study Update 2014) and the top six banks some 70% of total mortgages (source: BBA, Promoting competition in the UK banking industry, 2014).

Established players still hold the trust of the vast majority of the population in terms of maintaining confidentiality and managing personal data, as well as of being safe repositories for savings and longer-term assets.

The same is largely true of the insurance companies, where a large proportion of the industry's activity is held by a small number of companies. In each of the major sub segments of the Life and General Insurance markets, the top five companies write at least 50% of the total UK business and the top ten companies will command between 80% and 100% (Source: Association of British Insurers). However, the arrival of comparison web-sites and a new breed of high-tech brokers and intermediaries has drastically altered the economics of the UK insurance market, reducing premiums and margins and increasing the pressure for change.

Within the Capital Markets sector, there has been a major shift towards the larger companies, further increasing the relative power of the big US-headquartered companies. Successive decisions by UK banks such as Barclays and RBS have diminished the role they play in the world's financial markets. The cost of technology and the inability to keep pace with the industry leaders are further reasons why companies need to review the scope of their operations. The diminishing returns from capital (and the shrinking investable capital base) mean that these companies have to embrace rapid structural change. This needs to be in terms of strategic market selection and optimised business operations. This in turn necessitates an even greater use of technology, the introduction of global portals and a move from a support model based around proprietary infrastructure to one built around scale-advantaged, industry-standard supply chains (Source Morgan Stanley/ Oliver Wyman).

Governments also need a healthy incumbent financial services industry to act as national champions, to provide a democratic offering across all levels of society and to reap the benefits of volume and scale. Greater financial inclusion is also an important objective. The new models being enabled by emerging competitors and the potential of FinTech all promise much, but for the foreseeable future they are unlikely to be able to handle the scale required to replace established business models and modes of working at an acceptable level of cost and risk.

But more competition is a key objective of the Government

Despite the market's continuing reliance on the established companies, the government is working hard to promote competition. It has a clearly declared intention to compete away the "too big to fail" risk, by ring-fencing the retail banks from their wholesale divisions and by facilitating new entrants and reducing the concentration of industry wealth and power in a small number of hands. For example, in the provision of retail banking services, the government has launched an investigation into the existence of real competition and is calling for the rapid introduction of challenger banks, with over 20 applications already submitted for new banking licenses. Concern has also been expressed about the slow rate at which the challenger banks have been able to attract new account holders. To promote a more even playing field, the UK Competition and Markets Authority may well act to stimulate the movement of current accounts towards the newcomers.

A new mood within the sector?

The senior management of many financial services companies would, if challenged, probably say that they are doing all they can and moving as fast as possible. Indeed, it is clear that there is a new mood among the major insurance companies, banks and capital markets players. After six or seven years of caution and retrenchment as a result of the Crash, during which a huge proportion of resources were devoted to regulation and compliance, senior management are now more aggressively looking to invest in growth and to recover some of the ground lost in terms of technological capability. Several large companies, including RBS and HSBC, have announced far-reaching reorganisation plans and sketched out the implications for their IT.

The situation has certainly improved since the beginning of 2014, but we have to seriously ask the question whether the sector is moving fast enough and being bold enough. Large systems are extremely complex, there is little capital available and a substantial proportion of the resources available to centralised IT departments are diverted to keeping the bank running and compliant. As a consequence, many CTOs are still resorting to the tactics of introducing short-term fixes and building workarounds to meet a long list of change imperatives.

Finding new sources of change

Dissatisfaction with the speed of response from central IT departments is driving a fragmentation of IT spending, with individual business unit heads building new delivery strategies involving a broad range of non-traditional suppliers. This “Shadow IT” is creating opportunities for suppliers, but is also confusing the IT landscape for the larger companies, particularly when new systems move to scale, or have to interact with enterprise-wide data or security architectures.

Many of the leading financial services companies are also trying to improve their access to FinTech innovation. Companies such as HSBC, Barclays, Santander and UBS have each set up their own FinTech accelerators and many banks are participating in cross-industry ventures sponsored by companies such as Accenture and Level 39. Larger companies are also engaging in more M&A to access new ideas (for example, BBVA bought Simple, a digital bank). These progressive steps are laudable, but to realise the full benefits of innovation requires the established companies to fundamentally alter the architecture of their systems to enable rapid integration and move to scale. Such a change would require new concepts such as infrastructure on demand within the enterprise, a radical and agile approach to testing and the use of security as a service.

