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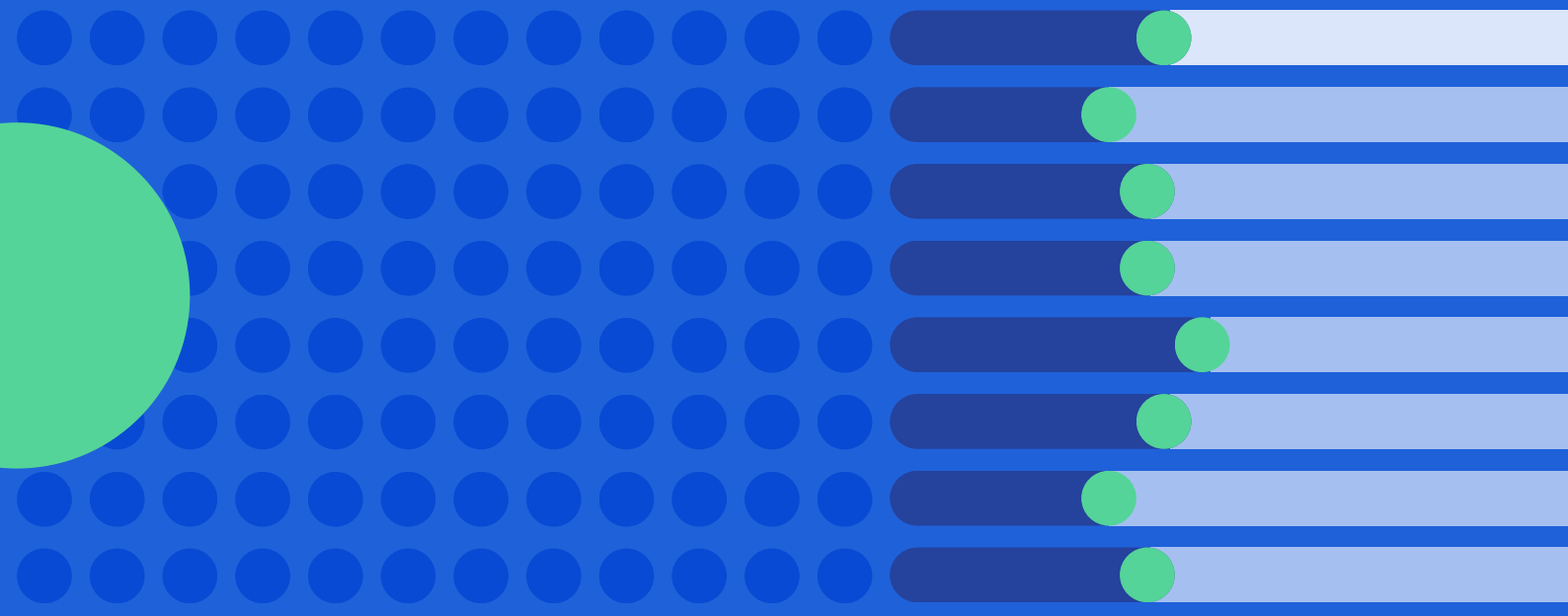
Growing Financial Services with AI: balancing innovation, quality and compliance



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Views shared during the roundtable and in this report represent personal opinions and experiences, not those of employers or affiliated organisations. While intended to inform industry discussion, they should not be considered legal or professional advice.

Foreword

Authored by Adam Pettman,
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The financial services sector stands at an inflection point in its AI journey. What began as experimental technology adoption has evolved into a fundamental driver of business transformation, demanding a sophisticated understanding of both its capabilities and governance requirements.

As we witness acceleration in AI capabilities, financial institutions face increasingly nuanced challenges. While banks sit on vast troves of historical customer, transaction, and market data, making them seemingly ideal candidates for AI adoption, the reality is often more complex, with data quality and consistency issues presenting significant hurdles.
The sector must strike a delicate balance between deploying AI solutions that drive genuine business value and maintaining the robust quality standards that this heavily regulated industry demands.

