

# The Lloyd's Market Association (LMA) disclaimer

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#### About the LMA

The Lloyd's Market Association (LMA) exists at the very heart of Lloyd's, a world-leading global marketplace for complex risk where solutions to challenges are delivered every day. All 55 Lloyd's managing agencies, with a total market stamp capacity of approximately £52.6bn in 2024, and all Lloyd's members agents, are members of the LMA.

We represent our members' interests to organisations including governments, regulators and the market's central supporting body, the Corporation of Lloyd's. We provide professional and technical expertise in areas ranging from model policy wordings to the implementation of innovative technologies. We connect with our members to identify and resolve issues facing the market, and work in partnership with Lloyd's and the other market associations to influence initiatives and outcomes. We operate the market's most comprehensive technical education service, the LMA Academy.

For more information visit: www.lmalloyds.com

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Senior executives choose Oxbow Partners when they want a fresh perspective from a high-calibre team of industry specialists that think deeply about each client's unique situation and have a track record of delivering insight and impact.

In 2023 we became a B Corp, indicating our commitment to balance purpose and profit.

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# Foreword



How we work is just as important as what we do. The 'what we do' in the Lloyd's marketplace is share risk to create a braver world, enabling our clients to build a more sustainable and resilient future. Our ability to work together as a market to solve our clients' complex problems using our deep expertise and insight has set us apart for the last 300 years.

The 'how' we share risk, as leaders and followers, is where we are seeing fascinating levels of the innovation for which our market is rightly famed. Countless new models have evolved over the last five years or so, some driven by the underwriting community and others by the broking community.

This paper defines and differentiates the new models under a framework of 'enhanced underwriting' and poses the question of whether they will become our new normal. The genesis of this question came from the LMA's own Enhanced Underwriting Working Group, chaired by Will Roscoe of Beazley. Together with the LMA Board and our Chief Underwriting Committee, this paper defines the constituents of the various models, as well as an overview of the risks and opportunities presented by each of them. We have also challenged ourselves about how they might evolve over the next five to ten years.

The intention of this paper is for executives and boards to start to understand the developing models in the context of their own strategies and risk appetites. There is no definitive answer here – what fits well with one firm's strategy may not with another. Our goal is simply to help firms make informed decisions about which model(s) may be right for them.

This paper was written in collaboration with many, many market participants – including 85 full interviews and 130 surveys, capturing 77% of Lloyd's GWP – in a very short eight-week period. Thank you to all of you who took the time to share your views with us and we hope this paper offers a balanced perspective on both the supporting and detracting viewpoints that were shared. Most importantly, I'd like to thank Greg Brown and his team at Oxbow

Partners, who pulled together this enormous piece of work in three short months. I would also like to thank Kevin Shallow of QBE, who sits on the CUO Committee and represents the LMA's Enhanced Underwriting Working Group. Finally, I would like to thank Elizabeth Jenkin, the LMA's Underwriting Director, for her tireless efforts to ensure all market voices were presented in a balanced and thoughtful manner.

The LMA's purpose is to make the market a better place, both for our managing agent members and for the market as a whole. I believe that this analytical and nuanced paper will help managing agents make the right strategic choices about the 'how' they want to work in the future.

Sheila Cameron

Chief Executive Officer Lloyd's Market Association

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Thank you in particular to Will Roscoe (Beazley), Kevin Shallow (QBE) and Jamie Garratt (Talbot) for their participation in this report, as well as members of the LMA's CUO Committee and Enhanced Underwriting Working Group.

# Executive summary

This report is an objective assessment of Enhanced Underwriting in the Lloyd's Market, capturing viewpoints from market participants representing 77% of Lloyd's 2023 GWP. It explores the current and future landscape of Enhanced Underwriting – assessing potential growth, impact on the market, and how carriers and brokers are responding.

Driven by advancements in technology and opportunities inherent to the hard market, carriers are increasingly investing in tools and data to support underwriting decisions. Digital business models are not new in insurance — UK personal lines has been largely digital since the 2010s — but in the complex and specialty space, new digital and data-driven propositions (such as Ki and Beazley Smart Tracker) represent a step change.

#### **Defining Enhanced Underwriting**

We define Enhanced Underwriting as propositions that use data and digital technology to enhance underwriting decisions, and propositions that have taken a new strategic approach to follow business. There are four distinct Enhanced Underwriting models, which split into risk-by-risk underwriting and portfolio underwriting.

Figure 1: There are four distinct models of Enhanced Underwriting Landscape of underwriting models Risk-by-Risk Underwriting Portfolio Underwriting Models Traditional Traditional Digital and **Traditional Traditional** Active Algorithmic Augmented Open Open Algorithmic **Portfolio** Delegated Broker **Broker** Market Market Underwriting Authority Underwriting **Facilities** Trackers Lead Follow **Facilities** Underwriter manually assesses individual Digital and Traditional binder Use of algorithmic Full no-touch Broker facilities, Supports Description algorithmically risks based on judgement. judgement to automation of single-and outperforming arrangements. No enhancement is involved. books of business adjustable support human underwriting cross-class. broker facilities. decisions without decision making. via quota shares human intervention. and consortia. Sub-models Rules-based 100% lead line Digital Quota shares triage Syndicated Risk scoring Algorithmic Consortia follow Risk insight Not enhanced underwriting Enhanced underwriting Source: Market interviews, 2024; Oxbow Partners analysis



# Executive summary continued

In Augmented Underwriting, the human underwriter remains central to decision making. Underwriters are assisted by data and algorithms which triage submissions, score the risk and/or provide risk-specific insights to support them in their decision making. Interviewees highlighted this would be key to a strong lead proposition in the future.

In Pure Algorithmic Underwriting, risk decisions and processes are fully automated, removing the human from decision making. Examples include Ki, Aegis Opal and Canopius' Vave.

Digital and Algorithmic Broker Facilities are digitised crossclass facilities. Examples include Howden ReThink and McGill's Auton (the latter of which is about to go live). Other established cross-class facilities are 'on the verge' of digitalisation.

Active Portfolio Trackers provide follow capacity to outperforming books of business via quota shares and consortia. While identifying strong lead underwriting teams to follow is not new, the explicit strategic intent and focused economic model of these propositions is innovative. Examples include syndicates Beazley Smart Tracker, Nephila, and Hampden Risk Partners, as well as dedicated internal Portfolio Solutions teams across several other carriers.

# The current and future Enhanced Underwriting landscape

Interviews with 85 senior leaders from 55 companies in the Lloyd's market established that:

• Enhanced Underwriting is in its early stages of maturity. Carriers and brokers are investing but many are still conducting small-scale experiments.

Few Enhanced Underwriting vehicles currently operate at an optimised, scalable level.

- Enhanced Underwriting currently represents c.\$5 billion in premium, approximately 7% of Lloyd's 2023 GWP, with the largest share from Pure Algorithmic Underwriting, and notably Ki's \$877 million GWP.
- Market participants all expect significant growth in the next 5-10 years. 35% of market participants expected rapid expansion across the market, and 65% gradual adoption. None expected limited or declining adoption.

Pure Algorithmic Underwriting and Active Portfolio Trackers are both projected to grow at c.20% p.a. and Augmented Underwriting at c.60% p.a. Digital and Algorithmic Broker Facilities are expected to grow at c.50% p.a., from a lower base.

# Supporters and detractors – not as far apart as they might seem

When we embarked on this report, we expected to find supporters and detractors of Enhanced Underwriting with significantly differing opinions. However, while interviewees differed on the application, scope and potential risks, there was broad support for all models of Enhanced Underwriting – provided they are implemented in a way that maintained robust underwriting discipline and control.

Key topics of debate emerged. For example, some sceptical interviewees expressed concern that Enhanced Underwriting might encourage 'blind follow', potentially undermining the quality and control of the traditional syndicated market. They highlighted that the review by multiple 'pairs of eyes' from lead and follow markets is a core strength of Lloyd's. These 'eyes' do not need to be human but require a strong

understanding of risk to avoid blind placement of capacity. Others contested the label 'blind follow' and noted that Enhanced Underwriting models had robust underwriting approaches, including up-front due diligence and ongoing portfolio monitoring.

Some interviewees had specific views on individual models. For example, Pure Algorithmic Underwriting was broadly seen as a viable model for more commoditised, often simpler risks. However, there was debate over whether this could dilute the market's traditional identity and focus on complex, specialty risks. Others stated that Pure Algorithmic Underwriting was 'not for them', usually because they had chosen a lead open market position.

Across all portfolio-based models, the underpinning economics, offering admin ratio savings of up to eight points, was recognised as a competitive advantage if they could be achieved.

# The impact of Enhanced Underwriting on the market

Enhanced Underwriting is seen as a driver of market bifurcation, where leaders and followers become more distinct in both their market positioning and underlying operating model. This could reshape capacity allocation. In this report we explore the possibility that participation on the slip may look significantly different in the future. Leaders could seek a stronger position supported by more automated types of follow capacity. The result could be a significant squeeze on traditional follow markets. This may also mean more reliance on the lead to ensure robust risk assessment, introducing the possibility of leader fees to reflect the transfer in workload.



# Executive summary continued

The growth of Enhanced Underwriting may require both carriers and the market as a whole to take action. Carriers may need to set out portfolio strategies with clear differentiation in their lead and follow propositions. This would result in a more segmented operating model, with 'true lead' underwriters focusing on expertise and insight, and follow markets focused on efficiency and distribution. The profile of teams may also need to evolve, with technical and data science skills being embedded more closely into underwriting teams to ensure a continual optimisation of insight and digital capability.

There was consensus among interview participants that performance management and oversight may need to evolve. Currently, there is limited ability to monitor performance of Enhanced Underwriting models relative to the market and to the internal performance of traditional open market underwriting. Some point to a lack of market standards for data and reporting, others cite the immaturity and variety of the models.

Overall Enhanced Underwriting appears to be a fundamental part of Lloyd's future, presenting an

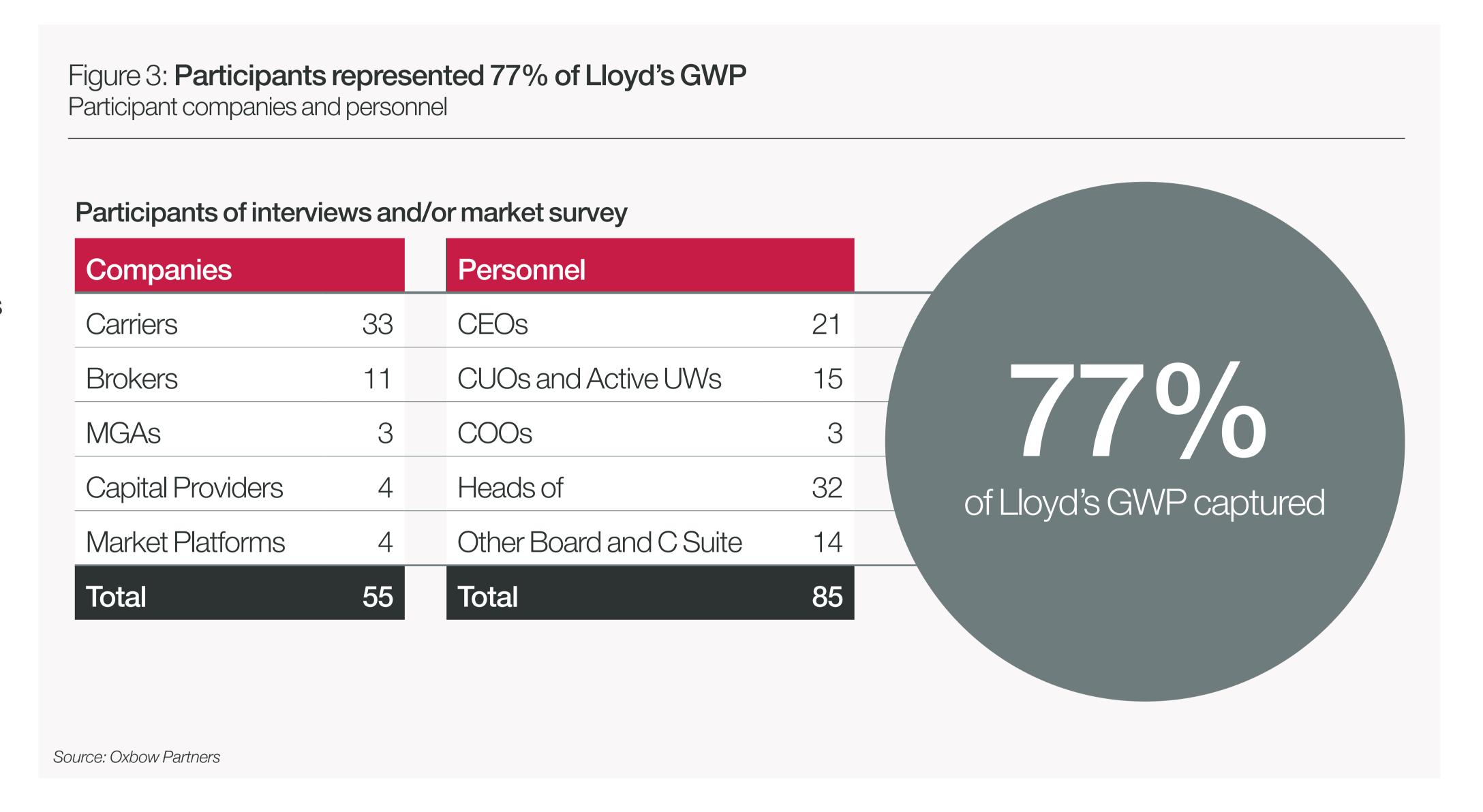
opportunity for the market to apply its deep specialty expertise in new ways. By thoughtfully integrating these models, market participants can drive efficiency, improve risk selection, and access underserved business. This will reinforce Lloyd's position as a leader in complex, high-value risks and reaffirm the market's reputation as a hub of innovation.

Figure 2: Bifurcation of lead and follow could reshape capacity allocation Potential split of market flows by lead / follow channels, incl. illustrative expected trend Insured Broker Leads place larger lines using Large cross-class facilities take Trusted leads auto-trigger Leaders who did not lead Remaining open market follow capacity sitting behind them algorithmic capacity increasing share of the slip added to end of slip capacity increasingly squeezed through quota share/consortia Follow Capacity B Algo Follow Capacity Follow Capacity A **Broker Facilitities** Slip Lead Underwriters Multiple algo follow propositions **Facilities** Underwriter Lead underwriter Consortia/ Follow Portfolio Portfolio Lead Consortia/ Traditional follow underwriters Lead syndicate syndicate underwriters syndicate quota share quota share underwriters Shrinking Source: Oxbow Partners analysis Potential trajectory: A High growth Moderate growth

# Executive summary continued

### Methodology and scope

The Lloyd's Market Association (LMA) and Oxbow Partners invited Lloyd's carriers, brokers, MGAs and capital providers to take part in this report. Between August and October 2024, Oxbow Partners conducted a series of interviews and ran a quantitative survey. Participants' responses (both qualitative and quantitative) were aggregated and analysed by Oxbow Partners. Responses have been anonymised and any reference to specific points have been made with the participant's permission.







# 1. Enhanced Underwriting today

Bionic underwriting, augmented underwriting and enhanced underwriting are all terms used in the Lloyd's and London market to describe digitally enabled underwriting. Some assert very specific meaning to particular terms; others use them more broadly. For the purposes of this report, we have chosen to use the term Enhanced Underwriting. We are using this to mean

propositions that use data and digital technology to enhance the point of underwriting decisioning, or those that have taken a new strategic approach to follow business. We are conscious that the term 'enhanced' could be read to mean better; we will leave the reader to decide whether they believe that to be the case.

Note, many carriers are improving the process around the underwriter decision. This includes automated data ingestion, automated workflow, and joining up of systems. We define this as 'operational enhancement' and have not addressed this in detail in this report, although recognise that it is a prerequisite for some forms of Enhanced Underwriting.