The clock is ticking.....

All these issues are combining to place enormous pressure both on the existing technical capability within financial services enterprises and on their cost base. The scale of these pressures is such that they can only be addressed by attacking the largest cost element; the central functions of IT and operations that run the enterprise. Only then can they free up the resources to introduce the scale of change required and to meet the challenges set as technology continues to shape the emerging competition.

In our view, the established players also have to move more quickly to minimise the effects of market share and value erosion as competition and the cost of inefficient practices increase. Although the newcomers to the sector may well spend several years in moving to scale, they will disrupt the market, take value out of it and hollow out the incumbents by capturing transactions, undermining their market position and impacting their profitability.

Moving forward to the new paradigm

The unprecedented rate of change in the underlying market is much faster than the larger companies can cope with. The complexity of legacy systems, the budgeting cycle and the sheer scale of their IT investments predicates against rapid change. Many banks have systems that have been in place for over 20 years and have to cope with many new demands from customers and from regulators. At the same time, with the advance of new technologies such as cloud computing, the emergence of mobile and the rise of Big Data, even systems that were designed five years ago are in danger of being made out of date very quickly. However, the landscape has shifted significantly as the necessary technology has become available, and has been tried and tested so that the art of the possible has changed. In view of the urgency of the situation we should reasonably expect a faster rate of change, starting with more decisive senior management action.

CEOs, CFOs and CTOs of the major companies need to stand back and take the reasoned view of where their bank or insurance company needs to be in five years' time. This is not fundamentally a technology question, but an economic one. Value will be created from the exploitation of an individual enterprise's knowledge of its niche in banking or insurance and from its relationship with its customers. It will not be from its ability to run a server farm, write applications or shuffle pieces of paper. This requires that banks and other financial services companies undertake an honest analysis of their various capabilities and map them according to the differentiation that they offer to the enterprise. Those capabilities that are not offering specific differentiation to the bank should be candidates for outsourcing. On the other hand, enterprises should consider creating an industry-wide utility if the capability is non-differentiating but the organisation does it particularly well. This would allow all participants to reduce costs and increase competence in the non-competitive domain. Although there has been some outsourcing and greater use of third parties, the UK financial services sector is still dominated by companies that are largely self-sufficient, huge in size and immensely proprietorial of operations and activity. The preservation of these optimised but arguably obsolescent structures is retarding change and diverting resources away from the strategically vital investment in domain expertise, market intelligence and customer service.

Newcomers are making inroads into the market as they leverage specific elements of expertise and run operations in a nimble and responsive way on lighter and more agile infrastructure. In our view, the older established companies need to be able to mirror some of this approach.

The strategy of technical renewal we are advocating is not, however, purely a defensive one outlined, in the face of increasingly able competition. It is also an offensive one, enabling companies to revitalise their relationship with customers, accelerate the rate of product and service innovation and drive better returns.

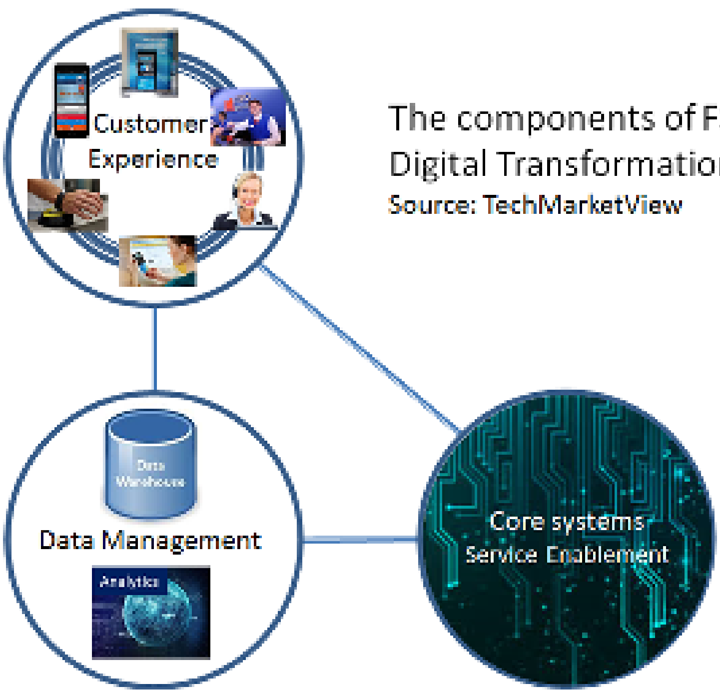
Established companies may also suffer from limited and unpredictable budgets for projects which extend beyond one financial year. The absence of true long-term buy-in across an organisation can lead to piecemeal improvements and inconsistent customer experience and service delivery, with the potential to jeopardise long-term customer satisfaction and market position.