The regulatory landscape itself is evolving rapidly.
While the UK government champions a pro-innovation stance through initiatives like the **AI regulation: a pro-innovation approach** policy paper, it simultaneously emphasises the critical importance of responsible deployment. This dual focus creates a unique operating environment for financial institutions - one that requires careful navigation to realise AI's transformative potential.

Against this backdrop, 2i convened an exclusive roundtable of senior technology leaders from across the financial services industry to examine how organisations can navigate these waters.
The discussion revealed a crucial insight: **successful AI adoption extends far beyond technical implementation**. It demands fundamental shifts in organisational culture, risk management frameworks, and operational models.

The perspectives captured in this report reflect deep, practical experience in deploying AI within regulated financial environments. Our participants' insights highlight both the immense opportunities AI presents and the sophisticated governance required for its responsible implementation.
As financial institutions move toward deeper AI integration, these learnings provide critical guidance for organisations seeking to balance innovation with safety and compliance.

The current AI landscape

The discussion highlighted that AI is not a new technology, but its accessibility has dramatically increased. As Isabel Palmer, Director of Engineering & Transformation, Experian EMS UK&I, noted, "AI is not new. Machine learning has always been there, but the proliferation and the accessibility of ChatGPT has made people think, 'yes, AI is actually here now'." This shift in accessibility has created new opportunities and challenges for organisations. Dave Kelly, CEO of 2i, commented, "AI has become more accessible in the last 12 to 18 months; you can see people are becoming more excited about the different models and values you can get from data."

Further to this, business needs have changed. What began as record growth during the pandemic has evolved into a more cautious market landscape, with organisations facing what many term a 'technology recession'. **Tighter budgets, extended sales cycles, and increased pressure for ROI have become the norm**. Yet, these constraints make the case for AI even more compelling - its ability to drive efficiency, enhance decision-making, and create competitive advantage offers organisations practical solutions to do more with less.

Despite widespread interest in AI adoption, many organisations still remain in the experimental phase. A fundamental challenge presented amongst many organisations is access to high quality data and data management. Vikas Krishan, Chief Digital Business Officer at Altimetrik, commented, "Lots of organisations are still struggling with what they do with data and whether they should even be using this data. Organisations are beginning to say - my data needs to be useful, so it needs to be organised and rational."

> **AI has become more accessible in the last 12 to 18 months; you can see people are becoming more excited about the different models and values you can get from data."**
>
> **Dave Kelly**,
> CEO of 2i

For organisations like Experian, data is central to their ethos. Isabel Palmer explained, "Part of our ethos is to be at the forefront of innovation, especially in data. We understand that having quality data fuels and fortifies great innovations. When you think of AI, regardless of domains to innovate e.g. finance, insurance, governmental institutions or other verticals, data quality is crucial." Governance requirements and maintenance costs are part of this, as Dave Kelly explained, "The cost of maintaining data and ensuring its quality is high. For regulated financial institutions, this isn't optional - they must make these investments to meet their compliance obligations. The real question becomes how to maximise the return on this mandatory spend."

Organisations are taking longer to make purchasing decisions in this environment of flat budgets and increased price pressure. Vikas said, "We've seen organisations struggle with questions like - 'How do I get enough governance? How do I begin to think about innovation when it comes to driving the overall management of a solution?" A careful approach is needed to balance innovation with fiscal responsibility in the current market climate. There was agreement from Dave Kelly that, "AI brings more risk than we've ever seen before. That's what's driving some of the questioning.

We're having to ask ourselves - what do you do with that when you can suddenly develop functionality and logic you've never seen or considered before? How do you manage that risk?"

Dave Kelly,
CEO of 2i

Balancing innovation and risk

AI is a transformative force in financial services, offering opportunities to enhance customer experiences, streamline operations, and create new revenue streams. While implementing AI requires careful consideration of the risks, organisations are finding innovative ways to harness its potential, while maintaining robust controls.

Vikas commented, "It's really important for innovation that organisations know how that governance works. This really determines the success of a strategy."