Figure 4: Enhanced Underwriting models can be split into risk-by-risk and portfolio underwriting Landscape of underwriting models Risk-by-Risk Underwriting Portfolio Underwriting Models Traditional **Traditional** Digital and **Traditional Traditional** Active Algorithmic Augmented Open Open Algorithmic **Portfolio** Delegated Broker **Broker** Market Market Underwriting Authority Underwriting **Facilities** Trackers Lead Follow **Facilities** Underwriter manually assesses individual Digital and Traditional binder Use of algorithmic Full no-touch Broker facilities, Supports Description algorithmically risks based on judgement. judgement to automation of single-and outperforming arrangements. No enhancement is involved. books of business adjustable support human underwriting cross-class. broker facilities. decisions without decision making. via quota shares human intervention. and consortia. Sub-models Rules-based 100% lead line Digital Quota shares triage Syndicated Risk scoring Algorithmic Consortia follow Risk insight Not enhanced underwriting Enhanced underwriting Source: Market interviews, 2024; Oxbow Partners analysis



# 1. Enhanced Underwriting today continued

# An overview of Enhanced Underwriting models

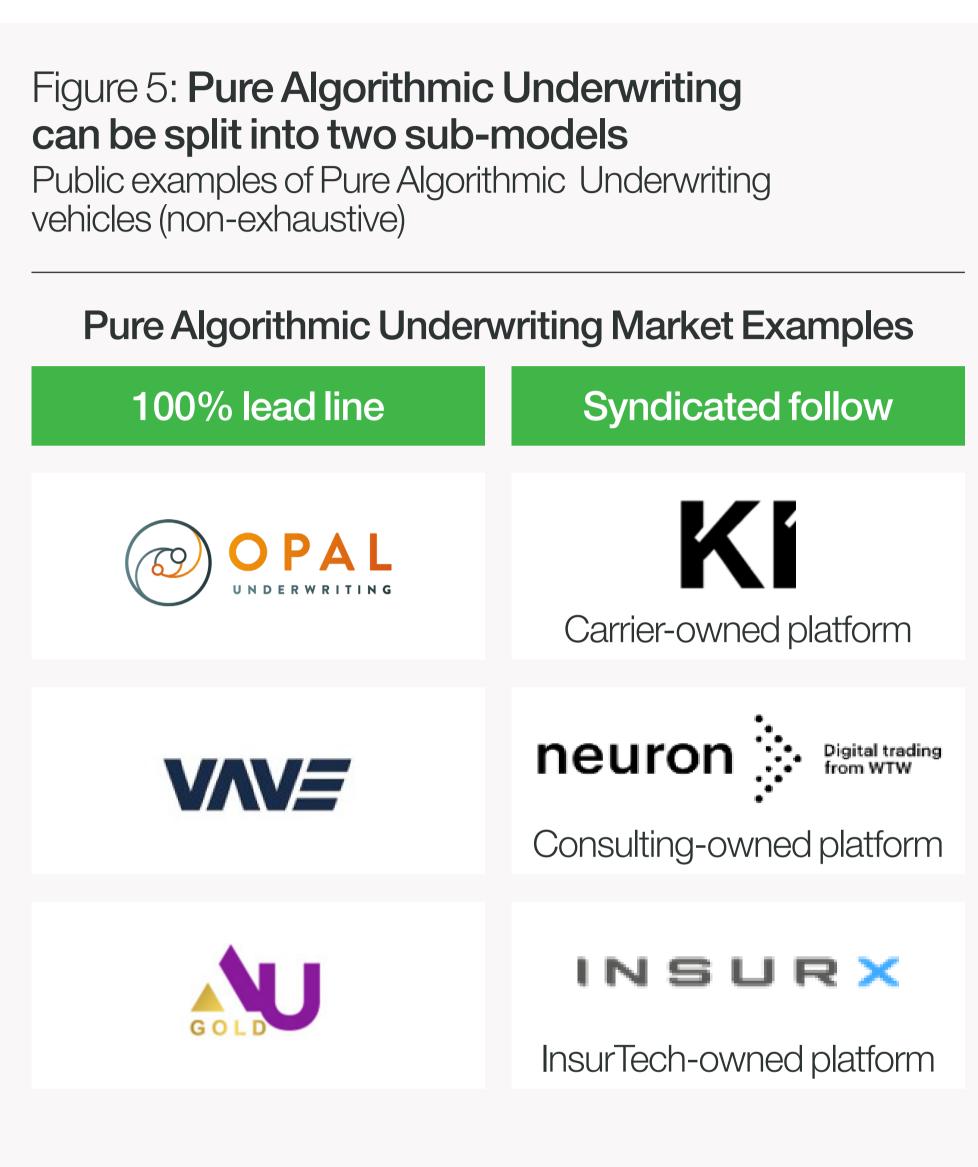
Enhanced Underwriting models fall into two main categories: risk-by-risk underwriting, where each risk is assessed and processed by the carrier, and portfolio underwriting, where whole portfolios are underwritten.

#### Risk-by-risk underwriting

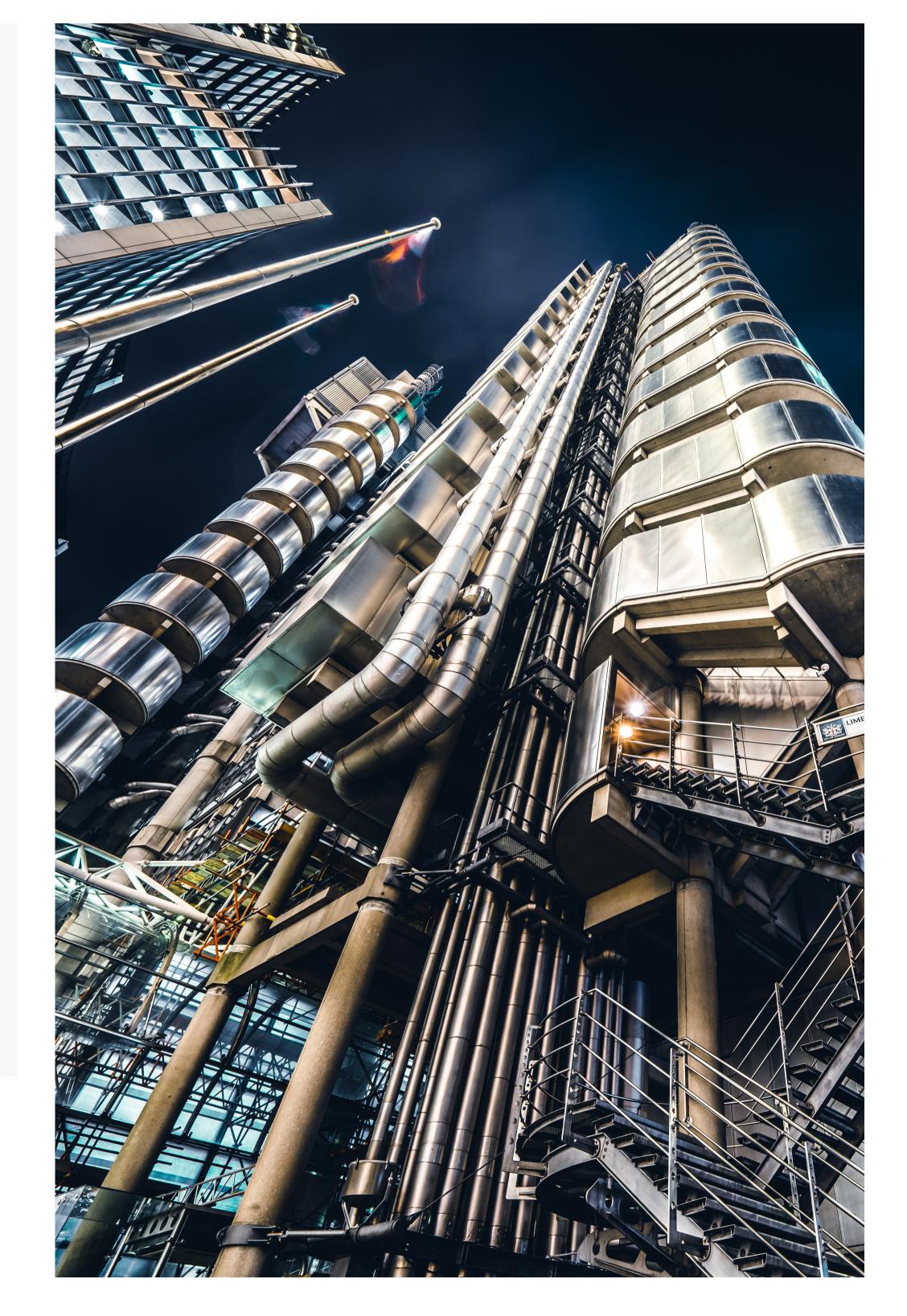
Risk-by-risk underwriting falls into two categories supported by differing levels of automation.

In Augmented Underwriting, the human underwriter remains central to the decision-making process. Underwriters are assisted by data and algorithms that triage submissions, score the risk and/or provide risk-specific insights to support them in decision making. Augmented Underwriting goes beyond simple workflow tools or post hoc reporting.

In Pure Algorithmic Underwriting, risk decisioning and processing is fully automated, removing the human from the point of decision making. These models are characterised by the objective of straight-through processing, although they often have a referral process that includes a human underwriter. Within this model, two submodels have emerged: In the first, carriers write 100% lines of smaller premium risks. Examples of this include Aegis Opal, Atrium's AU Gold and Vave. In the second, carriers participate within the syndicated market slip on open market follow business. The most recognisable example of this is Ki but placing platforms such as InsurX and WTW's Neuron also operate on a syndicated basis (Figure 5).



Note: Examples are non-exhaustive. Other non-public vehicles operate in the market. Source: Market interviews, 2024; Oxbow Partners analysis



# 1. Enhanced Underwriting today continued



#### Portfolio underwriting

There are two categories of Enhanced Underwriting where insurers underwrite whole portfolios of risk.

First, Digital and Algorithmic Broker Facilities, where brokers digitalise cross-class facilities. Digital Broker Facilities integrate with brokers' placing and workflow systems, connecting with carriers via APIs to provide live analytics. Algorithmic Broker Facilities go a step further, allowing carriers to dynamically and digitally change their risk appetite within the facility in-term. There are few live examples of Digital and Algorithmic Broker Facilities in the market. Howden ReThink, launched in 2020, was the first; others such McGill's Auton are launching in the near future.

Second, Active Portfolio Trackers identify and provide capacity to high-performing books of business through quota shares and consortia. This is not new; what is new is the explicit strategic focus on this model through emerging follow-only portfolio syndicates – such as Beazley Smart Tracker, Nephila and Hampden Risk Partners – as well as internal Portfolio Solutions teams (Figure 6). These teams describe themselves as 'proud to follow'. These underwriters could be characterised as having more of a 'Portfolio Manager' role than compared to traditional open market underwriters.

For more information on each model, please see Detail on Enhanced Underwriting models.

#### Figure 6: Active Portfolio Trackers typically comprise separate syndicates or portfolio solutions teams

Public examples of Active Portfolio Trackers (non-exhaustive)

#### Active Portfolio Trackers Market Examples

Follow-only portfolio syndicates

Portfolio Solutions Team



Smart Tracker Syndicate 5623







Syndicate 2358





Munich RE Munich Re Specialty

HRP Syndicate 2689

Note: Examples are non-exhaustive.

Source: Market interviews, 2024; Oxbow Partners analysis



# 1. Enhanced Underwriting today continued

### The journey to today

Whilst Enhanced Underwriting models have come to prominence recently, they are the manifestation of broader market trends of facilitisation, delegated authority (DA) and digitalisation over the past 15-20 years.

# Figure 7: **Digitalisation of the market was accelerated by COVID-19**Recent themes in the Lloyd's and London market

### Rise of the regulator

2000s

Regulatory changes (e.g., Franchise Performance Directorate, Spitzer enquiry) ended certain broker revenue streams, prompting additional service fees and facilities to emerge.

#### 2010s

### **Faciltisation**

Brokers continue to push facilities, incl. cross-class facilities. The market tees up for digitalisation and delegation – with early solutions entering the market. Propositions face slow implementation due to legacy systems and varying technological maturity.

#### 2020s

**Present** 

### Digitalisation & delegation

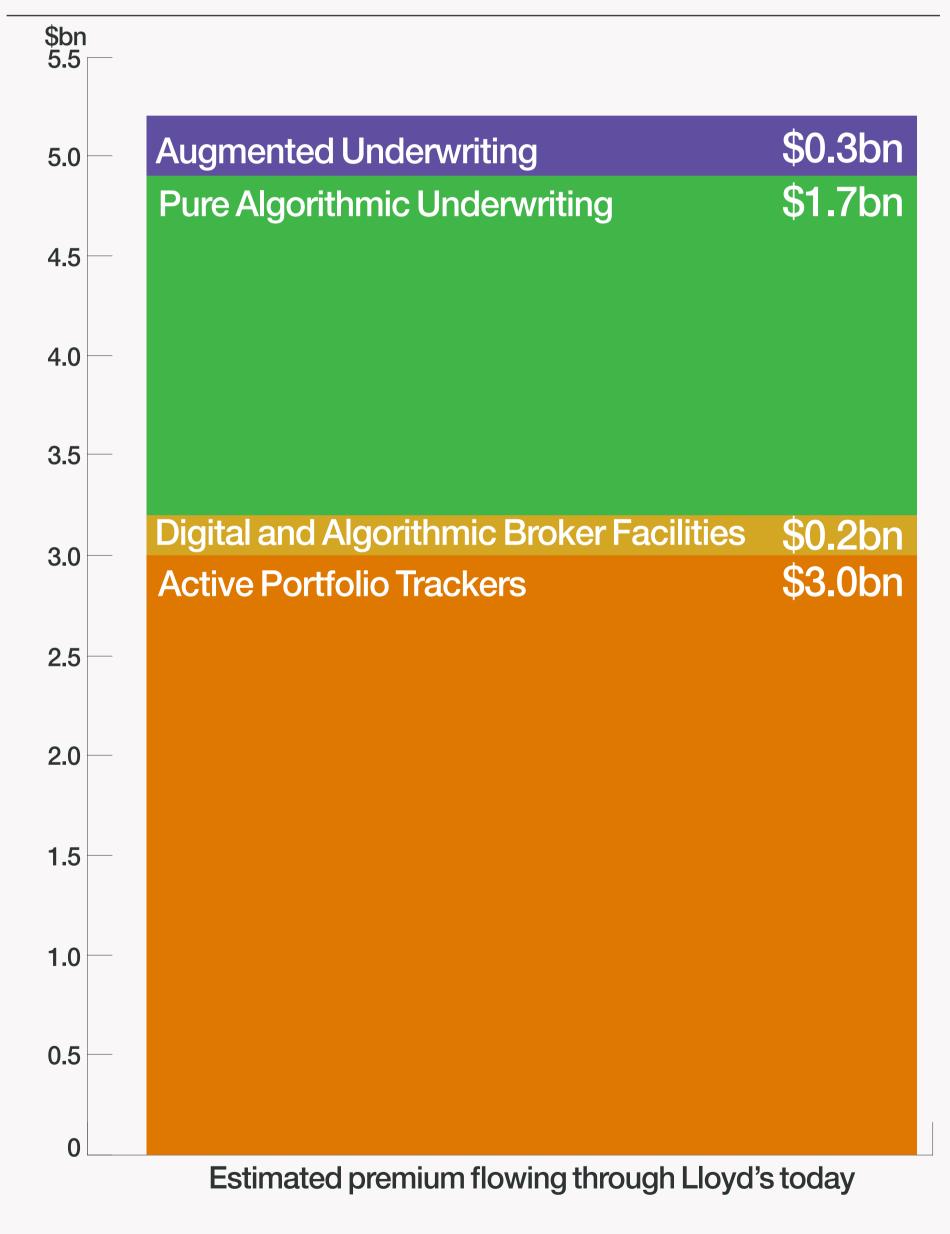
COVID-19 accelerates digital transformation. Carriers focus on digital models (e.g., smart follow, digital delegated authority) and API-integration, pushing for better data and more efficient capacity management.

Source: Oxbow Partners analysis

# 1. Enhanced Underwriting today continued

# Figure 8: c.\$5bn currently flows through Enhanced Underwriting models in Lloyd's

Estimated Lloyd's GWP flowing through each Enhanced Underwriting model today



### **Enhanced Underwriting today**

Enhanced Underwriting is far from full maturity. This is reflected in current premiums passing through Enhanced Underwriting models, which we estimate to be c.\$5bn today. This accounts for c.7% of the \$69.4bn premium written in Lloyd's (2023).

However, premium only tells a part of the story. Through interviews and a market survey, we have identified at least 40 Enhanced Underwriting models being developed by

carriers, MGAs and brokers, with many others considering build outs in the next 2 to 3 years (Figure 9).

Whilst there are many examples of Enhanced Underwriting vehicles, maturity varies by model, as outlined in Figures 10 and 11. In terms of maturity, we asked market participants to self-assess the maturity of Enhanced Underwriting models within their organisations across five stages of maturity. Most participants were still in the early stages of maturity.



Number of Enhanced Underwriting vehicles identified in the Lloyd's and London market during interviews and market surveys

Augmented Pure Algorithmic Underwriting Underwriting

Digital and Algorithmic Broker Facilities

Active Portfolio Trackers

Number of vehicles identified

15+

4

12+

Source: Oxbow Partners analysis

Note: Digital and Algorithmic Broker Facilities includes 2025 forecast

Source: Oxbow Partners analysis; aggregate of premium reported during interviews Total Enhanced Underwriting Premium is \$5.1bn

# 1. Enhanced Underwriting today continued

Figure 10: Enhanced Underwriting maturity framework

2. Tight Experimentation 3. Strategic Foundations 4. Scaled Execution 5. Optimisation 1. Awareness Broad awareness of Enhanced Continuous re-evolution Siloed experimentation by Overarching strategy is Use cases are evolving individuals or within innovation articulated and buy-in is into scaled delivery with and subsequent refinement Underwriting but limited well-established foundations. discussion and lack of action teams, with limited central of Enhanced Underwriting secured. proposition against industry within company to explore coordination and no clear Target use cases are closely Defined objective is to achieve advancements. top-down vision. propositions. defined, proofs of concept are delivery at scale. Efforts are focused on underway and efforts to build out foundations of infrastructure limited proofs of concept and risk mitigation. are ongoing.