However, the improvements necessary should not be made by a “rip-and-replace” strategy of re-writing large application stacks and introducing completely new, elegantly crafted processes. The time taken, the cost involved and the risk of failure are all too great.

Indeed, many banks do not yet see the need for a fundamental transformation of core systems and are taking an incrementatlist approach to change. While understandable, this tactical attitude to change needs in our view to be replaced by a more structured, and almost certainly, more accelerated approach. A framework following a clear strategy based on an understanding of future value generators can then set out how technology can be used to support the future success of the business. We consider that the requirements necessary to deliver this long term vision are increasingly within the reach of companies within the sector.

Three levels of transformation

In our view, the complex IT architecture and structure of a financial services company can be partitioned into three distinct areas, each of which faces its own legacy issues and new competitive challenges. Obviously, in many organisations there are complications due to past investment decisions and the implications of stove-piped business units, but the simplified three-tier model of financial services technology and operations provides a useful structure for discussion. This model is presented in the following diagram.



The components of FS Digital Transformation
Source: TechMarketView

Level 1: Transforming core systems

Within the larger banks and insurance companies, the core systems are generally very big, self-standing and fiendishly complex, the result of successive generations of updates. Nevertheless, these systems are generally reliable and perform repetitive, scale tasks extremely efficiently. However, the age of many systems means that replacement parts and programmers who can write in their original programming languages are difficult to find. At the same time, the volumes of queries and the overall level of activity of many core systems continue to rise, exacerbated by the twin forces of regulation and multichannel working. Several companies are using APIs to enable the offload of additional volume onto other platforms, but there is often the problem of poorly documented, complex systems that are difficult to update and integrate with other systems. Although there is medium-term grace to be found in the clever use of caching and the offloading of work to other platforms, the wholesale renewal of core systems cannot be postponed indefinitely.

The problem extends beyond the hardware and physical IT infrastructure on which these systems are run, into the bespoke software that is often used to deliver these important core functions. Some companies have moved to a more standard platform for elements of their process, although in many cases this step has been particularly difficult. Systems will often have been extended or integrated with other systems to deal with anomalies in the business process, to cater for exceptions and to make up for shortcomings elsewhere in the value chain. This has added hugely to the complexity and task of modernisation.

Larger companies have been (and to a large extent still are) extremely reluctant to take the risk and incur the significant cost involved of moving from these tried and tested platforms. The notable example of Nationwide Building Society showed that the journey towards the use of a standard core banking system is both long and expensive. However, it is becoming increasingly clear that the rewards in terms of a faster rate of innovation and improved customer service after the transition are significant.

An increasing role for Cloud Services

Cloud services are now tried and tested and are widely considered to be more secure than the complex legacy systems they replace. Despite the relative security and integrity of (a well-architected) cloud service, the technology has yet to gain the full approval of the regulator and this is slowing adoption. The perceived threat of regulatory scrutiny is also providing bank IT departments with another excuse for inaction. The FCA and other regulators are now more eager to engage with the sector and suppliers to discuss how cloud might be more extensively deployed to access the intrinsic improvements available in operational risk management, cost, availability and, security through the use of these systems. When this happens, cloud-based systems will be the default option across the sector.

An important factor in the choice of cloud systems is their ability to respond to additional volume of activity and particularly to changes in customer or regulatory requirements. By the structured use of APIs and composable capabilities, linked into a constellation of cloud platforms, new services, new processes and new product features can be more easily introduced, reducing the competitive advantage of the newcomers. Economic returns will also improve as the complex task of integration is considerably reduced and time to revenue much improved. Adherents of the old-style mainframe approach can also find solace in the fact that it is possible to create the capabilities and the performance metrics of a mainframe in the cloud. This could have the significant advantage of enabling an established company to migrate its workflow to newer infrastructure with less upheaval.

The availability of cloud services, the advances made in security and the fact that many of the processes undertaken in the financial services sector are common across many industry participants also increases the attractiveness of outsourcing or the use of shared services. As banks increasingly focus investment on where they can generate real value, this reinforces the need for management to look at new delivery models, using third party suppliers in different ways.