Strategic thought leadership has emerged as a key differentiator in successful AI adoption. Forward-thinking organisations are demonstrating how to leverage AI to transform their businesses, while building appropriate safeguards from the start. This proactive approach is helping reshape how the industry thinks about innovation and risk.

The evolution of risk management practices is keeping pace with AI innovation. As organisations seek to balance innovation with robust controls, they are developing more sophisticated frameworks that enable faster deployment while maintaining security. Vikas highlighted the importance of a consistent testing framework, noting the challenges of translating innovative approaches into financial terms that CFOs can understand. Dave reinforced this point by emphasizing the need to test solutions internally before market deployment, stating, 'We need to drink our own champagne, so to speak."

This approach reflects the broader industry trend of wanting to see concrete use cases before adopting new technologies, as Paul Colam from GB Bank earlier noted, "**As a bank, and as a very conservative organisation, we tend to be nervous of being early adopters of new technologies.**"

By building in appropriate controls from the start, organisations can move faster and more confidently in their AI initiatives.

This integrated approach, combining technical expertise with risk awareness, is helping financial institutions unlock AI's full potential, while maintaining the trust of customers and regulators alike.

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>
> **Paul Colam**,
> Head of Operations at GB Bank

The role of testing and quality assurance in AI implementation

Testing and quality assurance in AI represent far more than traditional software validation - they are fundamental to realising AI's transformative potential and ensuring system reliability and trust. As Isabel commented, "Testing needs to be an essential part of this culture because it can be a great enabler to explore tangible scenarios that will help improve or introduce new products and boost personal endeavours." As testing approaches have developed, they have become more suited to enable AI innovation.

Critical thinking and design principles are reshaping how organisations approach AI testing. Vikas noted, “Taking clients on a journey is something we’re still missing; we’re still doing point solutions, and we haven’t built that [customer journey] roadmap for clients just yet.”

While AI amplifies the possibilities for innovation, it also introduces new dimensions of complexity that testing must address as Vikas discussed, "Defining a use case is about “what should we do” not how complicated testing will be. **Many clients are figuring out solutions and making mistakes, which is ok, but when you’re making mistakes with something that is so critical to your potential future in so many ways, that becomes potentially problematic. But clients are beginning to look for this, and this will be important for them as they grow.**

AI itself is revolutionising testing products and practices, creating opportunities for more efficient and comprehensive validation. Isabel said, "Maybe in ten years, there will be a CQO, a Chief Quality Officer.

The responsibilities of the CQO will extend beyond managing risks, governance, and compliance of delivered products and services. They will also include measuring quality of innovations.”

AI itself is revolutionising testing practices, creating opportunities for more efficient and comprehensive validation.
Paul stated that, "As a small team, we’re taking people away from the front line to support testing at a time when we’re trying to grow, so having AI to support this is a good thing for us.”

These advances enable teams to achieve higher quality outcomes in compressed timeframes.

Many clients are figuring out solutions and making mistakes, which is ok, but when you’re making mistakes with something that is so critical to your potential future in so many ways, that becomes problematic.”

Vikas Krishan,
Chief Digital Business Officer at Altimetrik

The key lies in balancing quality with speed. As Adam noted, "We see technology companies that have been first to market, but their product launch has been a disaster. We take a different approach and try it ourselves instead of trying to be first to market.”

5 things success in AI testing requires

1. Integration of testing considerations from the earliest stages of AI development.
2. Combination of automated and human-led testing approaches.
3. Continuous validation throughout the AI pipeline.
4. Clear frameworks for measuring and maintaining AI system quality.
5. Adaptive testing strategies that evolve with AI capabilities.

These emerging practices are helping organisations build confidence in their AI implementations, accelerating their journey to production.

Forward-thinking teams find that robust testing frameworks enable faster innovation by providing clear guardrails for development and deployment.

