Technology trends in capital markets: outsourcing in, in-house out

All around the world, businesses in the capital markets sector are facing radical and far-reaching change.
Technological developments, social and political upheaval, and a shifting regulatory landscape all present significant implications for capital markets firms. We wanted to understand how these factors will affect the sector’s networking, communications, and connectivity needs.

That’s why we got together with Greenwich Associates, so we could talk to sell-side, buy-side, and exchange operators around the globe.
Changing customer demands are driving changing connectivity models

Of course, priorities vary across the sector, asset classes, and regions. But everywhere we looked, firms were facing fast-evolving customer demands.

Consequently, people are collaborating more with FinTechs, opting for managed services, and moving services in-house.

Senior decision-makers across the capital markets sector unanimously said it’s crucial they stay connected to counterparties, partners, service providers, and market infrastructures.

Capital markets firms are keenly aware of the business opportunities thrown up by digital technology. As well as increasingly looking for managed connectivity solutions and collaboration with FinTech companies, they’re also using Software-as-a-Service more for client products.
It’s all about the money

Our findings suggest a broad shift away from building technology-based solutions in-house. Companies are relying less on their own IT departments in favour of a managed-service approach: working with specialist providers.

Aside from the obvious benefit of reducing IT staff headcount, partnering with specialist IT companies means you can work faster, at scale, and with more ingenious technology.

No compromises on security

Of course, firms will only consider this way of working if they’re confident their prospective partner can stay on top of changing risk and data management regulations, as well as being able to counter cyber-threats. The message was clear: capital markets firms won’t compromise on security and reliability.

Two factors are influencing investment in connectivity. The first is how quickly firms can launch new technology (speed-to-market). The second is what they need to keep their existing infrastructure going (business-as-usual or BAU) – which includes responding to regulatory changes.

Of course, speed-to-market is a big draw – but BAU acts as a massive hurdle. On average, firms are spending nearly 50% of their technology budgets on BAU processes. The other half is split fairly evenly between front and back office initiatives.

Regulatory-driven projects account for a substantial 44% of the technology budget, spanning both BAU and new activities.

Relative allocation of technology budget by region

Capital markets firms spend around half of their technology on business-as-usual activities.

So while spending on IT is high, the proportion spent purely on developing new revenue-generating activities is relatively small. This is one of the reasons why firms are embracing managed services and jumping into bed with FinTechs, data vendors, and other specialist service providers.
Technology trends in capital markets

Say goodbye to the IT team, hello to your IT partners

As you know, the capital markets sector is complex; it’s naïve to assume that every player will respond to similar challenges with the same solution.

We found that the majority of firms (62%) we spoke to are planning to increase their use of managed connectivity solutions, while a smaller proportion (39%) told us they expected to increase their use of in-house solutions. There are arguments for both approaches.

One of our interviewees said they preferred to keep things in-house because it helped them ‘provide better customer service’.

Over in the managed services corner, another interviewee told us that a managed service offered greater opportunity to ‘take account of emerging architectures’. Others, especially those who’re increasing their use of SaaS-based infrastructure for client solutions, said that managed solutions help them move their strategies along more quickly and cheaply than if they had to conjure up the tech in-house.

Overall, it looks like the combination of money, control, and flexibility is winning the argument for managed services.
FinTech. Your new best friend?

Remember when FinTech companies were seen as the disrupters of the financial markets? Coming in to the sector with their pesky new technology, making long-standing business models quake in their boots?

Well, those days are long gone. Now, FinTechs and established capital markets players are best buddies, combining their strengths and pooling their expertise to meet the complex needs of the fast-evolving market.

There are several factors driving this new co-operation.
For example, many capital markets firms are struggling under budget constraints, but have ready access to assets and clients; FinTechs have the edge when it comes to getting new tech out fast.

Our survey reveals that many capital markets firms see collaborating with FinTechs (and traditional third-party service providers) as a central strand of their business strategy.
But businesses are pragmatic. They recognise that a FinTech collaboration isn’t a magic bullet for success.

What difference do FinTechs make?