Level 2: Using data to improve performance

At the heart of any move to improve operational performance, reduce the cost of regulatory compliance and ensure that the right products and services are targeted at customers, is the effective collection and use of data.

Many of the larger financial services enterprises have significant amounts of data, often held within discrete business unit stovepipes and not accessible in other units. By having systems capable of utilising operational, customer and transaction data across the whole organisation, management are able to exert greater control over their business in terms of capital and resource allocation, risk management and putting the right product in front of the right customer in a timely manner. Another clear benefit is in the management of the relationship with the regulator, in part to help ensure that the enterprise avoids the swingeing fines and sanctions. Failure to manage operations and data effectively cost the UK retail banking sector over £20 billion in the case of the PPI scandal. You can buy a pretty capable IT infrastructure with that sort of money, and still have some change!

Financial services organisations (FSOs) have typically worked using Systems of Record. In these systems, closely defined and targeted customer interactions are logged, stored and used to drive transactions. These systems of record now offer no sustainable or demonstrable competitive differentiation and advantage.

The new model would enable companies to communicate and collaborate more effectively across business boundaries, accessing different sources of information and using next-generation applications and infrastructure. These interactions will be driven by an evolved view of content, deriving benefit from insights and ideas generated in a dynamic and collaborative environment rather than from the hard, historic and structured facts within the Systems of Record.

Linking the siloed data of incumbent organisations and dismantling or reconfiguring the network of enterprise applications will be a substantial task but will add considerably to an enterprise's agility in the medium term and lead to significant improvements in customer experience and operational productivity. Unfortunately, badly documented databases and incompatible data structures are the norm in most long-established companies.

Notwithstanding the imperative for change, it is clear that data-related modernisation plans can be fearsomely expensive. A major UK retail bank is reportedly spending £200m in ensuring that its data meets the regulators' new quality standards. However, the benefits of a well-structured data architecture are significant. The move to a co-ordinated data warehousing strategy can substantially reduce cost and increase operational agility as large financial enterprises deal with regulatory requirements, integrate acquisitions and meet the changing needs of customers. Several big firms in the UK appear to have retreated from this level of rationalisation and this could constrain returns and competitive strength in later years.

The scale of the problem is further illustrated by the statistic that one UK retail bank is running 6,700 applications on over 80,000 servers. This multitude of applications slows down any attempt at change or modernisation. It also significantly increases the total costs of running the bank. Moving to use standardised function elements across a wider range of applications, by creating a shared services approach within a bank or insurance company, supported by a flexible, cloud-based infrastructure can make a substantial difference.

In their desire for change and a lack of patience with overall enterprise IT strategy, many individual business units inside larger financial services enterprises are pursuing their own strategy. Consequently, the issue of Shadow IT and piecemeal contracts pursuing elements of modernisation are very important in this area of data management. The departments and individuals pressing for a new approach will probably cause considerable friction and meet with significant resistance from those who are wedded to the historical organisational and business structures. To avoid a significant delay in the modernisation process, the financial services enterprise needs to have a clear, overall strategy with buy-in from both the business and central IT function.

The opportunity for software and application services suppliers comes from three distinct areas: firstly, the rationalisation of Systems of Record to interact with the newer systems; secondly, to create the new systems of data management using digital assets such as operational analysis, customer insights and greater use of analytics; finally the evolution to the new systems will need to be managed, but integration may be significantly easier as SaaS elements are grafted onto the architecture.

Level 3: Improving customer experience

Across Financial Services, company management teams are united in the belief that customer experience is a key ingredient of success. The goals of rebuilding trust, expanding the customer base and the imperative of being able to sell increasingly sophisticated services through a cost effective and compliant channel are all dependent on the financial services enterprises being able to create a strong and sticky relationship with their customers.

Retail Banks and Insurance companies in the UK have seen measures of customer satisfaction drop in 2014 (Source: 2015 World Banking Report and World Insurance Report from Capgemini and Efma) at a time of increasing competition. In serving the new generation of customers (Gen Y and younger), the scores and the prognosis are even worse. Failure to provide a good customer experience creates the risk that a financial services company misses transaction opportunities and eventually loses its customers. Failure to recruit younger customers and understand their different needs and expectations has obvious longer term implications.