Regulatory compliance

The regulatory landscape for AI in financial services is a fast-moving environment, with frameworks like DORA (Digital Operational Resilience Act) and the EU AI Act setting new standards for responsible AI adoption. Rather than constraining innovation, these frameworks are creating clearer pathways for safe and effective AI implementation.

Paul highlighted the core challenge: "Regulators want us to demonstrate we've got robust controls in place." This financial compliance burden is significant - as Pauline Smith noted from her banking experience with Clydesdale & Yorkshire Bank, "**60% of annual spend was going on regulatory compliance work, with no direct revenue generation.**"

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>
> **Pauline Smith**,
> Chief Operating Officer at 2i

The complexity creates a strategic dilemma: "Having an AI solution that works is good, but it's a catch-22," Paul explained. "We're nervous about implementation, yet manual testing requires substantial internal resources."

Explainability has emerged as a crucial factor in regulatory compliance. Adam said, “The FCA already has an established approach of working closely with financial institutions to understand their risk management, particularly around credit risk. They do this through both regulatory reporting and consultation, asking banks to explain their methodologies and risk controls. I believe they could adopt a similar consultative approach for AI governance. For instance, they might begin by consulting with banks on how AI is being used to accelerate product development.

Based on these insights and learnings, the FCA could then determine appropriate regulatory frameworks for AI usage in banking - much like how they've developed other regulatory frameworks through industry consultation.”

AI is becoming a powerful tool for regulatory compliance. As Pauline observed, **"If you can use AI to make compliance more efficient and drive value out of it, you can free the budget you would be spending on regulatory compliance for value-added products that retain and attract new customers. If you can master that, then that's a significant competitive advantage."**

The regulatory environment is prompting organisations to rethink their approach to governance and culture. Adam commented, "If I were the FCA, I would use the next regulatory change at that scale to influence institutions to share their approach to AI more widely."

While some regulatory aspects remain in development, leading organisations are taking proactive steps to build robust AI governance frameworks. However, financial services regulators are still iterating as Paul said, "There's not a lot coming out of the Regulator in this space to give us support. Demonstrating we have a good grip on anything new that we're doing is important in our conversations with Regulators."

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Paul Colam,
Head of Operations at GB Bank

Practical use cases of AI

AI is revolutionising testing practices, offering tangible solutions to long-standing challenges and creating new opportunities for efficiency and effectiveness. One of the most promising developments is synthetic data generation.

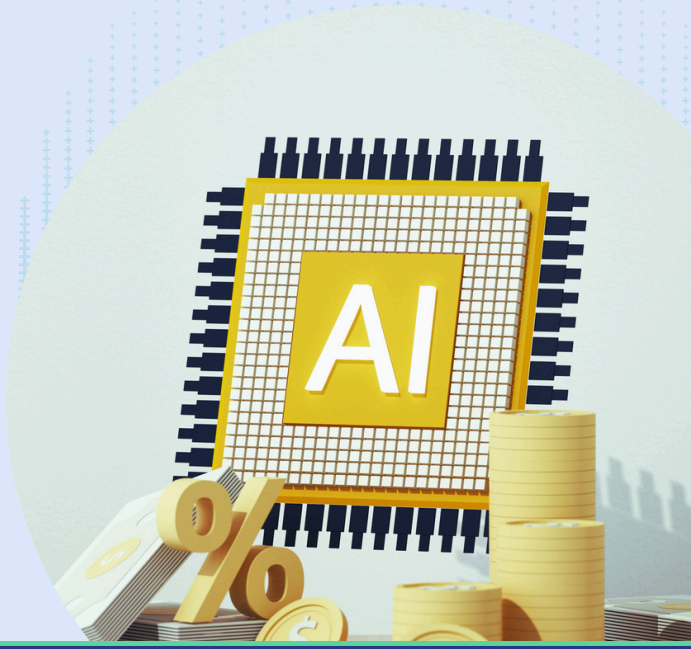
"We looked at synthetic data but wanted to be sure that this was right for us and could work with what we needed for regulatory and customer purposes," Paul explained.