Source: Oxbow Partners analysis

Figure 11: Active Portfolio Trackers are the most mature Enhanced Underwriting model Current maturity of Enhanced Underwriting propositions in the Lloyd's and London market, % respondents

Concentration	1. Awareness	2. Tight Experimentation	3. Strategic Foundations	4. Scaled Execution	5. Optimisation
Augmented Underwriting	30%	50%	7%	13%	0%
Pure Algorithmic Underwriting	47%	13%	20%	13%	7%
Digital and Algorithmic Broker Facilities	37%	27%	18%	9%	9%
Active Portfolio Trackers	13%	14%	0%	60%	13%

Source: Market surveys and interviews, 2024; Oxbow Partners

Note: Carriers not currently deploying a model – but were exploring doing so – were placed in the 'Awareness' category. Those deploying a model were asked to self-assess their organisation's maturity using the Enhanced Underwriting Maturity Framework.

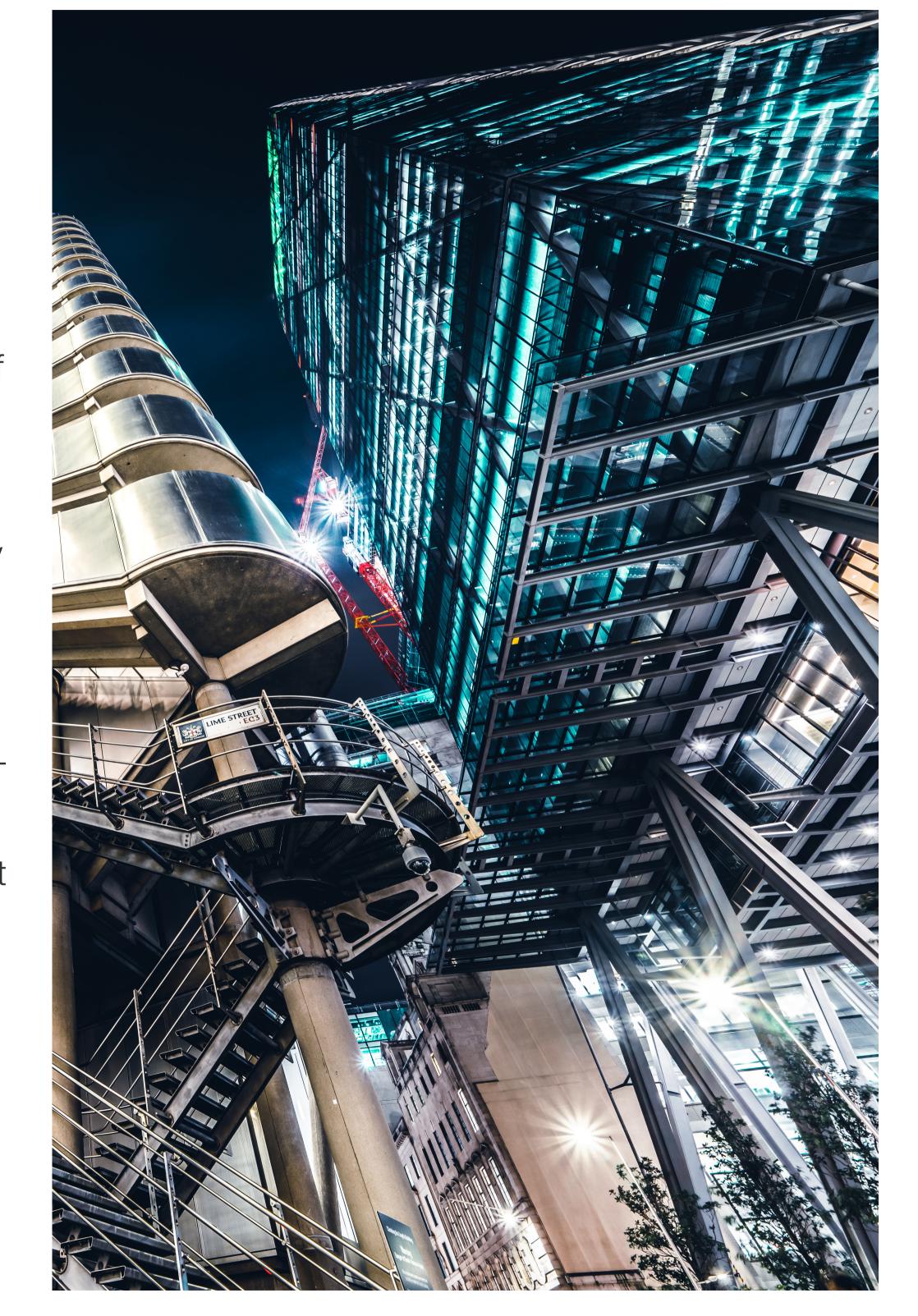
# 1. Enhanced Underwriting today continued

Taking each model individually, Augmented Underwriting accounts for only \$0.3bn of the \$5bn of premium associated with Enhanced Underwriting models. However, interviews with carriers suggest that there are over 15 Augmented Underwriting models in the market. The low premium is largely driven by the low maturity of those taking part. While many carriers are conducting 'Tight Experimentation' with rules-based triage, risk scoring and risk insight, there is limited live premium currently flowing through. The key challenge is retrofitting new technology and data into existing workflows. This is compared to new models that tend to be greenfield. Despite this, Augmented Underwriting was widely accepted as 'logical' and 'valuable' in interviews, citing dual benefits of more streamlined processes and enhanced underwriter decision making.

Pure Algorithmic Underwriting currently represents \$1.7bn in premium. This is driven primarily by Ki (\$877m – 2023 GWP), the most established syndicated follow vehicle. Other sources of premium come from no-touch quote and bind systems – such as Aegis Opal and Atrium's AU Gold. These models are typically focused on highvolume, low-value business (e.g. non-catastrophe property, US wind deductible buyback and terrorism). We identified eight established Pure Algorithmic Underwriting propositions in the market, which account for the 20% of vehicles reported to be above 'Strategic Foundations'. In the survey, a number of participants also indicated that they are in the 'Awareness' stage of Pure Algorithmic Underwriting (47%) – often viewing straight-through processing as the end state for segments of their Augmented Underwriting.

Digital and Algorithmic Broker Facilities make up the smallest proportion of premium associated with Enhanced Underwriting. There are currently few examples of Digital and Algorithmic Broker Facilities in the market, and most (>60%) are in the 'Awareness' and 'Tight Experimentation' stages of maturity. In interviews, many brokers were still evaluating whether a Digital or Algorithmic Broker Facility should be part of their strategic roadmap – either by digitising current or creating new digital facilities. Others expressed the view that digitalisation was becoming part of their value proposition and that they were actively developing a Digital or Algorithmic facility. For example, McGill's Algorithmic Broker Facility, Auton, is about to go live. As brokers continue to debate to what extent digitalisation of cross-class facilities is a priority, the maturity of these models will likely remain below 'Strategic Foundations'.

Active Portfolio Trackers account for the biggest proportion of premium (c.60%) flowing through Enhanced Underwriting models. This is made up of standalone followonly syndicates – such as Beazley Smart Tracker, Nephila and Hampden Risk Partners – as well as internal Portfolio Solutions teams. Active Portfolio Trackers are also the most mature model, with 60% in the 'Scaled Execution' stage. This is largely because the underlying methods, such as placement through consortia and quota shares, are well established. Additionally, Portfolio Solutions teams operate separately from traditional models, allowing teams to scale quickly without being hindered by legacy processes. Note: This excludes the binder business conducted by Portfolio Solutions teams, and consortia or quota shares written by traditional open market underwriting teams.



# 2. The impact of Enhanced Underwriting on the market

There was a consensus among market participants that Enhanced Underwriting will grow, even from individuals that would notionally be described as 'detractors'. However, there was debate around how much and how fast the market would grow.

# Less complex business will increasingly be written algorithmically

Interviewees broadly saw the value of homogenous, less complex classes of business being traded digitally. The likes of Vave, Aegis Opal and AU Gold are paving the way. Supporters view 100% line Pure Algorithmic propositions as a means to access underserved markets, "increasing the size of the pie" in London. There was wide belief that the 'tide' of digitisable risks would rise. However, sceptics questioned whether these more commoditised risks belong in London's portfolio and whether, in the event of a softening market, the business could withdraw from London.

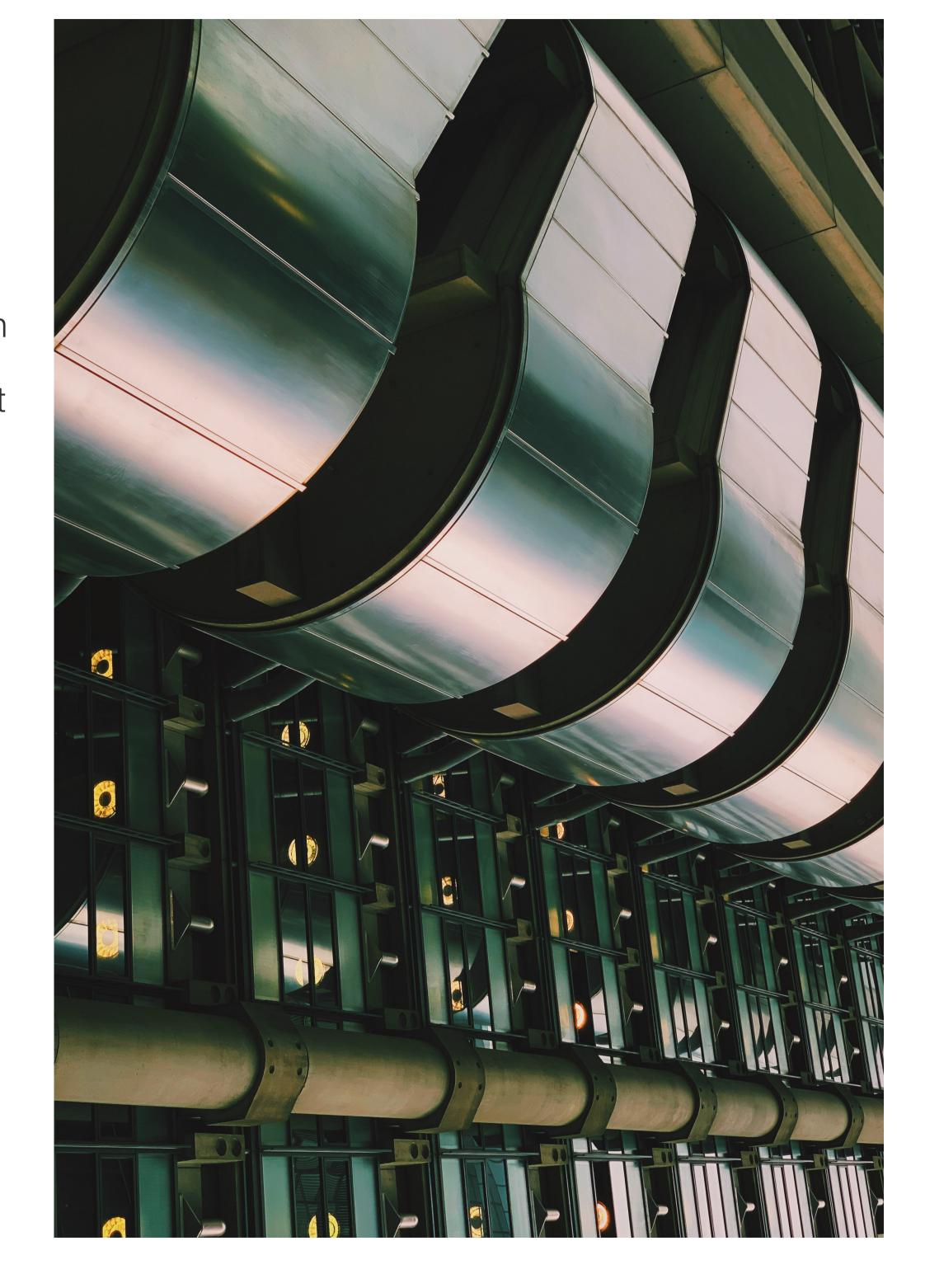
### The market is bifurcating between lead and follow

Enhanced Underwriting has accelerated the bifurcation between lead and follow capacity. Traditionally, carriers have operated homogeneous operating models, treating lead and follow business similarly. The traditional approach typically overlooks fundamental differences in expertise, processes and risk assessment required for each role.

This has led to inefficiencies and higher costs. Carriers are now recognising that they truly lead only a portion of their portfolio and are seeking more efficient ways to manage follow business.

To optimise their lead positioning, many carriers are developing Augmented Underwriting models to improve risk assessment and make faster or more precise underwriting decisions, strengthening their ability to lead on complex and high-value risks. Multiple interviewees highlighted that the emergence of 'true' leads would attract systematic, often automated, follow capacity. In this case, lead underwriters would command a level of control over capacity allocation and risk assessment in the market. Notably, the lead would be increasingly relied on to ensure that risk assessment occurs in a robust way.

For follow capacity, carriers are investing in solutions such as Pure Algorithmic Underwriting, cross-class broker facilities (including Digital and Algorithmic) and Active Portfolio Trackers to streamline the placement of follow risks. This allows carriers to deploy follow capacity more efficiently, reducing costs and admin ratio reduction and enabling underwriters to focus on segments where they truly lead.



# 2. The impact of Enhanced Underwriting on the market continued

Figure 12: Each Enhanced Underwriting model is underpinned by different economics

Illustrative impact on carrier P&L of Enhanced Underwriting propositions vs. traditional open market

		Augmented Underwriting	Pure Algorithmic Underwriting	Digital & Algorithmic Broker Facilities	Active Portfolio Tracker
	Losses/Claims				
Acquisition	Brokerage fee				
costs	Additional broker fees	-	-		-
	Consortium/leader fees	-	-		
	Admin costs				
		Change vs traditional open market:	Significant reduction Sor	me reduction Negligible/no change	Some increase A Significant increa

Note: Compared with average performing traditional open market. Some propositions (e.g. Ki) are attaching capacity behind them to obtain leader fees; this is not included here. Does not include outward reinsurance benefits/drawbacks. Source: Oxbow Partners analysis.

### The economics will differ by model

The different Enhanced Underwriting models are underpinned by different economics (Figure 12). These models vary from traditional open market underwriting in terms of acquisition costs, loss costs and administrative expenses.

The main differences between traditional open market economics and Enhanced Underwriting models are administrative costs and fees. Portfolio underwriting approaches aim to deploy efficient follow capacity at a low cost. They are able to operate at low administrative costs as follow underwriters rely on leads to conduct a sizable portion of the underwriting process – including risk assessment and pricing. To reflect the transfer in workload, carriers have suggested the potential for leaders to charge fees for participation on consortia or facilities.

Likewise, brokers indicated that they may charge higher fees on Digital and Algorithmic Broker Facilities due to the additional capabilities provided.

However, the early maturity of Enhanced Underwriting means that the economic performance of models is currently hard to prove. Performance data is lacking and few are willing to share what is not already public. However, anecdotal reports from interviews provide early evidence that improved economics are possible.

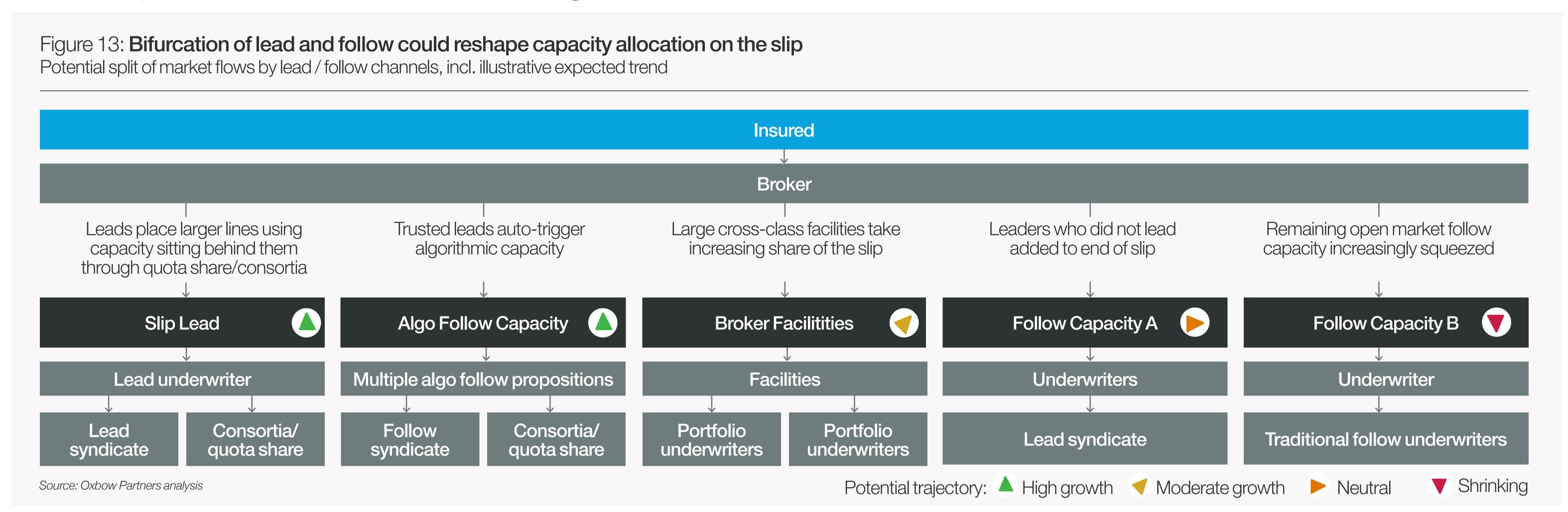
Pure Algorithmic Underwriting propositions are all still in growth mode, and so the ongoing technology investment costs are muddying the water in terms of results. However, 'run' costs do imply a lower admin ratio compared with traditional open market business.