To put this right requires a significant cultural change in the way financial services companies interact with their customers. Better relationships can be built if financial services providers can interact seamlessly and coherently with customers across multiple channels and as they use new devices (typically smartphones or tablets) to access relevant information and initiate transactions. With the connected society, the amount of data about individuals or representative groups of customers is growing exponentially and with the right data management approach this can make a significant difference to end-customer experience.

Financial Services providers are also eager to use the greater diversity of channels to contact their potential customer. Experiments with video banking and access to experts via videoconference calls (as being trialled by Barclays and Nationwide) are clear examples of this trend. The innovative use of social media (Twitter, Facebook, etc.) is also a growing phenomenon. Not only does social media give a bi-directional link with customers, it also provides an easy route to praise, or more generally to vilify, the service that they receive. Hence providers must ensure that their slick front ends are supported by effective and trouble-free delivery processes. Older established companies are disadvantaged by their speed of reaction as customer preferences, channels and business models change. New financial services providers who are not burdened by legacy systems have faster reaction times in terms of improving elements of customer service.

One of the key principles underlying a move to better customer experience must be that of flexibility. Customer tastes and preferences change and there is a greater demand and expectation among customers to be treated as individuals. The use of analytics and the ability of systems to respond intelligently will be important features. The future systems must be more agile than their predecessors and able to graft on new capabilities quickly.

Financial Services companies therefore need to have access to a responsive infrastructure which can allow rapid integration with new offerings and systems. In addition, they will need the right culture, as well as systems, to encourage experimentation and fast failure which in turn requires fast-moving budgeting and approval processes and easy access to tried and tested competencies.

Taking the initiative

As across the wider economy, all the companies engaged in financial services are each in a different place with regards to the introduction and use of new technology. In the document so far we have characterised the sector as moribund and certainly not moving fast enough. This simplistic view is far from the absolute truth, but it is clear that the centre of gravity of the sector is still mired in a very traditional approach and moving too slowly in the right direction.

However, in this most connected of sectors, where technology is often used to generate real competitive differentiation and advantage, there are some companies that are really taking the initiative and driving forward to alter their business model and value creation capacity.

Central to the different approach taken by the management of these companies is the strategic vision of where their respective financial institution needs to be in say 5 or 10 years' time. This then needs to be complemented by a bold transformation plan as the scale of change and speed required are such that an iterative, cautious approach is unlikely to be successful. There needs to be the strength of conviction and leadership to break down any internal and political barriers to change and to defeat vested interests, be they organisational or generated by old-style thinking.

There are several examples of real change within even the largest FS companies. A large UK bank, benefiting from a new and results-driven CTO has drawn up plans to introduce a cloud-based core banking platform as the next big investment. One major investment bank is moving a major proportion of its applications onto the Google Apps delivery model and another has re-vitalised its DevOps approach so that can generate new software releases on a much faster, even daily, frequency. These initiatives are viewed as potentially high risk, but if successful will radically alter their end-customer experience, the cost structure and their ability to respond to market changes. This will potentially place them in leadership positions that could guarantee them market-beating returns for the next decade.

One major retail bank has very dramatic plans to substantially increase its agility and to accelerate its Time-to-Market for new products so that it can rival the Challenger Banks in this important characteristic. Its next generation infrastructure is to be based on a private, on-premise cloud, managed across environments by a modern cloud orchestration system, enabling new development resources to be provisioned at a few minutes' notice. By accessing standardised application modules the cost and time required to for testing will be reduced. This will be part of a longer term strategy to surround the core banking platforms with more agile and responsive systems, and then to drive through a strategy of migrating the core platform onto a cloud-based, cost-effective and modern infrastructure. Elsewhere in the Insurance sector, several companies are beginning initial pilots to explore Cloud options for future replacements of their existing infrastructures and even some of the larger companies are moving faster than ever before to initiate change.

However heartening these moves are, we are concerned that the progress is simply not fast enough nor the changes deep enough. The scale of the problem is large and the timetables for strategic programmes extend into 2019 and probably beyond. Many initiatives within the sector are abandoned as being too difficult or are put on the back burner due to changing priorities. Funding of transformational projects is also difficult to secure for many organisations as the budgets for such projects have to extend into multiple years. One bank CTO complained that “we never finish anything”, as projects took too long to get going and were never completed before the budget year ended and cash withdrawn. The cost of change is also formidable due to the complexity of the system stack and the inter-dependency of systems. One bank reportedly has to invoke a £60,000 testing programme for even the smallest and most straightforward change to a customer-facing system.