Success in AI testing demands a focus on practical, value-driven implementations. Paul noted, "AI testing can reduce the timeline for delivery. If we look ahead, Basel 3.1 is coming soon as a big piece of work.

The testing regime needs to make sure we get what we need from that. We estimate the testing will be within the ballpark of five months, but AI can dramatically reduce this time. **If you can work that AI piece, so it works robustly and 24/7, it's worth it.**" Vikas further commented, "You can run continuous testing through AI. I think that's great for driving productivity, greater customer experiences and efficiency. You can use this insight to really drive bolster these pillars."

A significant breakthrough in testing efficiency comes through AI-powered test case generation. As Dave explained, "One of the things our team produced early in the process was the ability to generate test cases automatically. There were several different ways to do it, but we proved a technique for taking a set of requirements to create use cases for testing. It's like having a nuclear button - what will happen when you release this to the world? We've walked it back a little bit as it was too generic and looked at how we implement this technology to make it more tailored and relatable for clients."

AI can transform traditional testing approaches by addressing common challenges that teams face:



Current industry challenges:

- Teams spending many weeks manually designing test cases.
- Difficulty achieving appropriate test coverage.
- Risk of human error in test planning.
- Possibility of missing critical test scenarios.
- Limited ability to scale testing effectively.

Key benefits of AI-powered test case generation:

- Test cases generated in minutes rather than days.
- Automated processes reduce manual effort.
- Increased test coverage with better risk identification.
- Minimised defects through comprehensive testing.
- Secure integration with client systems - no data leaves their environment.
- Enhanced engineering capacity leading to accelerated delivery.

Adam explained, "The approach we've taken is to target each role in the agile workflow and deliver an AI element into it. This is for a few reasons - for explainability and then the speed it delivers to that step. You can deliver a bespoke solution for each gateway quickly."

The approach to AI implementation must be targeted and persona-based rather than generic. By keeping AI processing within client walls and allowing restrictions on system access, it addresses key security concerns and delivers substantial efficiency gains.

The impact extends beyond immediate testing benefits.
AI testing of systems can:

- Write test cases from start to finish.
- Accelerate delivery and revenue generation.
- Enable better use of engineering capacity.
- Replicate proven testing approaches at scale.

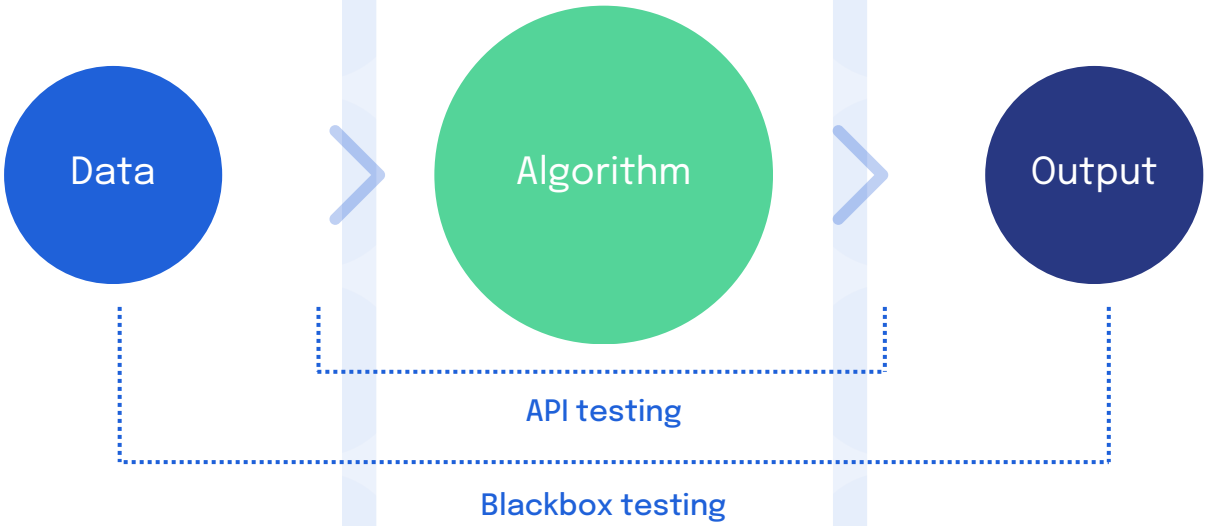
While many organisations are exploring continuous testing and similar approaches, few openly discuss their implementations. By combining AI-powered analysis with practical business requirements, these tools could help organisations achieve new levels of quality assurance, while reducing time and resource requirements.