Augmented Underwriting propositions were reported to be driving more productive, disciplined and objective

underwriting. In the long term, carriers are confident that this could translate into improved loss ratios as models mature. However, it is important for carriers to recognise the ongoing build costs associated with these decision engines. This can create upward pressure on administrative costs for carriers implementing these solutions.

For Digital and Algorithmic Broker Facilities and Active Portfolio Trackers, analysis shows follow-only syndicates have successfully reduced admin ratios to below the Lloyd's average (11 to 12% in 2023). Interviews indicate that admin savings were up to eight points lower than the Lloyd's average, and that these are not being outweighed by additional consortia or leader fees. However, it is also important to recognise that underwriting performance (loss ratio) for cross-class broker facilities may also be worse than traditional open market business.

# 2. The impact of Enhanced Underwriting on the market continued



# Capacity allocation on the slip of the future could look very different

Projecting forward, this bifurcation and adoption of Enhanced Underwriting models could result in a structural shift in the market, squeezing out traditional open market follow capacity (Figure 13).

Market participants anecdotally described their illustrative view of capacity allocation on the 'slip of the future'. Interviewees suggest that lead underwriters could strengthen their position on the slip and take larger lines,

expanding their influence in the market and triggering algorithmic follow capacity, automating placements to brokers. At this point, slip leads may take the opportunity to charge fees to reflect the value of their effort, expertise and quality of risk assessment, something that has been consistently discussed, but is far from universal. (Some interviewees noted a concern that if leaders are receiving fees from followers for work done on their behalf, this may create a liability to those followers if the work is not performed adequately).

In the scenario outlined in Figure 13 follow underwriters would focus on identifying and backing trusted leads through Enhanced Underwriting models. By aligning with 'true leads', they ensure they are supporting high-quality placements. Brokers may increasingly prefer algorithmic follow capacity solutions, including Pure Algorithmic propositions and Digital and Algorithmic Broker Facilities, as these models provide a quick and efficient way to fill the slip with minimal manual intervention. Sceptics highlighted the concern that 'fast' or 'blind' follow propositions may take on risks with limited scrutiny of the lead's risk assessment or pricing.

# 2. The impact of Enhanced Underwriting on the market continued

There was consensus that the role of the traditional follow underwriter could decline as brokers opt for enhanced approaches to placement that are faster and more efficient. Followers may also sacrifice their rights to run non-disclosure or misrepresentation arguments, leaving only the lead underwriter able to take that position for their share of the risk.

Some parties might challenge this view of the market evolution. Brokers may challenge the growing influence of lead carriers forming consortia, as this could reduce broker control over distribution and limit their ability to earn fees from managing follow capacity. Also, brokers and insured may still value face-to-face relationships with underwriters across the slip and may resist algorithmic follow capacity, favouring traditional follow underwriters.

### Degree of codification

The nature of Enhanced Underwriting's impact on the market is dependent on which classes of business (COB) are deemed appropriate for straight-through processing. Proponents of Enhanced Underwriting argue that straight-through processing could eventually be applied to all lines of business (LOB) – assuming sufficient data integrity and granularity. Sceptics argue that there is a threshold of risk homogeneity required for a LOB to be classed as suitable. Their understanding is that there are some classes that due to their complexity and heterogeneity may always need a human in the loop.

For example, some types of terrorism risks can require minimal data points (insured locations, total value and occupancy) for pricing and exposure management. In contrast, Upstream Energy Construction Liability demands analysis of non-standardised, qualitative risk reports to reach a considered underwriting judgement.

It may be the case that it is near impossible to come to a market consensus about whether more qualitative-based risks can be accurately assessed by an algorithm. The makeup of capacity on future slips across classes will be heavily influenced by the degree to which algorithmic follow capacity can emerge.

#### Potential shifts in the value chain

As well as the capacity profile changing, interviews highlighted potential shifts in the value chain. It has been suggested that Pure Algorithmic models could enable carriers to directly access local broking markets (such as US wholesale) using digital tools and APIs, bypassing London brokers for commoditised high-volume business. Clearly this has wider considerations than simply technology, having a significant commercial impact on wider trading relationships. Those considerations notwithstanding, this would initially rely on local brokers developing digital platforms that rival those of London's brokers and placement platforms. Only then is there potential for them to leverage proximity to clients to streamline the placement process, potentially reducing reliance on traditional intermediaries.

Finally, third-party placement platforms like InsurX, WTW's Neuron or potentially a more mature Whitespace or PPL, could integrate themselves into the value chain. If they establish themselves as a vital part of matching capacity at scale, they could add a valuable link that brings efficiency savings for both carriers and brokers. However, these platforms would require compensation for this added value.

If Lloyd's total servicing cost is viewed as a 'zero-sum game', then either carriers or London brokers would ultimately need to foot the bill.

#### Benefits for clients

Interviewees raised several opportunities for Enhanced Underwriting to improve client experience.

Client
'dividends
on broker
facilities

Some brokers are passing a portion (up to 50%) of the additional fees charged on broker facilities back to the client in the form of a 'dividend'. While this dividend is relatively small in overall premium discount, its intent and principle is tangible.

# Differential pricing across the slip

A structural shift towards differential pricing with cheaper capacity within follow markets (enabled by Enhanced Underwriting) could result in overall premium reduction for clients.

# Efficiency savings passed through to clients

Digitally enabled efficiency for brokers and carriers could ultimately flow through the value chain and result in lower premiums for clients.

# Less volatility and longer-term certainty of follow capacity

Active Portfolio Trackers and increased facilitisation, in theory, provide longer-term certainty of follow capacity, because brokers have to find fewer follow markets and because of the potential emergence of multi-year contracts. This certainty in placement and coverage has been suggested by some in the market to be a clear benefit to clients.

# 3. Opportunities and risks for London

# Opportunity: Access to new or underserved markets

Supporters have expressed that Enhanced Underwriting offers London the opportunity to penetrate new or underserved markets. Technologies such as Pure Algorithmic quote and bind platforms enable carriers and brokers to connect with global clients and underwrite risks where physical presence or local expertise may be limited (such as wind-deductible buyback insurance within the global renewable market). Clearly, carriers will need to comply with local requirements and licencing, but notwithstanding this, one interviewee described Enhanced Underwriting as "an opportunity to increase the size of the pie" in London.

### Risk: Losing the power of the syndicated market

The illustrative slip of the future in Figure 13 suggests that leaders could have more influence and may take on larger line sizes. There are concerns that putting leaders on a higher pedestal risks a shift to blind follow. This follow capacity, if too trusting of the lead, may 'blindly' follow, reducing the existing robustness that currently exists with followers acting as a 'second set of eyes'.

### Opportunity: Attraction of third-party capital

Specialty insurance has attracted investment from third-party capital providers due to strong returns and its uncorrelated relationship with equity and bond markets. Capital providers can gain exposure through Insurance-Linked Securities (ILS), partly via initiatives such as the London Bridge Risk (LBR) Protected Cell Company (PCC). This could allow Lloyd's syndicates to draw on a larger pool of capacity from international capital markets. However, one of the capital providers we spoke to – who supports an Enhanced Underwriting proposition – said that while they were attracted to the novel approach, they were wary of investing in building additional positions until performance could be proven.

Greater digitalisation, standardisation of risk data, market connectivity and enriched performance data were highlighted in our interviews as key areas of interest for capital providers in this space. The improved level of data capture, analysis and integrity from Enhanced Underwriting propositions may enable Lloyd's to attract more third-party capital providers to support the capacity of existing players.

### Risk: A 'lost generation' for talent

Enhanced Underwriting models focus on efficiency, which often means automation of lower complexity risks and operations. Many market participants are concerned as to

how more junior teams will be able to be immersed in underwriting if the activities they would traditionally perform (e.g. data entry, simple risk review) are no longer performed by a human. Humans are well suited to adaptation over generations and in the long term we expect this will be resolved. However, in the near term there may risk being a 'lost generation'.

### Opportunity: Potential flattening of the cycle

A core facet of Enhanced Underwriting is improved access to data and insights to better understand risk and exposure. This improvement in understanding should allow carriers to make more precise assessments of risk and potentially avoid 'riding the cycle', as has happened historically. Many executives have expressed views that cycles should flatten, or at least become more narrowly focused (e.g. by class or subclass).

Active Portfolio Trackers and increased facilitisation could, in theory, provide longer-term certainty of follow capacity, reducing market cycle risk. We have yet to see this play out through a market cycle. We do expect Active Portfolio Trackers to adjust appetite through the cycle, and currently broker facilities operate on a one-year contract. But, if longer-term contracts for follow capacity become common (which may require a Lloyd's rule change), this could drive certainty of capacity.

# 3. Opportunities and risks for London continued

### Risk: Dilution of London's value proposition

While there is agreement that Enhanced Underwriting is a logical evolution in the context of digitalisation, there is debate over whether it aligns with the type of risks that London is traditionally known for. The Lloyd's and London market has built its reputation on underwriting complex, bespoke and specialty risks – areas where human expertise and judgement are considered crucial. Sceptics have raised that Enhanced Underwriting may risk diluting the market's identity by commoditising risks that traditionally have not been part of London's portfolio.

There is also concern that as Enhanced Underwriting expands, London could lose its hallmark physical experience if distribution is digitalised. Many clients and wholesale brokers value trips to London for personal negotiations, where expertise is showcased and trust is built in London's ability to handle complex risks – central to the market's appeal and reputation. However, we expect lead markets to continue to value these relationships.

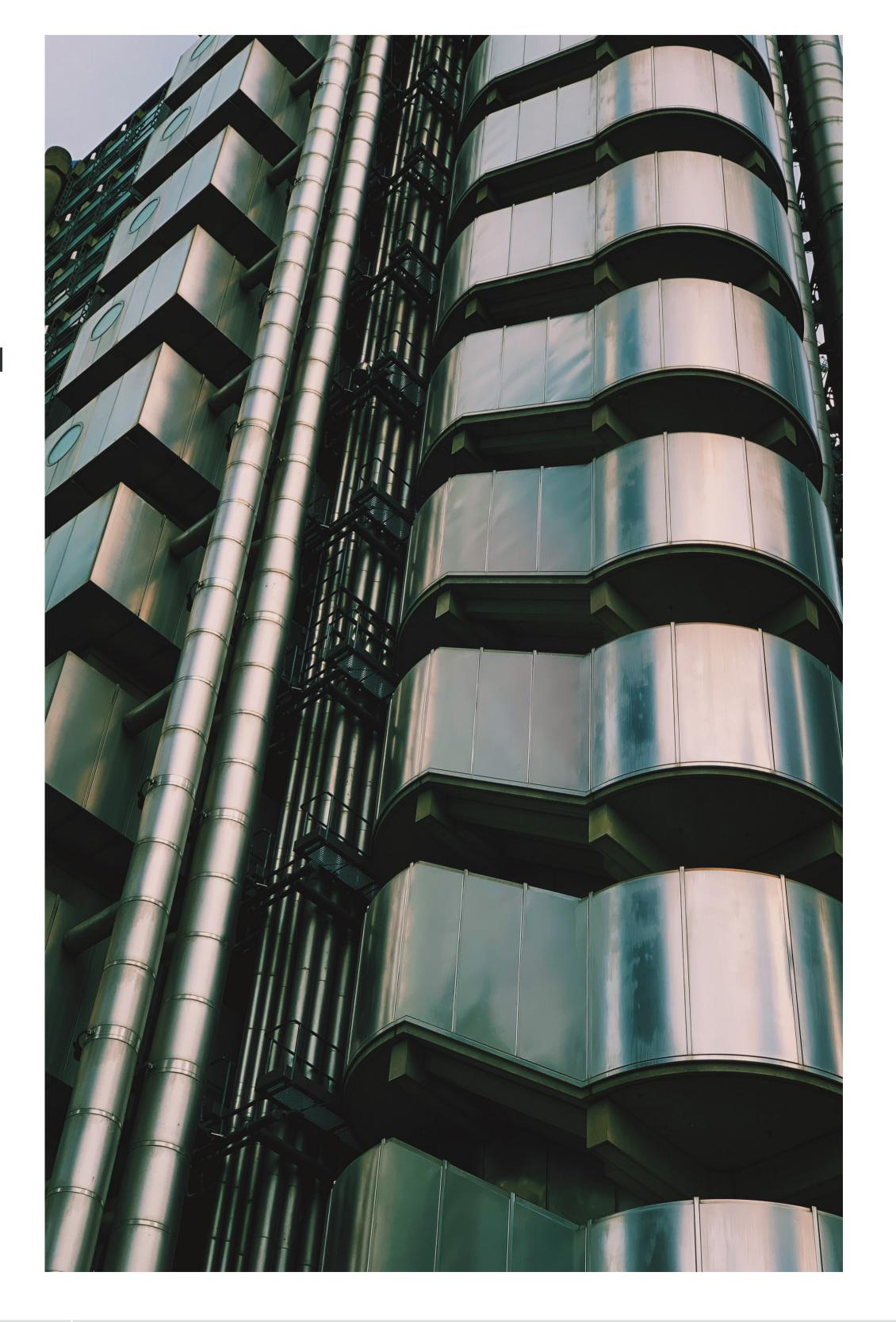
Additionally, sceptics raised concerns about whether technology can effectively respond during a major loss event, in comparison with a physical underwriter. The challenge is finding a balance: how can the Lloyd's

and London market embrace the benefits of Enhanced Underwriting models while preserving the human element and physical presence that are central to its identity?

# Opportunity: Validate London's competitive edge in the digital age

As a long-established hub of insurance innovation, the Lloyd's and London market can use Enhanced Underwriting to strengthen this legacy in the modern, digital age. By integrating digital solutions, London can maintain its competitive edge, validating its position as a leader as markets evolve. Proponents of Enhanced Underwriting view it as an opportunity for London to expand its market reach and maintain its relevance and leadership in a digital, globalised insurance landscape.

What makes Lloyd's unique is its ability to bring competitors together to collaborate for the benefit of clients – a dynamic known as 'coopetition'. Both supporters and sceptics agree that 'coopetition' provides the opportunity to accelerate innovation with carriers collaborating on new products and services. For Enhanced Underwriting to succeed, this 'coopetition' will need to be leveraged successfully.



# 4. What this means for the growth of Enhanced Underwriting

### Projected maturity of Enhanced Underwriting

The growth of Enhanced Underwriting is partly driven by the projected maturity of each of the models. Market participants believe that all four models will mature over the next 5 to 10 years but at different rates.

Augmented Underwriting is expected to see gradual longer-term advancement in maturity. Currently, 80% of carriers are in the 'Awareness' or 'Tight Experimentation'

stage. While many carriers are optimistic, challenges such as retrofitting existing processes and securing underwriter buy-in reflect the steady pace of progress. In 5 years, 40% of carriers are projected to exceed the Strategic Foundations stage. Looking further ahead, and somewhat remarkably, Augmented Underwriting is expected to be fully optimised for only around a third of carriers in 10 years, reflecting a measured but steady growth in adoption.

Pure Algorithmic Underwriting and Digital and Algorithmic Broker Facilities are also expected to see gradual longer-term advancements in maturity. At least 60% of both models are currently in the 'Awareness' or 'Tight Experimentation' stages. This reflects the complexity of integrating new technologies and the need for more comprehensive data infrastructure. The shift toward real-time data analytics, API integration and digital risk appetite management requires significant upfront investment, both



Question: What is the current maturity of your organisation's Enhanced Underwriting proposition, and what stage do you expect it to be at in 5- and 10-years' time?

	Enhanced Underwriting Maturity Framework				Enhanced Underwriting Maturity Framework					
	1. Awareness	2. Tight Experimentation	3. Strategic Foundations	4. Scaled Execution	5. Optimisation	1. Awareness	2. Tight Experimentation	3. Strategic Foundations	4. Scaled Execution	5. Optimisation
Augmented Underwriting						Pure Algorithmic Underwriting				
Current	30%	50%	7%	13%	0%	47%	13%	20%	13%	7%
5Y outlook	30%	30%	0%	20%	20%	15%	23%	16%	23%	23%
10Y outlook	0%	0%	50%	19%	31%	0%	14%	21%	36%	29%
Digital and Algorithmic Broker Facilities					Active Portfolio Trackers					
Current	37%	27%	18%	9%	9%	13%	14%	0%	60%	13%
5Y outlook	0%	18%	46%	18%	18%	0%	20%	6%	22%	52%
10Y outlook	0%	9%	27%	37%	27%	0%	0%	11%	19%	70%

Note: Carriers currently deploying a model were asked to estimate their organisation's maturity in the next 5 and 10 years' time using the Oxbow Partners Enhanced Underwriting Maturity Framework. Source: Market surveys and interviews, 2024; Oxbow Partners analysis

Concentration

# 4. What this means for the growth of Enhanced Underwriting continued

in terms of technology and re-engineering operating models. As these components come together, the next 5 to 10 years will see more carriers move through the 'Strategic Foundations' and 'Scaled Execution' stages, but at significantly varying speeds.