- Made a big difference across the whole business
- There were clear benefits to parts of our business
- We saw some improvements but we could probably have got a similar result in-house without the FinTech
- The FinTech made hardly any difference at all

While 36% of interviewees reported clearly attributable benefits, 43% reckoned that they could have achieved similar results by not working with a FinTech. Interestingly, when we strip the global results down to focus on London, the results tell a different story.
Perhaps it’s a reflection of London’s position as a leading global FinTech hub, but 47% of UK-based interviewees claim to have already achieved clear benefits from getting together with a FinTech.
What’s up with start-ups?

Although many people we spoke to believe that working with a FinTech is a good thing, particularly if it involves analytics, it was apparent that only the right FinTech would get the gig. The most frequent objection we ran across was that these start-ups had just, well, started up.

Almost by definition, FinTechs tend to have a short track record, which is why 62% of our interviewees said they were reticent to join forces with them.

Allied to jitters over a brief operating history were concerns over quality of experience, product testing abilities, scalability, capacity, and cultural fit.

So what is the right FinTech?

43% of interviewees said that a FinTech’s ability to deliver innovative solutions was the top or second to top reason for partnering with one. Other reasons given to us were greater technological expertise and lower costs.

Capital market firms are essentially looking for two things: a new approach to networking and a reliable, secure operating infrastructure.

For many firms in the sector, FinTech companies can help bridge the gap.

Why people want to work with a start-up FinTech

- Innovative ideas & solutions
- Considerable expertise
- Lower cost
- Better service

And why people think they shouldn’t

- They don’t have a lengthy track record
- Products are untested and unreliable
- Inadequate cybersecurity
- Insufficient capacity to work with us
With 77% of our interviewees already using it and 64% planning to increase their use over the next couple of years, SaaS is becoming the industry standard.

Many firms are now examining the most suitable options for securing and supplying cloud-based access to applications and content-as-a-service.

Do you use SaaS-based architecture for your client products?

- Yes for everything
- Yes, we use it for some client products and we’re planning to move others over in the next 2-3 years
- Yes, we use it for some client products but we’re not planning on moving any others over
- No, but we will in the next 2-3 years
- No, we don’t use it and don’t plan to either

Not using SaaS? You’re in the minority.

Software-as-a-Service (SaaS) for client-based products is now so popular in the capital markets sector that we no longer need to explain it in documents like this.
Capital markets firms are waking up to the enormous potential of AI. It’s not just about being more efficient – AI will also help firms develop new services and, through big data analytics, understand client requirements at a more granular level.

**Quiz time:** what have AI, cloud-computing, and blockchain got in common?

**Answer:** they’re all about community. The real benefits come from being able to share information and resources with multiple parties, across common protocols and standards.

Of course, you could argue that they’ve got something else in common too: they all rely totally on tip-top networks to function.

Now, here’s the thing. As capital markets seize on these technologies and more and more firms start using them, there’s going to be a huge, parallel demand for secure, reliable connectivity and networking capabilities.

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**Artificial intelligence? Real smart move**

Our survey revealed 48% of interviewees are eager to exploit artificial intelligence (AI), with 40% being up for cloud computing and blockchain-based technologies.

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**Capital markets firms interest in emerging technology**

- **Technology with most interest**
  - Artificial intelligence / machine learning
  - 31%
  - Said this was their #1 interest

- **Technology with least interest**
  - Robotic process automation
  - 10%
  - Said this was their #1 interest
CIOs are no longer defaulting to doing everything on their own turf.

The savvy capital markets firm is now weighing up the costs and benefits of private, public, and hybrid solutions and opting for whichever hits the sweet spot: supporting strategic objectives while optimising the investment budget. The CIO’s life was once pretty straightforward: build and run an internal technology stack with help from the in-house IT team. But with the shift away from buying kit and managing it all yourself that job description’s in need of a rewrite. Now the CIO is more likely to spend their days sourcing an array of third party technologies to support the company’s strategic objectives.