How do we test AI?

Data driven testing

Algorithm assurance

Automated testing



This approach harnesses extensive test datasets, leading to more comprehensive testing outcomes.

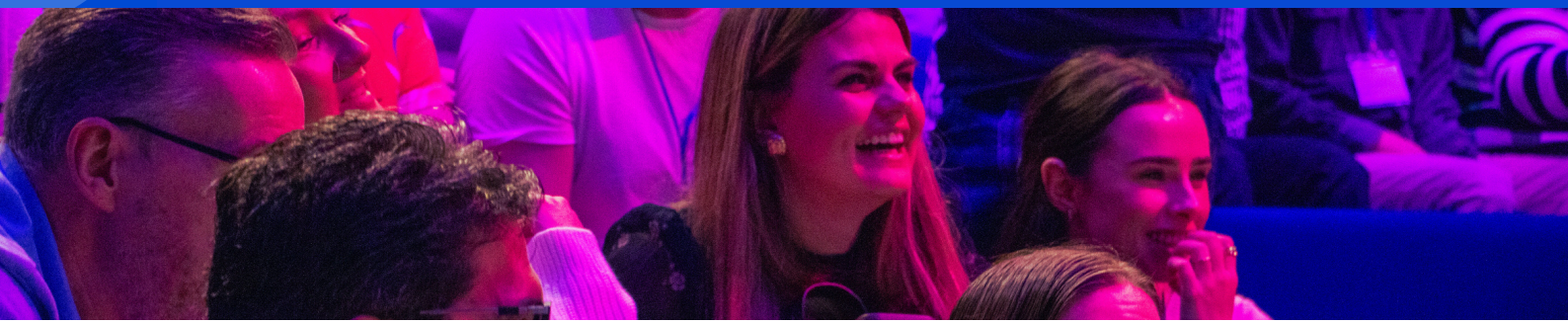
It reduces the need for manual test creation, enabling testers to focus on adding value.

Delivering increased assurance by focusing on the Technical, Governance, Maintainability and Education aspects of the AI implementation.

Automated testing plays a pivotal role in the development and deployment of AI systems.

It offers a scalable and efficient method to ensure their reliability, accuracy, and performance.

Cultural transformation and team dynamics



The impact on organisational culture emerged as a critical consideration.

"You need to consider whether your approach to the current team working methods or framework needs to evolve. You have to ask questions like - now that I have a super enabler in AI - how am I going to approach delivery and execution to maximise the benefits towards velocity volume and speed in a simplified way within or across functions?"

The discussion emphasised the importance of cross-functional collaboration.

Vikas explained, **"AI adoption isn't just a technical project - it's an organisational journey requiring cross-functional teamwork."** Isabel highlighted the importance of cultural evolution, "As leaders and innovators, we are positioned to shape the next phase or phases of our company's growth. It's then essential to understand how to inspire, build and motivate a team that embraces AI as part of that journey."

However, Tijo T Joy, CTO of Azur Technology, explained that customers also need to undergo a cultural change to fully realise AI's potential, "The challenge is making sure the clients understand it. We've seen that it can take organisations several months to fully appreciate and realise the benefits of automated testing and quality assurance."

Dave noted that, "quality and testing hasn't been a board-level conversation."

Tijo agreed, "The leadership appears to be more reactive, addressing issues only when they occur, rather than proactively identifying areas where quality gates should be implemented." He continued, "Having a business case for the board, more facts, testing timelines, and ROI is useful."

AI adoption isn't just a technical project - it's an organisational journey requiring cross-functional teamwork."