Active Portfolio Trackers have already matured rapidly, with most already at 'Scaled Execution'. This is unsurprising as these are based on well-established underwriting practices such as consortia and quota share placements. 70% of participants expect to reach 'Optimisation' within 10 years.

# Growth scenarios – the future is bright but uncertain

We have forecasted four potential growth scenarios for the models of Enhanced Underwriting, ranging from temporary trend to rapid expansion (Figure 15).

Forecasting is uncertain at the best of times and for Enhanced Underwriting it is particularly tricky. Factors affecting the growth are numerous and varied. For example, market connectivity, underpinned by data standards and technological maturity, will be critical to growth – and could either be a limiting factor or enabler of rapid adoption. Please note, the growth scenarios below are agnostic of market cycles.

There was consensus that Enhanced Underwriting will grow over the next 5 to 10 years. 65% of participants expect Scenario 2: Gradual adoption in specific areas.

Figure 15: Four scenarios for the growth of Enhanced Underwriting in the Lloyd's market Descriptions of Enhanced Underwriting growth scenarios and the key forces driving them

Scenario 1	Scenario 2	Scenario 3	Scenario 4				
Rapid expansion across the market	Gradual adoption in specific areas	Limited adoption, primarily in niche segments	Temporary trend with decliining interest				
Enhanced Underwriting becomes standard  Less complex classes are fully algorithmic, while more complex classes employ Augmented Underwriting  Portfolio underwriting becomes the standard way to place follow capacity	Enhanced Underwriting grows steadily in less complex classes  Portfolio underwriting emerges as the standard way to place follow capacity  New market entrants or incumbent syndicates emerge, focused on algorithmic underwriting	Most managing agents focus on traditional methods  Select agents and new syndicates target Enhanced Underwriting models in niche areas	Enhanced Underwriting sees early interest but struggles with scalability, leading to a return to traditional methods				
Dependencies  Technological maturity							
Data evolution  Market connectivity							
Market connectivity Scalability							
Market culture and talent							

Source: Oxbow Partners



# 4. What this means for the growth of Enhanced Underwriting continued

We have projected the growth in premium for each model across the four scenarios. It is important to note that the growth of each model is interconnected, meaning the expansion of one model may limit or influence the growth of the others.

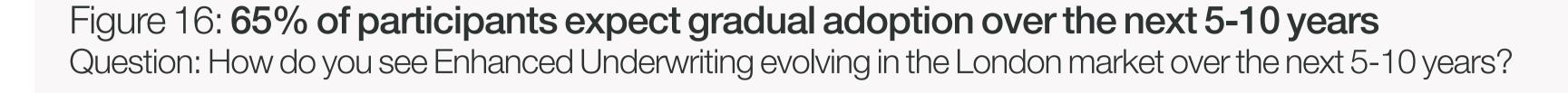
Our projections assume that rapid expansion of Augmented Underwriting would require the majority of large carriers to develop mature capabilities in the next 10 years (Figure 17).

Growth is dependent on the rate at which carriers (and the market) invest in technology and data capabilities needed to scale Augmented Underwriting effectively.

Equally, growth will depend on which classes of business Augmented Underwriting is applied to vs. Pure Algorithmic Underwriting. As discussed earlier, there is debate of how high the tide of algorithmic underwriting goes: how much of London's portfolio, known for complex, bespoke and specialty risks, is appropriate for straight-through processing? Growth will depend on which classes of business carriers determine need a human in the loop vs. Pure Algorithmic Underwriting.

Our projections assume that the rapid expansion of Pure Algorithmic Underwriting would require stable and significant growth of current 100% lead line and syndicated follow algorithmic vehicles (Figure 18). We also assume new dedicated Pure Algorithmic value propositions will enter the market, as established mature players demonstrate a strong proof of concept for other participants to follow.

Growth is dependent on market connectivity. The maturity of algorithmic placing platforms – such as InsurX and



Scenario 1 Rapid expansion across the market

Scenario 2 Gradual adoption in specific areas

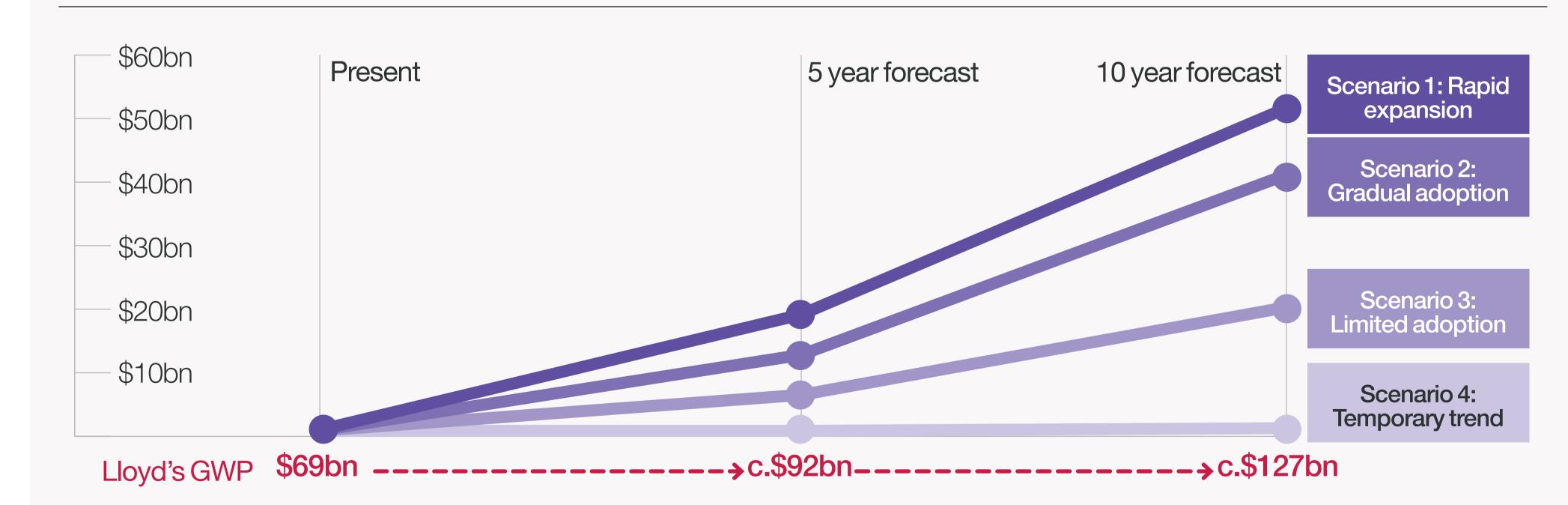
Scenario 3 Limited adoption, primarily in niche segments

Scenario 4 Temporary trend with declining interest

% of survey respondents 35% 65% 0%

Source: Market surveys, 2024; Oxbow Partners

Figure 17: Model 1: Augmented Underwriting could grow to c.\$42bn in 10 years (Scenario 2) Growth of Augmented Underwriting within Lloyd's under four different market evolution scenarios



Source: Oxbow Partners analysis

# 4. What this means for the growth of Enhanced Underwriting continued

Neuron, and vendors like Artificial Labs – unlock the opportunity for carriers to participate in Pure Algorithmic Underwriting without significant upfront investment in technology.

As with Augmented Underwriting, Pure Algorithmic Underwriting is dependent on how much of London's portfolio is appropriate for straight-through processing. While some carriers see Augmented Underwriting as a stepping stone to Pure Algorithmic, it is unclear which classes of business will ultimately remain Augmented vs. Pure Algorithmic Underwriting.

Lastly, a significant data evolution, achieved through market standards or data science solutions, will be needed for straight-through processing to truly take root within Lloyd's.

Our projections assume that for Digital and Algorithmic Facilities to grow rapidly, major London brokers would need to either digitalise their existing cross-class facilities or launch new ones – such as McGill's Auton (Figure 19). This also assumes that all cross-class facilities maintain their current strong growth trajectory. We heard that some of the large established cross-class facilities are "on the verge" of digitalisation.

Growth is also contingent on improvements in technological maturity and market connectivity. Digital and Algorithmic Broker Facilities rely on API connection with carriers for digital data transfer and near-live reporting. We heard that readiness for API-integration was variable across the market.

While some are prioritising digitalisation, others are still evaluating whether a digital or algorithmic facility should be part of their strategic roadmap. One broker highlighted that

Figure 18: Model 2: Pure Algorithmic Underwriting could grow to c.\$15bn in 10 years (Scenario 2) Growth of Pure Algorithmic Underwriting within Lloyd's under four different market evolution scenarios

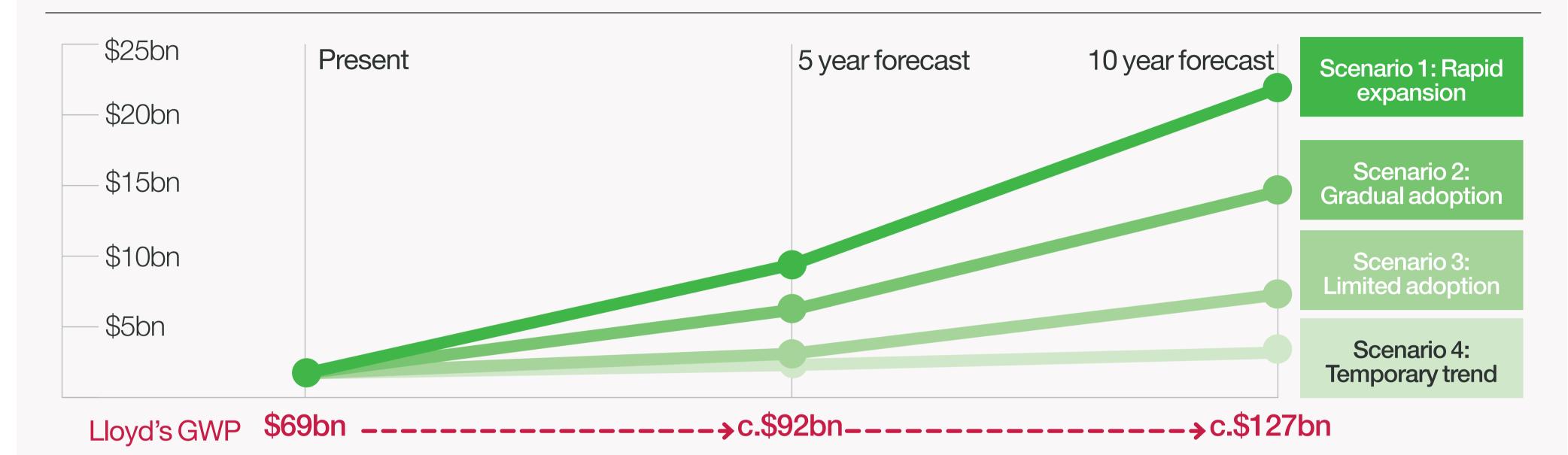
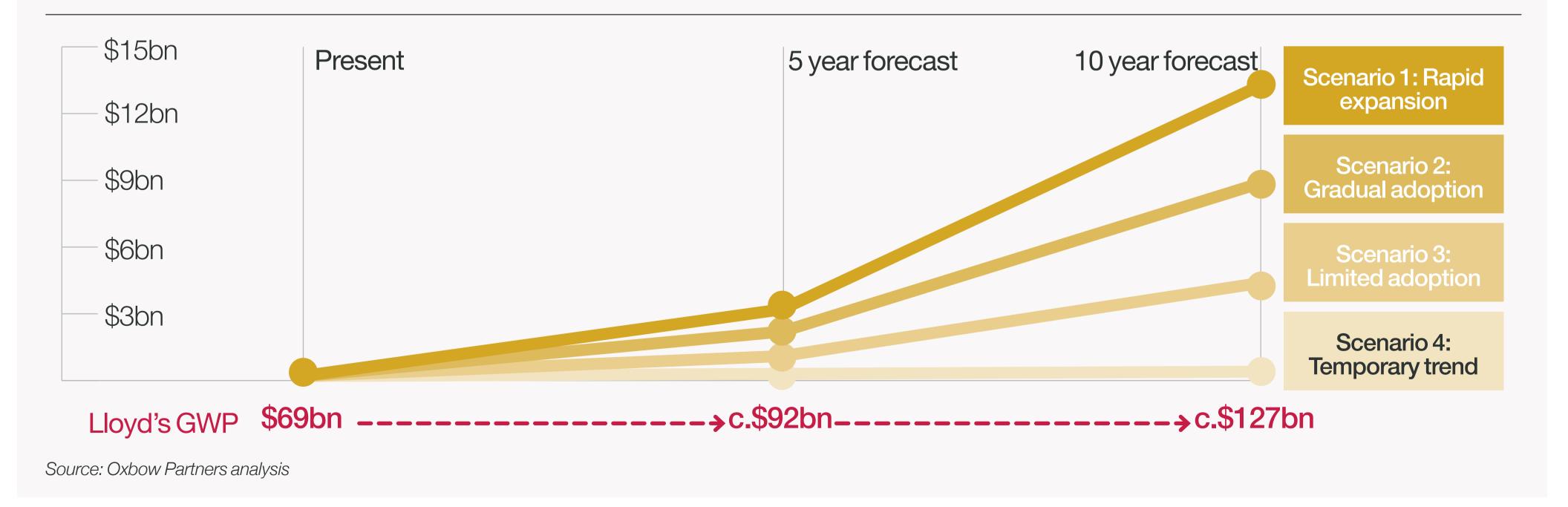


Figure 19: Model 3: Digital and Algorithmic Broker Facilities could grow to c.\$9bn in 10 years (Scenario 2) Growth of Digital and Algorithmic Broker Facilities within Lloyd's under four different market evolution scenarios



# 4. What this means for the growth of Enhanced Underwriting continued

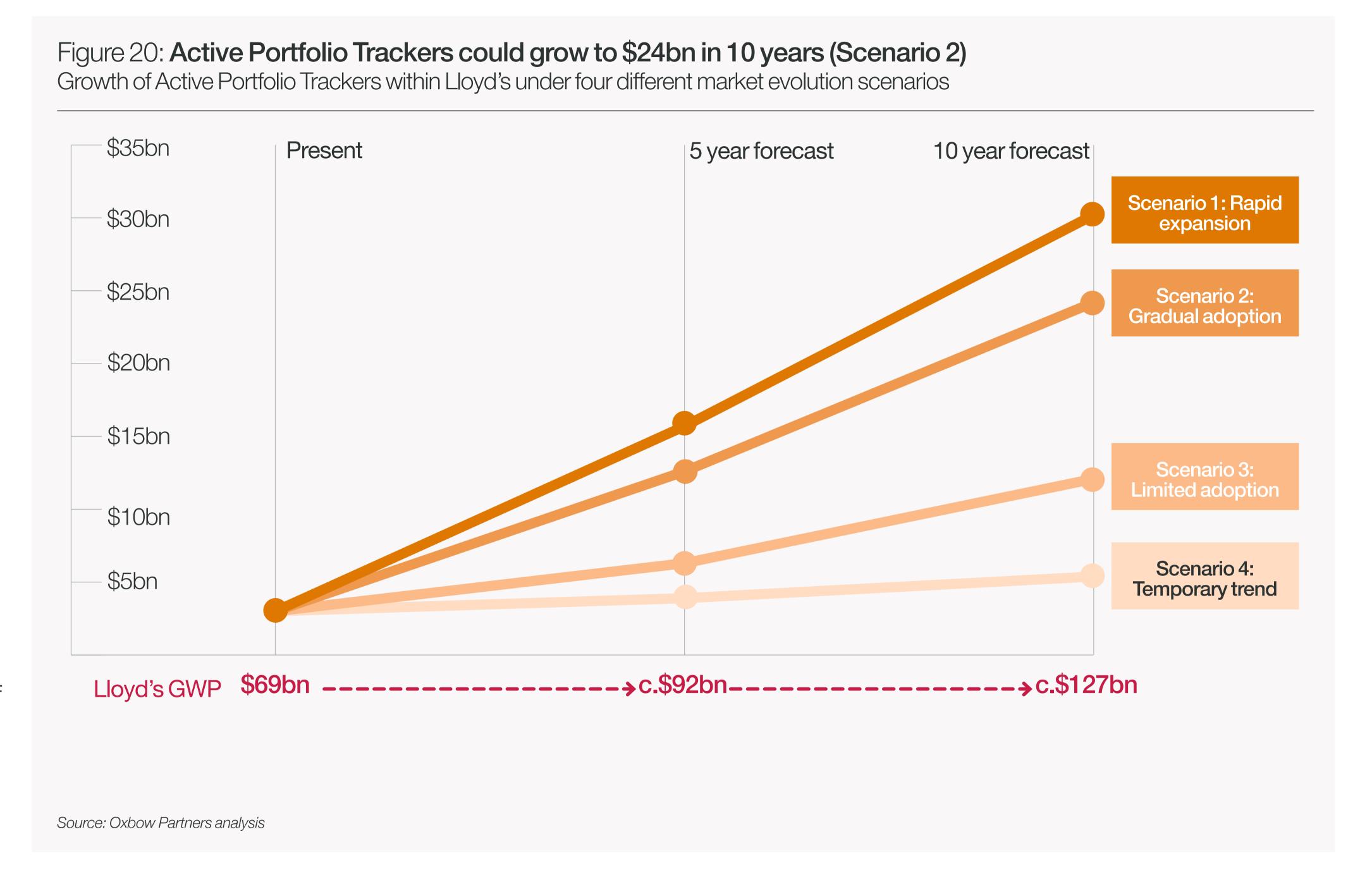
placing broker behaviour would be the limiting factor to growth of Digital and Algorithmic Broker Facilities. We observe that while there is a general trend of broker facilities collecting and sharing more data, maturity into full digitalisation is slow. Carriers may also encourage brokers to digitalise their facilities if they require more oversight on business being written.