Underlying it all is the need for a financial services company to decide what it wants to be when it “grows up”. To this end, the Chairman of Spanish bank BBVA suggests that all banks (and by inference all financial services enterprises) will have to become software companies, and those that don’t change completely will disappear.

That is one view, and certainly radical change is required across all companies within the sector. Those which want to become market leaders need to balance scale and investment with innovation and agility. Those that want to become utility providers of services across the sector need to ensure that their systems are sufficiently reliable, up-to-date and cost-effective in order to survive. In any event, all financial services enterprises need to change, and change quickly to be fit for the challenges of the next decade.

The way in which the centralised IT department is viewed by the Lines of Business will also need to change fundamentally in many companies. Moving from being a cost centre, with long lead times and restrictive practices, to become a partner of the Business Units, offering services through a transparent and market-tested pricing mechanism should ensure faster progress and a better allocation of resources.

As for the suppliers to the industry, they will also have to change and the relationship with their customers must evolve, to embrace the concept of partnership and accommodate a higher level of trust than exists at the moment. Suppliers will also have to take on more responsibility in terms of guaranteeing outcomes and a higher level of risk than ever before.

This is a huge challenge for the sector and for its suppliers – and one that requires consistent resolve, and action now.

Conclusion and Recommendations

The Financial Services sector is totally underpinned by technology and should be well positioned to benefit from new data and information technologies. However, it is clear that too much of the financial services value chain is proprietorial and as a consequence is complex, expensive, inflexible and increasingly unable to benefit from scale and external innovation. One senior executive at a large UK Bank recently expressed the opinion that in less than five years they will not be able to afford to run the increasingly expensive and ineffective legacy systems.

A major requirement to effect change is to examine the optimum scope of the enterprise and the processes within it. There are significant clues as to why this needs to be undertaken as a priority - Banking Separation, Conduct Risk and operational issues, Rescue and Resolution plans, Basel Banking Committee recommendations, the list goes on. All of these initiatives point to significant Board obligations. "Reprocessing" is the foundation of any fundamental supply chain improvement in the way an enterprise delivers, and provides the base on which to leverage technological advances such as Big Data and analytic technologies. It should be said that core process and data management technologies are mature and robust - there is no excuse for inactivity.

The way forward is clear. Any rebuilding of trust and revitalisation of the Financial Services 'brand' has to make better use of data, have more responsive personalised customer engagement (in all channels), and have an underlying responsive, secure, modern infrastructure that develops at the same speed as change in the technology industry.

The technology industry needs to be acutely aware of the needs of the Financial Services sector, rather than hoping generic technologies will sell themselves.

There needs to be clear strategic focus on portfolio renewal, concentration on value add and the underlying differentiated use of technology and use of labour. Management has to have precise objectives and take decisive action.

Recommendations

A more decisive and faster rate of change

Both the Financial Services industry and technology companies supporting it need to continue making the shift from a reactive position to one of proactively future proofing the business model and technology investments. Companies need to develop a coherent vision to consolidate multiple silo efforts and reduce duplicative initiatives to enable change at a faster pace.

Embrace and accelerate the use of Industry Utilities

Move faster and reduce complexity by working with partners, offering the potential to future proof investments and lower risk. Financial Services companies should continue to do an analysis of their multiple capabilities and map them according to the differentiation they really offer. Those capabilities that are non-differentiating should be candidates for outsourcing or transfer to industry utilities (existing or new). Technology suppliers should also strengthen their industry solutions within their service offerings, refine the pricing to support ‘everything as a service’, and be delivered via SaaS and the Cloud.

Build a structured approach to technology renewal

At the Board and Senior Management level in Financial Services firms significant technology vision and expertise is required. Real industry expertise and understanding is required as the technology control point moves from IT to the business, calling for new and differentiated relationships. Management must visualise the end game (naturally this will always evolve but must have the customer firmly in view), prioritise where to start, and accelerate change. The management within the established companies need to shed their incumbent mindset and adopt a disruptor’s point of view. This will facilitate the use of new technologies such as cloud services and Big Data and analytics and enable Sustainable Innovation through a culture of change, based around a central digital platform and driving seamless customer and user experience.