Vikas Krishan,
Chief Digital Business Officer at Altimetrik

The importance of partnerships

Industry leaders emphasised that the complexity of AI implementation demands a collaborative approach, with Vikas noting that organisations can no longer operate in isolation when it comes to AI.

“I remember looking at a testing deal years ago, testing as a service; it was hugely important as clients had very disparate IT estates and no governance. We still see institutions struggling with legacy and governance. The lessons learnt from before should come back around,” he explained.

Pauline also highlighted that successful AI implementation requires an ecosystem of credible partners, each bringing unique capabilities and perspectives. **"Having financial services credibility that organisations have tried and tested was absolutely critical [when choosing partners],”** she observed. This collaborative approach and credibility building have become increasingly vital as organisations navigate AI implementation.

"Having financial services credibility that organisations have tried and tested was absolutely critical [when choosing partners],”

Pauline Smith ,
Chief Operating Officer, 2i

The evolving relationship between suppliers and clients emerged as a central theme, with Dave bringing attention to changing expectations when it comes to quality assurance and testing. "It should almost feel as if the organisation can just focus on their core business - they can spend more time and value on their customers, whilst we take the safety and quality aspects [of testing and AI] on,” he explained.

Organisations are increasingly relying on their technology partners to demonstrate innovation opportunities and potential use cases, requiring suppliers to take a more proactive role in sharing insights and possibilities with their clients.

The importance of demonstrated success in building client confidence was particularly emphasised by Paul, “If I'm going to sell AI products or testing to my team... show me where you've used it. Show me, how in my world, in my context, that it's worked.”

Organisations want to see concrete examples of where AI has delivered value in similar contexts, with case studies and success stories becoming essential tools in helping organisations visualise their own AI transformation journey.

Knowledge sharing has emerged as a critical success factor in AI partnerships. The roundtable participants agreed that transparent sharing of insights, challenges, and learnings create a foundation of trust and accelerate the learning curve for all parties involved. Pauline explained, “You want to go in and work with clients at the beginning as you can help to shape and build the solution. It’s a much better and more cost-effective outcome for everyone involved.” This open exchange of knowledge has become instrumental in driving successful outcomes.

Isabel and Adam brought particular attention to the importance of early client engagement in the AI journey. "**Identifying sponsors or stakeholders who can actually be your ally in creating value - that is key to maintaining alignment and support regardless of where you are in an organisational transformation**" Isabel noted. Adam added that early collaboration allows for better alignment of expectations and more effective risk management, “It works well on regulatory change as the requirements are clearly defined. So, predicting and measuring the benefit of AI is much easier.”

Identifying sponsors or stakeholders who can actually be your ally in creating value - that is key to maintaining alignment and support regardless of where you are in an organisational transformation,"

Isabel Palmer,
Director of Engineering & Transformation, Experian UK

As organisations continue to navigate their AI transformation journeys, the importance of strong partnerships will only grow. **Success in the AI era will increasingly depend on the ability to build and maintain effective collaborative relationships across the ecosystem.**

This includes fostering diverse partnerships to address AI implementation complexity, ensuring suppliers take a leadership role in demonstrating possibilities, leveraging proven use cases, maintaining transparent knowledge sharing, and engaging in partnerships from the earliest stages of the AI journey.

The future of AI and testing

The transformation of testing practices through AI is reshaping how financial services organisations approach quality assurance and development, with particular emphasis on workforce transformation and industry-specific implementation strategies.

Isabel and Pauline highlighted how AI is fundamentally changing resource allocation in financial services testing teams. Traditional testing approaches in banking and insurance often required large teams to perform repetitive validation tasks across multiple systems and products. However, AI is now enabling a significant rebalancing of workloads.
"It's important to not only think of AI as a helper, but how it is going to support everything in the [product and customer] end to end journey", says Isabel.
"It is important to note however, that you still need personnel; you need human oversight to ensure that what is being delivered is well within the context of the requirements," she continues.
This shift is particularly valuable in financial services, where testing teams have historically spent considerable time ensuring compliance with regulatory requirements and validating complex financial calculations.