Our projections assume that rapid growth of Active Portfolio Trackers would require the majority of large carriers to have mature, optimised vehicles in the next 10 years (Figure 20). Current follow-only portfolio syndicates would continue to grow, and the span of GWP written by Portfolio Solutions teams will continue to expand.

The adoption of Active Portfolio Trackers relies on the delivery of cost efficiency in capacity deployment. While there are already established vehicles, they will need to maintain low administrative ratios as they scale.

#### A note on forecasting and market cycles

Modelling future growth is fraught with danger, particularly in the London market, where market cycles can be hard to predict and have a significant impact on how and where premiums flow. The figures above attempt to be agnostic of market cycles and this report is not intended to be an appraisal of market cycle trends. However, it must be noted that market cycles will influence the relative strength of the Enhanced Underwriting models, affecting growth.





# 5. How carriers could respond

There are important strategic topics that carriers could focus on in light of the evolving Enhanced Underwriting landscape and the increasing bifurcation of the market.

# Setting out an Enhanced Underwriting portfolio strategy

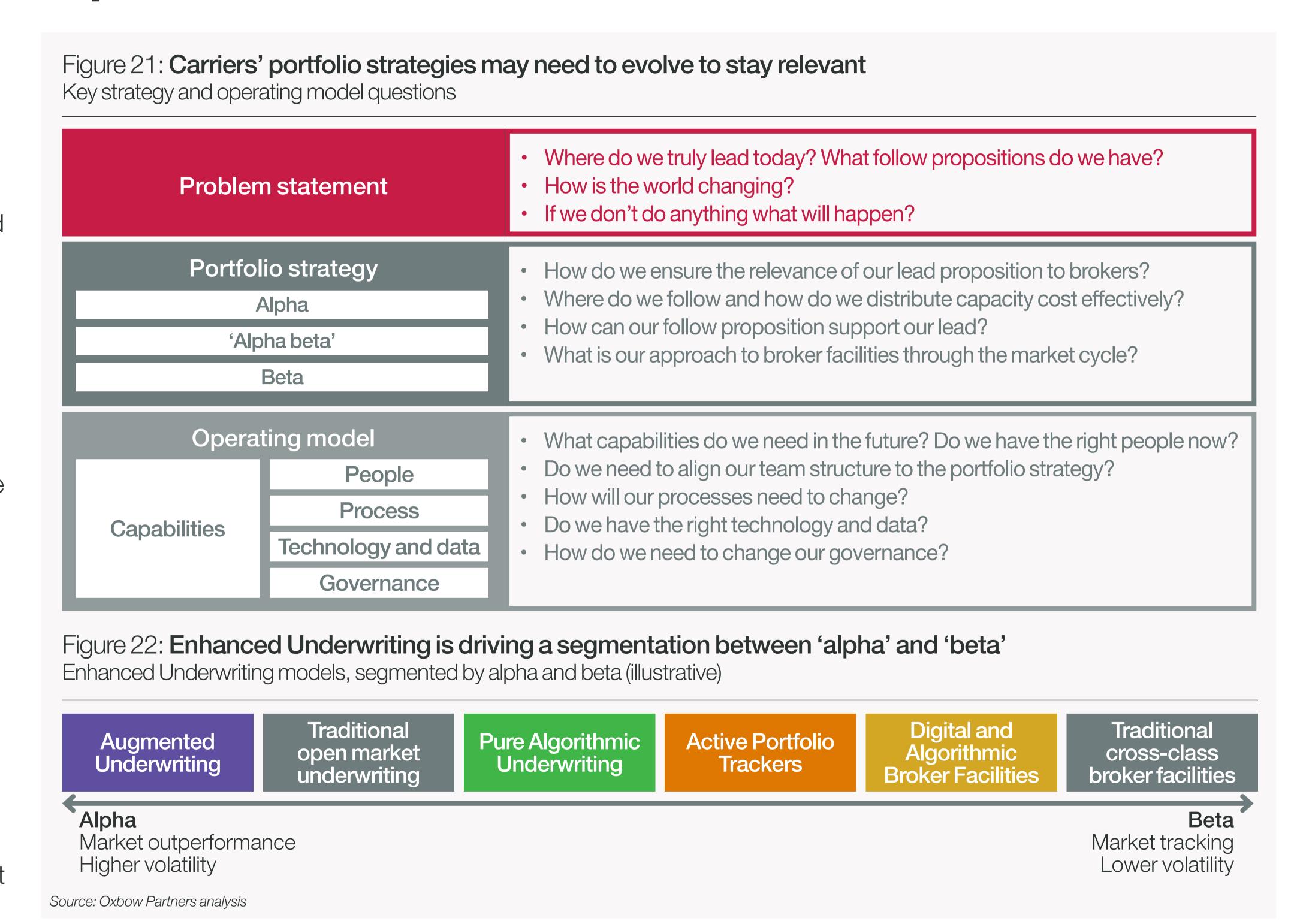
A future portfolio strategy may consist of separate lead and follow components, each weighted differently depending on how the carrier views the market.

We frequently heard that brokers and carriers are now framing their portfolio strategies using the language of 'alpha': aiming to outperform the market through superior risk-by-risk decisioning, and 'beta': aiming to track the market to manage market exposure and volatility. Some propositions were described as 'alpha beta', where carriers track specific segments of the market in a selective way, identifying pockets of alpha business to follow.

Carriers are increasingly thinking about how they can build a complementary portfolio of compelling alpha and beta propositions across lead and follow. Most carriers are making this shift tentatively, concerned about disrupting their traditional business, talent and premium flows. However, we have heard that urgency in strategic decision making is increasing.

We identified various examples of how a carrier might segment their business, for example:

• In classes of business where a carrier has marketleading expertise, they may adopt a lead, alpha proposition and try to build a flagship practice. Most that identify as 'true leads' are developing Augmented





# 5. How carriers could respond continued

Underwriting to enhance risk selection and encourage follow capacity. This would enable them to pool capacity behind them to put down larger lines, and potentially collect additional consortia or lead fees.

- In classes of business where carriers don't have the expertise or see limited opportunity for outperformance, they may adopt a follow beta strategy. This focuses on market exposure and cost efficiency by diversifying risk through broker facilities (enhanced or otherwise) and portfolio plays.
- In some examples, carriers are choosing to adopt an alpha stance but in a follow capacity either through Active Portfolio Trackers or by building a compelling follow proposition that brokers prioritise over others.

### Building segmented operating models

Carriers have also been implementing segmented operating models to differentiate between lead and follow and traditional and algorithmic strategies.

Traditionally, carriers have treated lead and follow business the same, even though follow business is simpler to process as the lead underwriter usually handles the terms, pricing and other key decisions. Now, carriers are segmenting operating models and optimising each for the nature of business being written (Figure 23). For example, lead operating models focus on building market-leading underwriting expertise supported by data and insights. Follow models emphasise efficiency to drive out administrative costs.

### People and process

The 'Underwriter of the Future' has been a consistent subject of discussion in the market for several years.



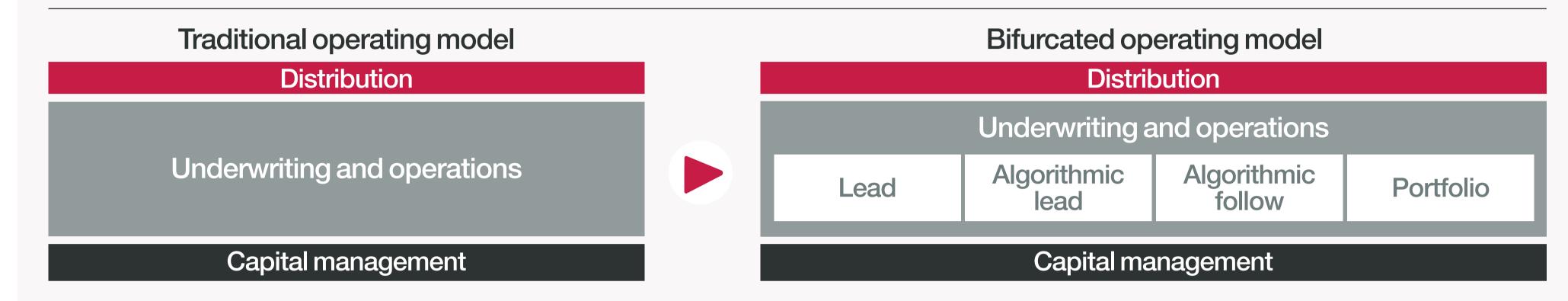
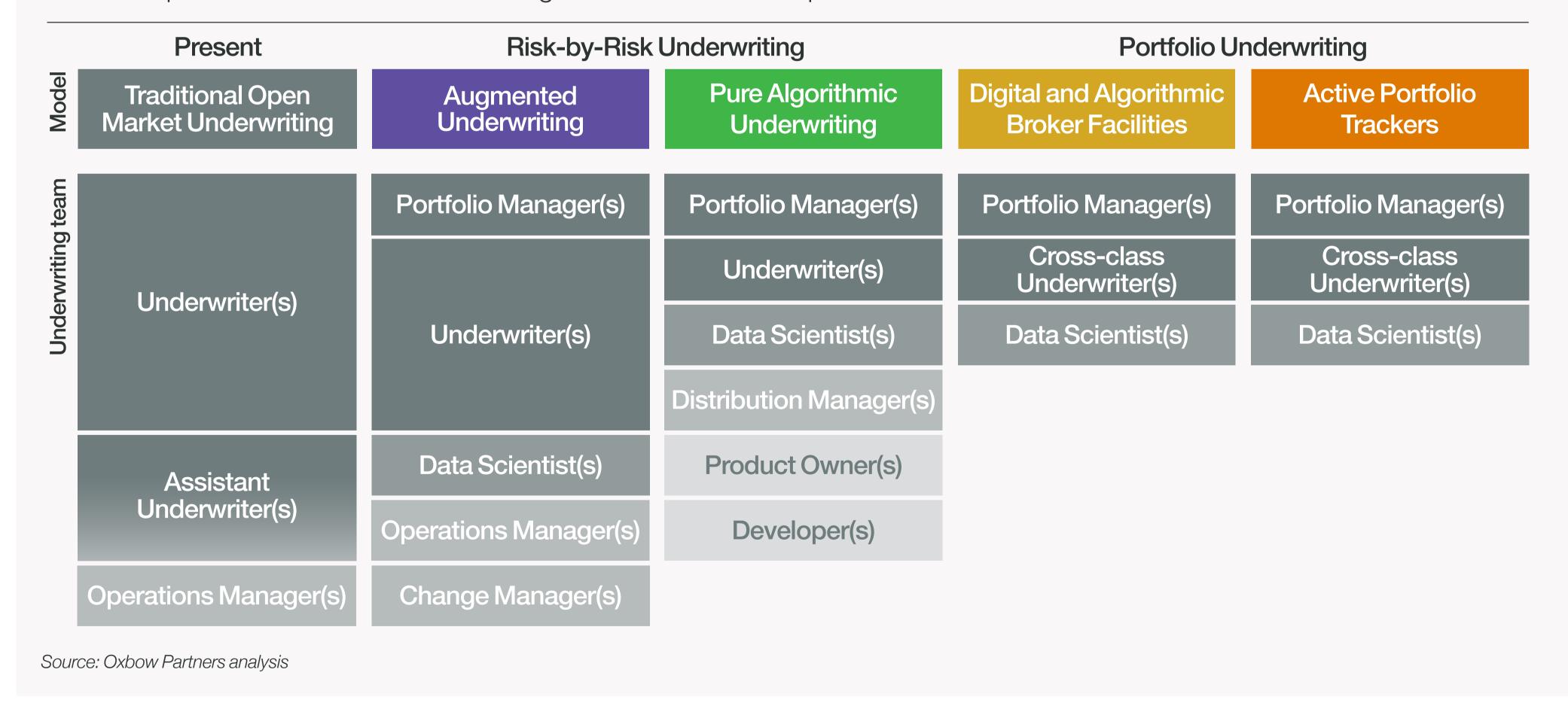


Figure 24: The underwriting teams of the future

Team composition of Enhanced Underwriting models vs traditional open market



# 5. How carriers could respond continued

A number of carriers raised that they would not be surprised if the role of underwriter and data scientist/ actuary conflate. On the other hand, others believed that they will diverge – with underwriters becoming market facing, and data scientists increasingly owning risk assessment.

However, it is also important to consider how the underwriting team of the future may differ in terms of roles required – in addition to skills. Figure 24 shows an indicative outline of how the teams required for each Enhanced Underwriting model could look once fully matured.

All Enhanced Underwriting teams could require portfolio management resource, as these models depend on the ability to analyse and guide a portfolio of risks. This is clearly important for portfolio underwriting, but even risk-by-risk Enhanced Underwriting requires a portfolio approach to assess algorithm outputs and adjust the rules for desired outcomes.

Unsurprisingly, Augmented Underwriting has a team composition most similar to that of current open market underwriting. However, as the processing and analysis of data is crucial to the operation of Augmented Underwriting, teams will require data resource. Additionally, as Augmented Underwriting requires retrofitting of existing workflows to integrate new technology and data, underwriters and other support functions will likely benefit from a dedicated change management resource.

Team composition for Pure Algorithmic Underwriting will vary between organisations due to differences in product type. However, broadly speaking these teams will require significant technological resource. Experienced developers

and product owners will be necessary to build these propositions, which in many ways resemble technology solutions more than traditional underwriting. Data scientists will also play a greater role compared with traditional underwriting. Underwriting expertise will still be crucial to steer the algorithm (and by proxy, the portfolio) and deal with referrals. Additionally, dedicated resource for managing distribution may be necessary as Pure Algorithmic Underwriting has a different approach to distribution than traditional models.

Both Digital and Algorithmic Broker Facilities and Active Portfolio Trackers are likely to be delivered by a portfolio solution-style team, supplemented with insight from (crossclass) underwriters. As these models mature, data scientists may also play a role in decision making and opportunity selection. The decoupling of headcount from GWP is a key enabler of the commercial success of these models so they should require less resource overall.

All Enhanced Underwriting models require roles and skillsets that are currently nascent or limited within the Lloyd's and London market. The topic of how carriers seek out, acquire and train appropriate individuals remains an open question.

However, roles and skills are only one part of the challenge – market participants highlighted that culture and behaviour will also need to evolve. Most underwriters in the market have been brought up on a culture of 'touching' every risk. This model has protected the market for many years by promoting thorough risk assessment. However, as Enhanced Underwriting models evolve, this cultural norm will need to change. Underwriters will need to be comfortable to rely on technology for some (e.g. Augmented Underwriting)

or all (e.g. Algorithmic Underwriting) of that process. This doesn't mean that the expertise is not valuable or that the technology should be trusted in all scenarios, but that touching every risk in a traditional way is no longer essential in all cases. In our experience this cultural hurdle is surmountable but will require time.

#### Technology and data

Technology is essential to Enhanced Underwriting models, enabling automation, data processing and advanced risk analysis that wouldn't be possible manually. For example, many carriers are investing in technology that drives algorithms for faster risk assessment and APIs that allow for real-time data processing and collaboration. Without these technological foundations, many Enhanced Underwriting models couldn't function.

However, the bigger challenge often lies in the availability and quality of data. The specialty insurance industry has long struggled with poor data quality and volume, limiting the effectiveness of these models. While initiatives like Blueprint Two aim to improve data standards, the problem is far from resolved.

Carriers are focusing on improving how they collect, manage and refine data to drive the growth of their Enhanced Underwriting models. This includes investing in better data infrastructure or working with partners to enhance data flow quality. Many organisations are already making significant investments, recognising that resolving data issues is key to scaling these models beyond niche experiments.

Additionally, the future of these models may depend on integrating AI, machine learning and generative AI, which will



# 5. How carriers could respond continued

enhance accuracy and efficiency as carriers move away from simpler, rules-based systems. Although few carriers are using Al in a meaningful way today, its adoption will be crucial to unlocking the full potential of Enhanced Underwriting.

#### Governance

All carriers acknowledged that governance would need to evolve as Enhanced Underwriting models mature.