Work together with the Regulator

techUK has strongly advocated cross-industry dialogue including government, regulators, academia, technology industry and across the Financial Services sector. All parties now have to be pro-active leaders for change. Collaborative action across the sector is to be welcomed and encouraged, but don’t just talk about it, do it.

Those that seize the initiative today will reap the reward tomorrow through better customer satisfaction, greater revenues and profits, and ultimately better shareholder value. Collectively this can only benefit the Financial Services sector and the UK economy.

Tech Market View

FinancialServices*Views*

Research focusing on the UK financial services sector

2015 will be a pivotal year for the Financial Services sector in the UK. Incumbent banks and insurance companies will be keen to show that they are making progress.

Key objectives are the rationalisation of complex organisations, cost reduction and the search for new sources of profitable growth. TechMarketView anticipates that this sector will continue to be the fastest growing area of the UK market with the growth rate accelerating. Sector companies will be looking to increase their agility in responding to shifts in customer behaviour and in financial markets and to develop new ways to harvest and leverage data about their customers. As new competitors enter the market with innovative business models, companies will also be looking to improve the end-customer experience, a key element of competition in the sector. Established companies will also accelerate their plans to transform legacy systems which are now under increasing pressure.

The sector is also shaped by many of the general trends that impact the overall UK market; the greater use of Smartphones is transforming the way that people interact with their financial services providers, as we increasingly use Social Media and the “Internet of Things” we create more and more data that providers can analyse to understand our preferences and needs and technological advances in Cloud Services and Automation are making a real impact on how Financial Services companies run their operations. In this exciting year, FinancialServices*Views* will be reporting on these trends and helping you make sense of this dynamic sector.

Market shaping trends in the UK Financial Services sector for 2015

Peter Roe
Research Director
+44 7713 795372
proe@techmarketview.com

FinancialServices*Views*, TechMarketView’s focused research stream on the supply of software and IT services (SITS) to the UK Financial Services sector (banking, financial markets and insurance businesses) is led by Research Director, Peter Roe. Peter has over 20 years’ of experience in Financial Markets, working with major banks and brokers, and more than 10 years in the IT and Telecoms industry.

About TechMarketView

TechMarketView LLP brings you authoritative research and analysis on the technology scene via **UKHot*Views***, our FREE daily e-newsletter with the latest opinion and comment on events, issues and players that really matter in the UK software and IT services market.

In addition, TechMarketView offers a series of subscription services, including FInancialServices*Views*, enabling access to our in-depth market research and analysis.

We also provide engagement packages, presentations and workshop sessions making TechMarketView the ‘must visit’ destination for suppliers, investors and advisors to the UK software and IT services market - indeed for anyone with ‘skin in the game’!

For more information on any of our subscription services or engagement packages contact

Deborah Seth
New Business Development
dseth@techmarketview.com

About techUK

techUK represents the companies and technologies that are defining today the world that we will live in tomorrow. More than 850 companies are members of techUK. Collectively they employ approximately 700,000 people, about half of all tech sector jobs in the UK. These companies range from leading FTSE 100 companies to new innovative start-ups. The majority of our members are small and medium sized businesses.

techUK is committed to helping its members grow, by:

- Developing markets
- Developing relationships and networks
- Reducing business costs
- Reducing business risks.

The Financial Services & Payments Programme

Technology underpins every function across the financial system, from executing trades to making payments into accounts. The techUK Financial Services & Payments Programme provides a platform to understand the shape of the industry and the ways in which technology is changing the landscape across financial services, identifying both challenges and opportunities.

techUK members are the providers of much of the technology that enables disruptive new business models, as well as enabling incumbent firms across the financial services sector to modernise and innovate to meet the challenges and demands of an increasingly digital market.

techUK is the 'go-to' organisation that helps members and the wider tech industry understand both the existing landscape in financial services and how technology continues to transform the sector.

techUK's Programme also seeks to understand the current and evolving regulatory framework at a domestic, European and international level. Central to these objectives is the role that techUK can play in representing the views of the technology sector in policy making. This is achieved by developing an informed and responsive range of events, insights, consultation responses, reports and policy inputs that have a constructive impact on policy outcomes.

Lisa Moyle
Head of Programme, Financial Services & Payments
T 020 7331 2166
E Lisa.Moyle@techUK.org

Oisin Merrins
Financial Services and Payments Programme Executive
T 020 7331 2161
E Oisin.Merrins@techUK.org

techUK

10 St Bride Street London EC4A 4AD
techUK.org | @techUK | #techUK