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The potential impact of AI on code generation in financial services was brought into sharp focus through Adam's reference to Meta's achievement of generating 25% of their code base using AI. This development has resonance for financial services, where large legacy systems often require extensive maintenance and testing effort.

The potential impact of AI on code generation in financial services was brought into sharp focus through Adam's reference to Meta's achievement of generating 25% of their code base using AI. This development has resonance for financial services, where large legacy systems often require extensive maintenance and testing effort. Adam said, “This will start to filter down, now that it’s started at this scale, due to its efficiency. There’s two parts to this, they [Meta] invested a lot in their AI ability, which means they have comfort in it and can deploy it at scale, but also that they are giving away their large language models for free and publicly. They will stop sharing this model freely in the next 18 months.”

The economics of AI implementation in financial services emerged as a key discussion point, with Adam and Vikas noting the current availability of free large language models.

However, they cautioned that this landscape is likely to evolve, particularly given the financial sector's requirements for secure, auditable AI solutions. Vikas commented, “Although technology can do lots of things, it’s still biased. There’s still a level of maturity in our bias that is looking to solve industry issues via AI technology. We are at a pivot point to see what the priority of the organisation with this technology is and how it can work for you.”

Dave's observation about the shifting focus of AI conversations resonated strongly in the financial services context. Dave reiterated that organisations should, “focus on the use case. Don’t focus on broad AI, technology or language. Focus on how to answer - here’s what it can do for you.” This pragmatic approach aligns well with the sector's need for demonstrable results and clear risk management strategies.

Looking ahead, the financial services sector stands to benefit significantly from AI-driven testing transformation. However, success will depend on carefully balancing innovation with the industry's fundamental requirements for security, reliability, and regulatory compliance.

Our roundtable discussion highlighted important insights about how financial services companies can best use AI in their testing and quality checks. As companies move forward with AI, clear patterns are emerging that show what works and what doesn't.

We're seeing a significant change in how financial companies approach AI. Rather than just talking about what AI could do, companies are now focusing on practical ways it can help their business today. Success comes from finding the right balance between trying new things and keeping appropriate controls in place.

Three main themes stood out in the discussion.
Companies need to:

- ✓ Make sure AI projects deliver clear benefits.
- ✓ Keep high standards while embracing new technology.
- ✓ Meet all regulatory requirements.

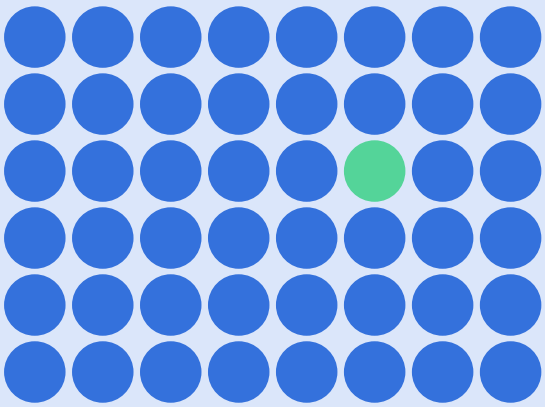
Looking ahead, financial companies should focus on three key areas:

1. First, they need to **choose AI projects carefully**, focusing on ones that will clearly help their business. The time for experimenting with AI just to see what it can do is over. Companies now need to be selective and focus on projects that will show real results while staying within industry rules.

2. Second, companies need to **develop strong testing methods that make good use of AI while keeping appropriate safeguards**. These methods need to be flexible enough to work with new technology but thorough enough to meet the high standards expected in finance.

3. Finally, companies must **help their teams learn new skills and adapt to working with AI**. This means creating an environment where people see AI as a helpful tool rather than a threat to their jobs.

The key to success lies in getting these three elements working together well by using new technology to improve the business, maintaining high standards, and following industry regulations. Companies that can do this while staying focused on practical benefits will be the ones that succeed with AI.



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