Governance will need to be designed to support segmented and bifurcated operating models, rather than the traditional homogenous operating models. A common topic was governance of the lead as their role increases. This increased dependence requires stronger lead governance to ensure that standards are upheld, while not allowing followers to abdicate their responsibilities as 'a second set of eyes' on the risk. This is a particular concern as carriers look to optimise the cost base of their follow propositions.

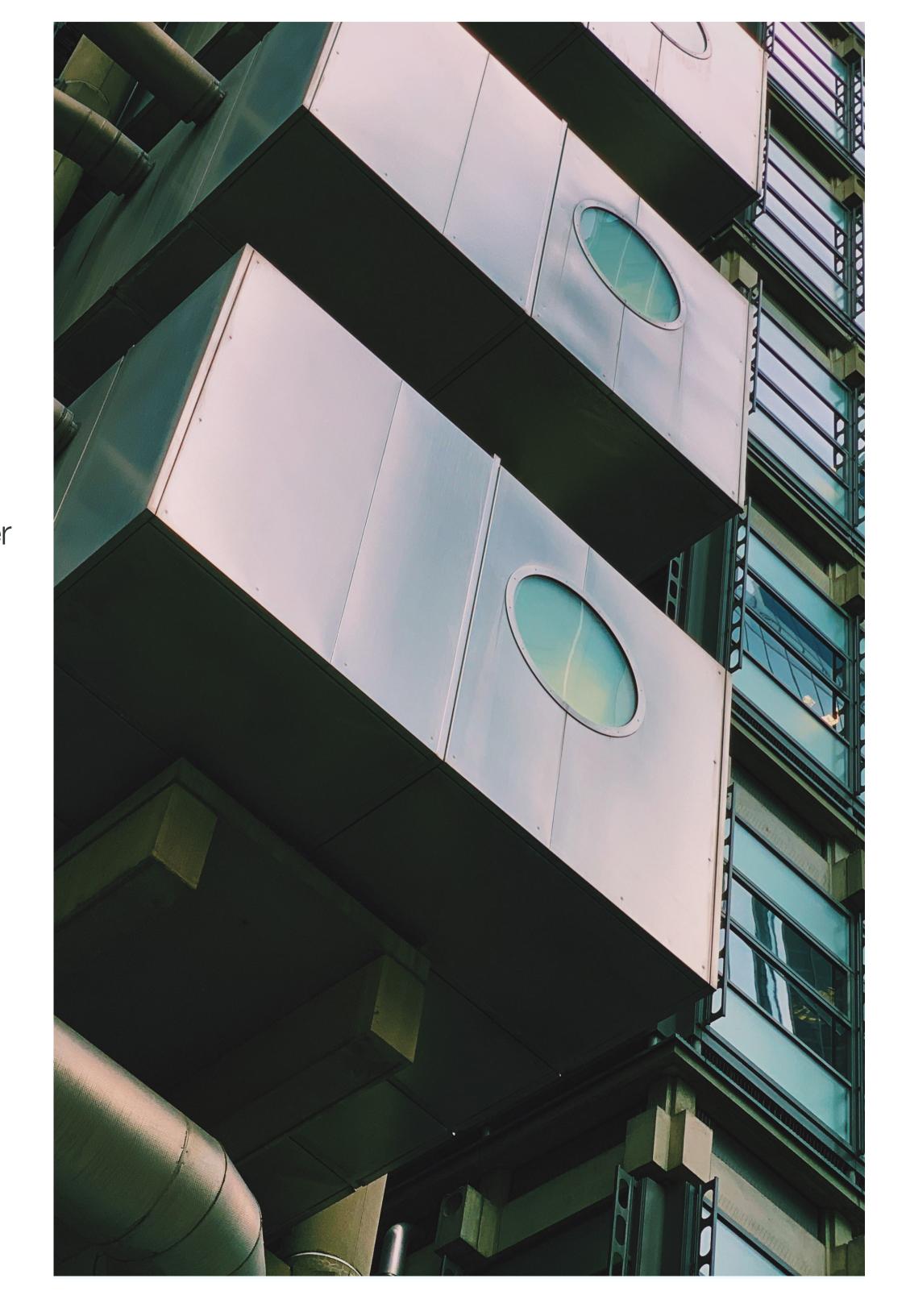
There was also consensus that governance will need to evolve to mitigate risks involved with using technology and data to make underwriting decisions. Firstly, data governance will need to become more robust to ensure algorithms are fed with high-quality and accurate data. One interviewee highlighted that "algorithms are only as good as the data that feeds them." Secondly, new governance structures will need to be created to act as custodians of the rules engine. This will ensure algorithms reflect desired outcomes and can be adjusted quickly in the event of emergencies.

As algorithmic models mature, there is a growing risk they could become 'black boxes', making it hard to understand how decisions are made. This is especially true when machine learning is used as rules can evolve without human oversight. Governance will need to evolve to reflect the technology being applied.

### Performance monitoring

Interviews revealed that monitoring the performance of Enhanced Underwriting models is notoriously challenging. Carriers highlighted that they were reticent to ring-fence a portion of their premium to test performance against traditional methods due to the impact on the P&L. The nature of specialty insurance also makes A/B testing harder and less effective than in the GI or personal lines space. Furthermore, there is currently no ability to understand the market performance of similar models in order to benchmark – with the exception of follow-only syndicates.

As Enhanced Underwriting models mature, developing robust performance monitoring and tracking practices will be crucial for evaluating their economic benefits. There is also an opportunity to consider more advanced approaches, such as standardised reporting frameworks, to enable improved benchmarking and comparisons.



# 6. How the market could respond

The response to Enhanced Underwriting is not just the preserve of carriers working individually. There are aspects that may need to be tackled across the market, either collectively by carriers or brokers or by market-wide bodies such as Lloyd's.

### Data standards and interconnectivity

Enhanced Underwriting models will improve significantly if data standards and interconnectivity are improved. Without high-quality data, these models will remain limited in scope and scalability. There are clearly multiple initiatives in the market, some part of Blueprint Two, that are focused on delivering this shift.

While we are seeing positive steps in the right direction, initiatives like the Core Data Record (CDR) include only essential transactional data for premium validation, claims matching and tax and regulatory reporting. Interviewees expressed a desire for more data in the minimum standards to support advanced risk assessment, portfolio management and better due diligence on lead syndicate performance in follow propositions.

Some interviewees told us that they hoped the market would continue to support these initiatives to move towards a future where data flows seamlessly through the market.

# Oversight, performance monitoring and benchmark data

Oversight and performance were called out regularly in interviews as requiring a market-wide response.

In terms of oversight, there was broad interest in having more market-wide standards and best practice for managing Enhanced Underwriting models. New algorithmic entrants to the market need to know what appropriate governance looks like and, equally, Lloyd's will need enhanced capability to assess the robustness of new algorithmic propositions. For existing market participants who are conducting 'Tight Experimentation', best practice governance may not be required, but once propositions scale and a significant portion of premium is written algorithmically, being able to draw on industry best practice would be helpful. Key topics could include data governance, model governance, underpinning technology infrastructure and portfolio management approach.

Equally, carriers writing business through broker facilities (enhanced or otherwise) and Active Portfolio Trackers told us that best practice standards across data receipt and management, portfolio monitoring and reserving would be helpful.

In terms of performance, carriers are yet to have the clearest view of performance of enhanced models distinct from other parts of their business and market-wide data is largely absent. In creating this report, this lack of data was apparent, and was something interviewees said they would value.

Similarly, performance reporting today does not differentiate between different models of underwriting. This makes it difficult to create objective benchmarks or to analyse the performance of different models of underwriting. Lloyd's approach to model segmentation could also be used in support of creating transparency, allowing the market to understand performance across and within the different models.

At a minimum, oversight and performance management improvements will distil market confidence in Enhanced Underwriting and allow carriers to scale models thoughtfully.

#### Market innovation

Enhanced Underwriting presents an opportunity for the market to apply its specialty expertise in new ways, aligning with the demands of a digital and globalised insurance landscape. By thoughtfully integrating these models, carriers can drive efficiency, improve risk selection and access underserved areas, while reinforcing Lloyd's position as a leader in complex, high-value risks. In this way, Enhanced Underwriting could reaffirm Lloyd's reputation as a hub of innovation, of which Enhanced Underwriting is the next chapter.





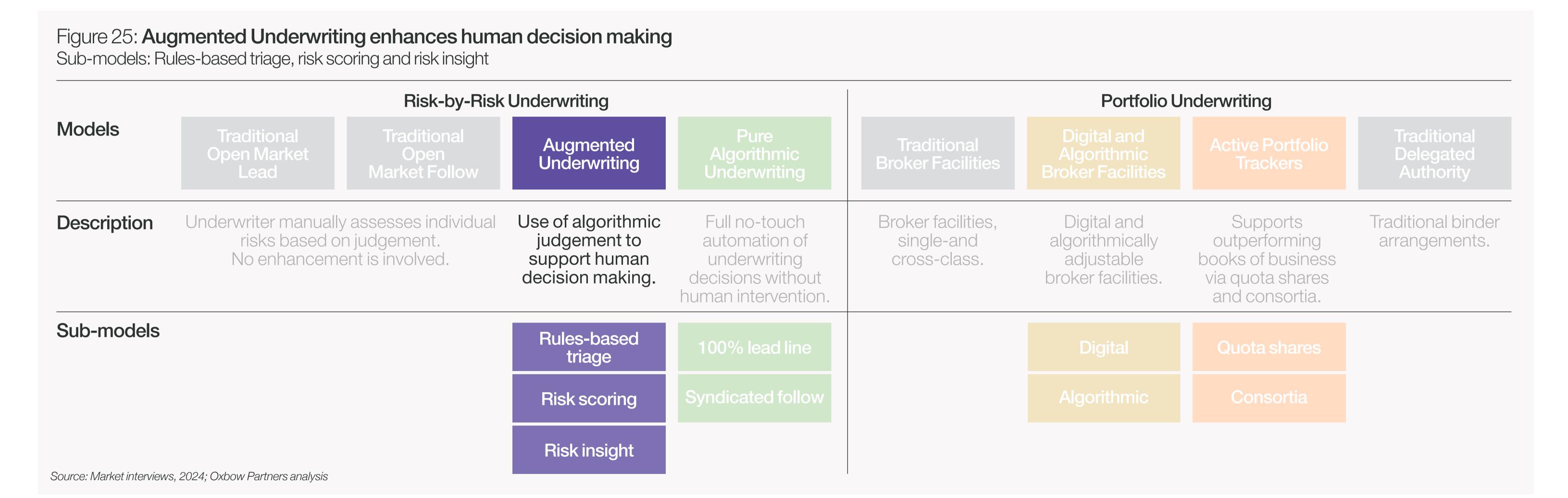
Detail on Enhanced Underwriting models

# Augmented Underwriting

### **Defining Augmented Underwriting**

Augmented Underwriting uses algorithms to enhance human-based decision making. The goal is to codify and quantify risk, with sophistication varying based on the level of judgment applied by the system. System judgement can range from simple rules-based triage to risk scoring and risk insight. Notably, Augmented Underwriting can be applied to both lead and follow underwriting.

Many of our interview participants see Augmented Underwriting as a stepping stone to Pure Algorithmic Underwriting. However, there are examples of carriers employing Augmented Underwriting who strategically choose to keep the underwriter in the loop. The goal is to enhance the underwriter's role without fundamentally changing or automating the process. One CUO referred to the use of Augmented Underwriting as creating a "bionic underwriter".



Detail on Enhanced Underwriting models

# Augmented Underwriting continued

When triaging risks, algorithms use codified rules based on factors set by underwriters (i.e. premium, broker, sub-class). These rules prioritise risks for the underwriter's workflow with the most attractive risks placed earlier. These rules can be based on codifying underwriting appetite, third-party data sets or in most cases a combination of both. The most challenging aspect of implementing triage is the efficient ingestion of submission data. Due to this challenge, some carriers choose to focus initial efforts on renewals, rather than new business. When renewing a risk, key fields can be pulled from the policy administration system (PAS) rather than being ingested from slips or schedules of values (SOVs), removing one of the complexities of triaging new business. This difficulty of

ingestion applies to all Augmented Underwriting propositions, not just rules-based triage.

Risk scoring adds an additional level of sophistication on top of rules-based triage. For example, a low score can signal a weak appetite fit; a high score may indicate underwriters should accept a lower-rate adequacy due to the risk's portfolio impact. Scores can be broken down into constituent parts relating to adequacy, historic performance or aggregate exposure. Additionally, feedback capturing an underwriter's rationale when they disagree with the score creates an iterative loop. This enables carriers to align the codified underwriting appetite with underwriting decisioning.

Further sophistication beyond scoring occurs when the engine provides risk insight. Underwriters receive quantified and detailed risk insights in a consistent format. This may include additional asset level data (using third-party data sources), rate comparison vs. historic business and capacity consumption impact.

Some carriers outside the London market are taking Augmented Underwriting even further by using GenAl to analyse policy wordings. This allows them to assess terms and conditions, flagging the potential for additional exposure to underwriters. However, in London, we have not encountered this level of augmentation technology.

Figure 26: Augmented Underwriting can provide three types of output Sub-models of Augmented Underwriting

#### Increasing level of sophistication

#### Rules-based triage

- Algorithm filters and sorts submissions based on preset rules
- For example, prioritising the best or urgent risks, or rejecting risks clearly out of appetite
- Allows underwriters to focus on the most relevant submissions, driving productivity

#### Risk scoring

- Algorithm provides a score or flag to indicate the quality of a risk
- Enables the underwriter to make a more informed decision, driving discipline, objectivity and consistency

#### Risk insight

- Algorithmic delivery of risk specific insight across key aspects
- This includes augmentation with third party data, advanced analytics applied to give relative portfolio positioning, or red flags raised to underwriters algorithmically
- We did not hear of an algorithm providing insight on coverage terms

Source: Oxbow Partners analysis



Detail on Enhanced Underwriting models

# Augmented Underwriting continued

# Why are carriers investing in Augmented Underwriting?

The top 3 strategic drivers of Augmented Underwriting highlighted by survey participants are:

#### 1. Improved broker response time

Augmented Underwriting optimises workflow and provides data analysis 'to the underwriter's fingertips'. This allows the underwriter to identify attractive risks more efficiently and assess risks more effectively, reducing the time between quote to bind. Interviews highlighted that brokers are likely to prioritise carriers that can process risks quickly.

#### 2. Data collection

The data flow through an Augmented Underwriting decision engine allows data to be captured not solely on bound risks (as is standard market practice) but also declined and not-taken-up (NTU) risks. This significantly increases the pool of collected data, which significantly enriches the management information a carrier can gain from their portfolio.

#### 3. Decrease profit volatility

Increased underwriting discipline and consistency, in principle, may allow underwriters to better manage their exposure through the market cycle. Therefore, at a carrier level, this may enable them to decrease their COR variance across the market cycle.

Augmented Underwriting does not appear to be an explicit expense ratio play for participants. High initial investment costs tend to negate additional GWP benefits in the short and medium term.

Figure 27: Improved broker response time is a key strategic driver for Augmented Underwriting Question: How important are the following strategic goals of Augmented Underwriting at your company? Percentage of participants responded 0% 20% Strategic drivers 40% 60% 80% 100% Underwriting strategy Capitalise on UW expertise of other carriers Learning Data collection Increased UW productivity Improved broker response time Broker management Increase new business Premium Increase retention Decrease profit volatility Loss ratio Improve loss ratio Increase scalability Expense ratio Improve expense ratio Moderately important Very important Not important

Source: 2024 survey of Lloyd's syndicates; Oxbow Partners analysis

# Augmented Underwriting continued

# Capabilities required for Augmented Underwriting

### Data science and analytics

Augmented Underwriting requires excellent data capabilities. It is common for dedicated data and analytics teams to manage the datasets and algorithms, while underwriters remain market facing. Carriers with more mature Augmented Underwriting are effectively connecting premium and claims data and using third-party asset-level data to supplement this. This relies on a data science solution to effectively ingest, structure and store initially unstructured data.