Our survey flagged this widespread move to an outward-facing technology strategy, with CIOs concentrating investment on:

- Enhancing cybersecurity
- Implementing private infrastructure
- Developing collocation services at data centres
- Building up market connectivity infrastructure

Technology investment priorities over the next two years

<table>
<thead>
<tr>
<th>Technology Type</th>
<th>Ranked #1</th>
<th>Ranked #2</th>
</tr>
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<tbody>
<tr>
<td>Enhancing cybersecurity</td>
<td>33%</td>
<td>35%</td>
</tr>
<tr>
<td>Private cloud infrastructure</td>
<td>48%</td>
<td>19%</td>
</tr>
<tr>
<td>New provision... colocation services at datacentres</td>
<td>37%</td>
<td>19%</td>
</tr>
<tr>
<td>Public cloud infrastructure</td>
<td>12%</td>
<td>32%</td>
</tr>
<tr>
<td>Upgrading data centre hardware</td>
<td>18%</td>
<td>26%</td>
</tr>
<tr>
<td>Upgrading market connectivity infrastructure</td>
<td>16%</td>
<td>25%</td>
</tr>
<tr>
<td>Hybrid cloud infrastructure</td>
<td>17%</td>
<td>22%</td>
</tr>
<tr>
<td>Re-factoring proprietary software related to markets infrastructure</td>
<td>18%</td>
<td>13%</td>
</tr>
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Cybersecurity worries spook internet traders

So everyone’s starting to embrace the outward-facing, collaboration-centric approach. Great. But there’s a fly in the cyber ointment: security niggles.

Persistent concerns over cybersecurity, reliability, and certainty mean that many firms are still wary about using the internet for trading and – to a diminishing extent – public cloud solutions. Security concerns aren’t just about the immediate effects of loss of data, compromised systems, ransom demands, and brand damage, they’re also about the implications of an expanding regulatory landscape.

The General Data Protection Regulation (GDPR) is currently a massive driver of technology projects across the sector. In our survey, 46% of capital markets firms said GDPR was driving technology investments, second only to Basel III, cited by 52% of our interviewees.

Caution pays. But concerns about cybersecurity continue to dominate investment decisions.

Plans for investment in technology infrastructure are overwhelmingly focussed on security. 68% of people we spoke to ranked ‘enhancing cybersecurity’ as their top or second priority over the next two years.

76% of capital market firms expressed concern about the perceived risks of using the internet for trading rather than sticking to dedicated, secure networks. And 74% were also worried about reliability.

With 55% of interviewees fretting about certainty (you need to be confident that your service is wholly predictable), it’s plain that for capital markets firms there’s a tension between relishing the idea of digital innovation and steadfastly refusing to increase operational risks in order to exploit it.

Don’t think twice, FinTech’s alright

Security concerns also colour people’s attitudes to working with FinTech start-ups. When we asked about the barriers to working with FinTechs, around 50% of the people said inadequate cybersecurity was making them think twice about partnering with one.

But the allure of FinTechs is hard to resist. Our evidence suggests that the two sectors will continue to converge as security and networking technologies get ever better.
Where are we now?

Things have changed an awful lot in the past 10 years. The financial crisis threw the world’s economies into turmoil. Old revenue streams suffered a crippling body blow.

Technology has changed the face of global markets – what we sell, how we buy, and how we do business. Regulators across the world raced to keep up with the changing landscape, introducing wide-ranging regulatory reform.

The challenges that capital markets firms face are acute. And that’s before we even mention Brexit or that ‘very stable genius’ in the White House. Whether they want to or not, capital markets firms are having to fundamentally rethink what they do and how they do it.

First step to a third party. As companies re-engineer their strategies, re-evaluate their priorities, and redesign their business models, one thing is common to all capital markets firms: they need an operating infrastructure that will help them prosper in this new, harsh climate.

Our survey tell us that firms are turning away from the old in-house technology model in favour of embracing wide-ranging managed services. They’re willing to partner with third parties to a greater extent than ever before, including FinTech start-ups.

They may be fledgling businesses, but the attractions of FinTechs are undeniable: fast, cost-effective, and above all, innovative.

But capital markets firms are rightly cautious. Security and reliability are paramount. The price of ignoring them can be calamitous: loss of data, systems held to ransom, collapse in customer confidence, punitive penalties from the regulator.

Join the dots with Radianz services from BT. As firms refine and roll out their strategies, they’ll need a range of networking and connectivity solutions across geographic markets, business lines, and customer sectors.

And that’s where we come in. We’re continually investing in our services, our partnerships, and in our research. We’ll talk to you, listen to what you tell us, and do something about it. We treat every customer individually, coming up with solutions to match your demands. We’re Radianz from BT.