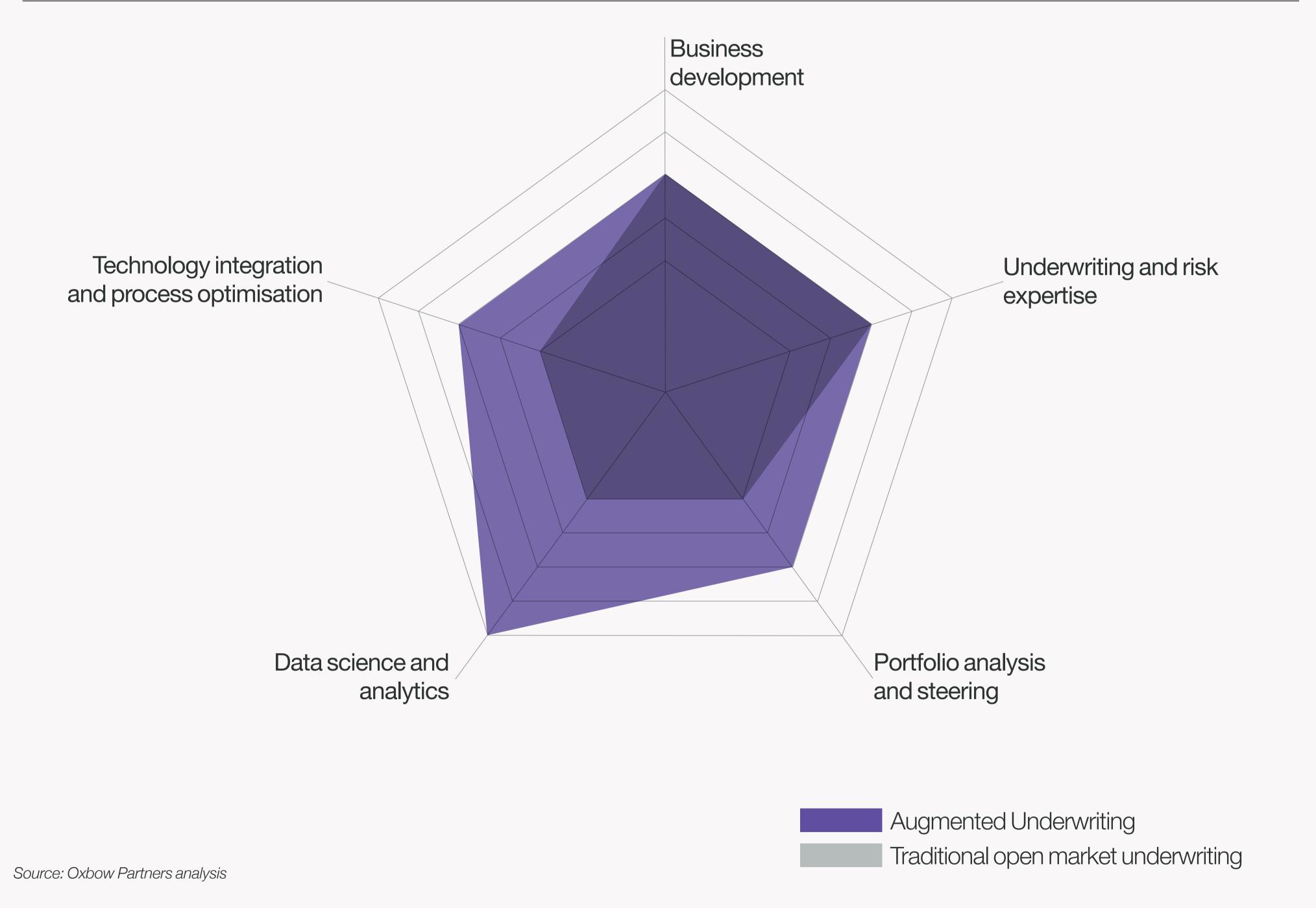
## Portfolio analysis and steering

Maximising the value of Augmented Underwriting engines requires carriers to consistently adjust the underlying algorithm based on portfolio composition. Traditionally underwriting management may set exposure limits at the start of the year for each class of business and may take weeks (or even months) to update them based on written business. But by tweaking the risk insight engine on a more frequent basis, they can maximise the value of filling up the aggregate buckets throughout the year. Augmented Underwriting also facilitates a more coordinated underwriting approach across the organisation. Exposure management (EM) is brought to the forefront of underwriting as live EM data outlines cross-class concentration risks, and portfolio management has greater granularity in the guidance it can provide.

## Technology integration and process optimisation

Augmented Underwriting for new business is reliant on submission ingestion. Many carriers have ambitions for

Figure 28: **Augmented Underwriting requires improved data science and analytics capabilities** Capabilities required for Augmented Underwriting vs. traditional open market





# Augmented Underwriting continued

automatic ingestion of unstructured emails, slips and schedules of values (SOVs). Some are building tools internally; others use off-the-shelf tools. The heterogeneity and relatively low volume of London market business has proved a challenge for the training of GenAl, which sits at the heart of most submission ingestion tools, but these are improving fast. Most carriers still have a human in the process to ensure data quality, any move away from this will require significant work in outlining additional data governance frameworks.

# What concerns are associated with **Augmented Underwriting?**

While all interviewees could see the opportunities with Augmented Underwriting, there were clear concerns. These primarily revolved around the risk of loss of control of underwriting decision making, either through process or algorithmic biases, and quality of data either directly or due to poor market connectivity.

The top 3 concerns of Augmented Underwriting highlighted by survey participants are:

### 1. Loss of control of underwriting decisions

Sceptics raised the risk that underwriters may become overly reliant on algorithms without fully understanding how decisions are made. This could reduce critical thinking and limit opportunities to question or challenge the algorithm's outputs. A culture of personal accountability, core to the Lloyd's market, is important to mitigate this risk.

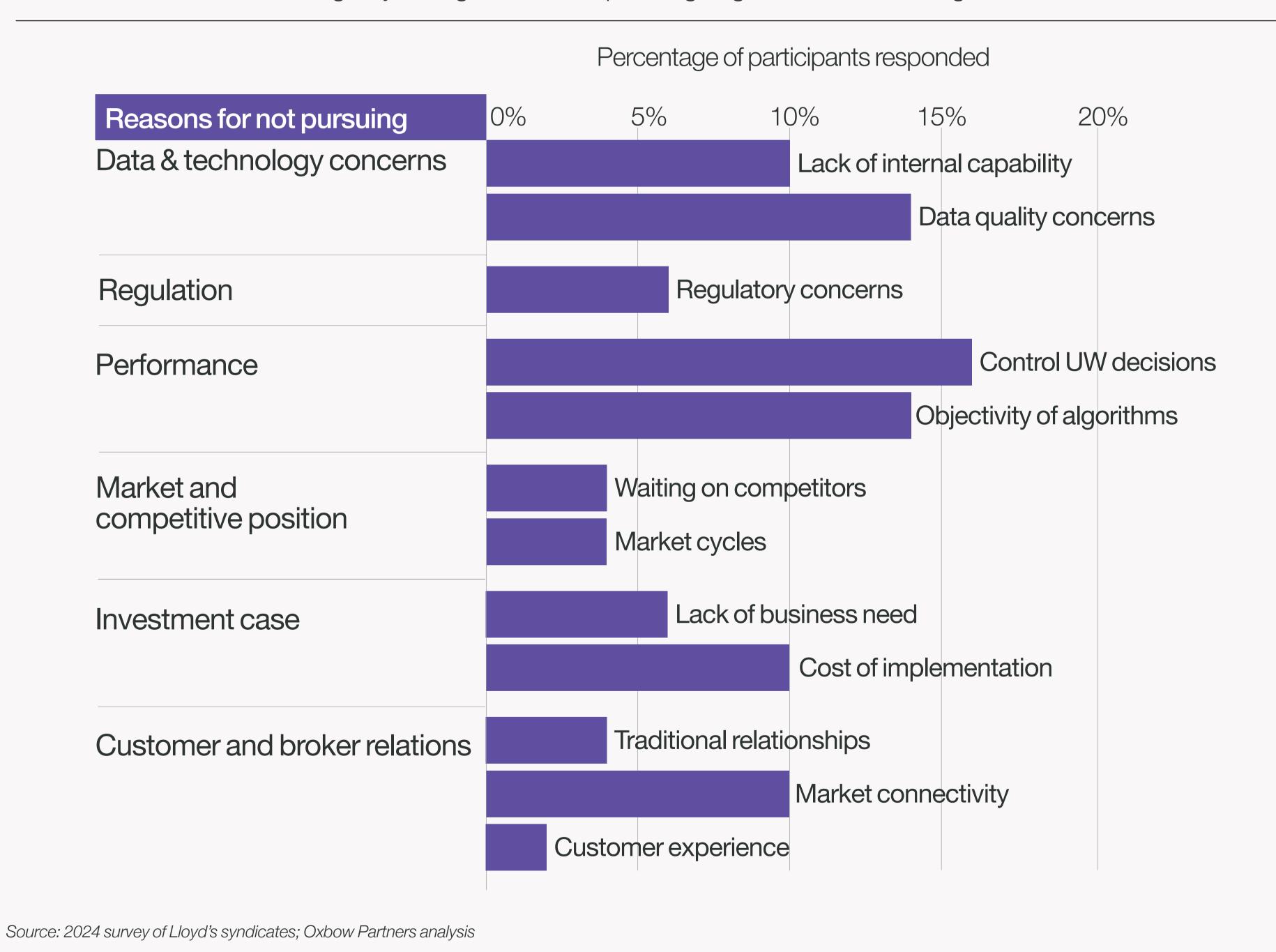
# 2. Concerns over data quality

Augmented Underwriting depends on high-quality data, but carriers at times receive fragmented or incomplete information. Accurate and structured data is crucial for rules

Executive summary

Figure 29: Loss of control of decision making and data quality were key concerns with **Augmented Underwriting** 

Question: What is the reasoning for your organisation not pursuing Augmented Underwriting?





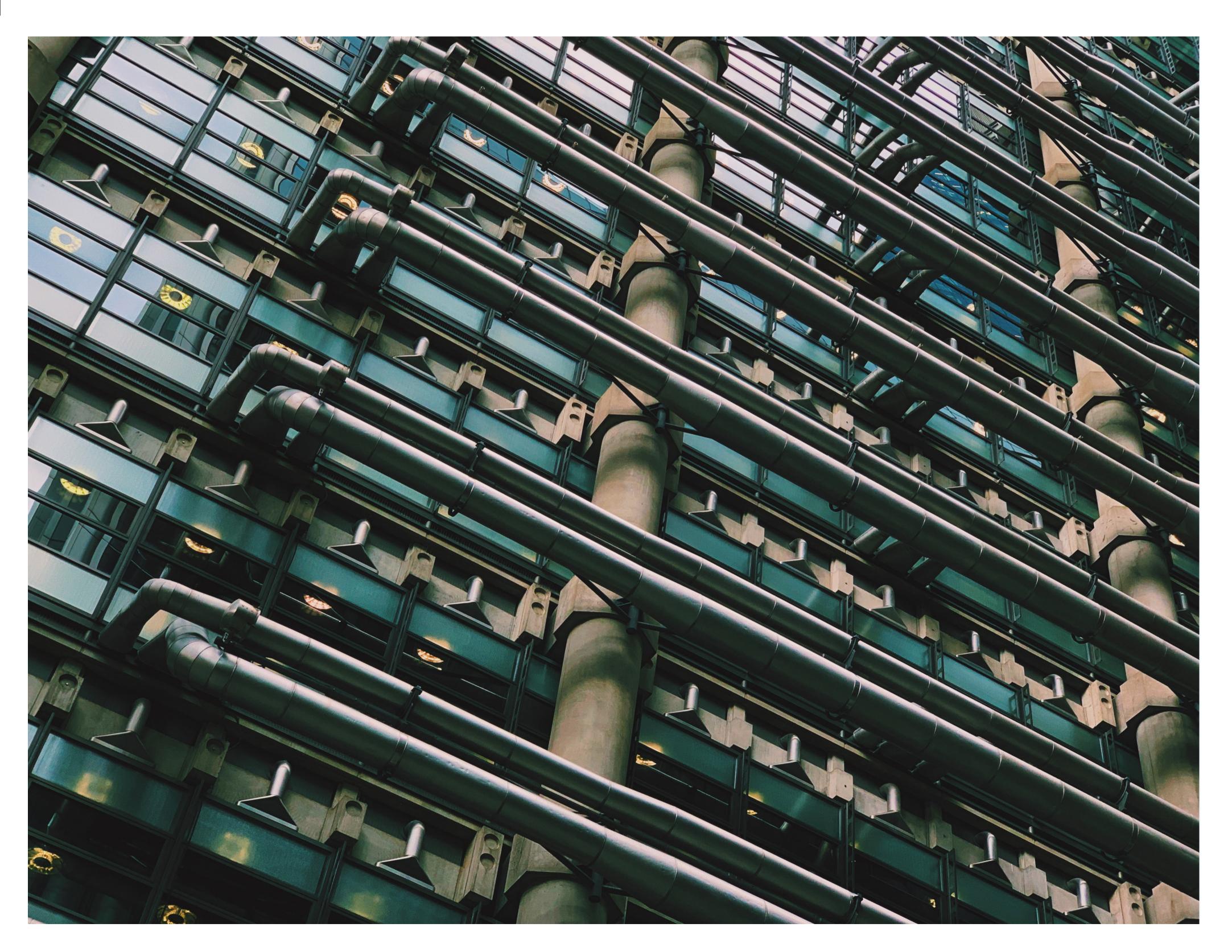
# Augmented Underwriting continued

engines to produce reliable and consistent decisions and recommendations. Many carriers are prioritising the development of data ingestion, structuring and storage before developing rules engines.

## 3. Concerns of algorithmic biases

Algorithms can reflect biases in training data, like underwriters' preferences for certain assets, regions or industries. Identifying these biases takes consistent and concerted effort on the part of carriers. Mature Augmented Underwriting models use data teams to critically assess and validate data sources, challenging subjective preferences with objective analysis.

The views above were expressed by supporters and sceptics alike. In fact, most people you might consider to be sceptics did support Augmented Underwriting, as they could clearly see the value in augmenting underwriter experience with data, insight and efficient process.



# Pure Algorithmic Underwriting

# **Defining Pure Algorithmic Underwriting**

In every interview, Pure Algorithmic Underwriting was the first Enhanced Underwriting model referenced. Pure Algorithmic Underwriting aims for 100% automatic underwriting, with no human intervention.

Pure Algorithmic Underwriting relies on the codification of the underwriting process into an algorithm. An algorithm is a set of rules against which a risk is assessed. Risks are submitted

through an API or webform, evaluated against predefined rules and factors such as appetite and capacity, priced, and a quote is generated. This is often known as 'straight-through processing' or 'no-touch' underwriting. Pure Algorithmic Underwriting relies on data-led underwriting assessments, in which expected risk performance is assessed using internal experience of loss data and/or third-party data. This is often accompanied by codification of underwriter judgement, especially where there is insufficient data.

There are two models of Pure Algorithmic Underwriting – 100% lead line and syndicated follow. These differ in how they deploy capacity and manage risk.

100% lead line propositions tend to be 'many-to-one', whereby multiple brokers plug in to obtain capacity from one insurer.

The syndicated follow propositions are all 'many-to-many' propositions, whereby multiple brokers can obtain quotes

Figure 30: Pure Algorithmic Underwriting aims to underwrite with no human intervention Sub-models: 100% lead line and syndicated follow

	Risk-by-Risk Underwriting				Portfolio Underwriting			
Models	Traditional Open Market Lead	Traditional Open Market Follow	Augmented Underwriting	Pure Algorithmic Underwriting	Traditional Broker Facilities	Digital and Algorithmic Broker Facilities		Traditional Delegated Authority
Description	Underwriter manually assesses individual risks based on judgement. No enhancement is involved.		Use of algorithmic judgement to support human decision making.	Full no-touch automation of underwriting decisions without human intervention.	Broker facilities, single-and cross-class.	Digital and algorithmically adjustable broker facilities.	Supports outperforming books of business via quota shares and consortia.	Traditional binder arrangements.
Sub-models			Rules-based triage	100% lead line		Digital		
			Risk scoring	Syndicated follow				
Source: Market interview	s, 2024; Oxbow Partners analysis		Risk insight					

# Pure Algorithmic Underwriting continued

from multiple markets. However, this is not a pre-requisite. Originally, Ki only offered Ki capacity; brokers can now obtain quotes from Aspen, Beazley and Travelers on the Ki platform.

Two 'many-to-many' algorithmic risk trading platforms, InsurX and Neuron, let carriers set their own rules to define their appetite, essentially creating their own algorithms. The platform then matches broker-submitted risks with these appetites. Other placement platforms like Verisk's Whitespace, PPL Next Gen and Ebix Europe's PlacingHub are also exploring rule-based systems to support triage and straight-through underwriting.

For all platforms, the carrier retains control over the decision-making algorithm, even if the platform adjusts the rules. This distinction is important because, while platforms may operate as delegated authorities and provide data through APIs or bordereaux, the carrier can tweak the algorithm at any time. The key point here is that carriers retain flexibility and control, allowing them to adjust their underwriting strategies dynamically, even when using external platforms.

# Why are carriers investing in Pure Algorithmic Underwriting?

The top 3 strategic drivers of Pure Algorithmic Underwriting highlighted by survey participants are:

## 1. Improve loss ratio

Pure Algorithmic Underwriting drives greater consistency in approach and underwriting discipline which should, in turn, lead to lower loss ratios and institutionalise decision making knowledge.

Figure 31: Pure Algorithmic Underwriting processes risks automatically

Sub-models of Pure Algorithmic Underwriting platforms

## Pure Algorithmic Underwriting Models

#### 100% lead line

- Carrier writes 100% of risk
- Focus currently is on lower premium, typically homogenous business, e.g., Wind deductible buyback, Terror, Cyber
- Handles large policy volumes, with low premiums
- Submission, quote and bind all via API or portal
- Compliance, rating and exposure management all integrated







## Syndicated follow

- Submission, quote and bind via API or web portal
- Line quoted automatically
- For platforms operating as coverholders, line bound automatically
- Line size dynamically changes based on appetite and capacity
- Some platforms experimenting with differential pricing







Note: Examples are non-exhaustive. Other non-public vehicles operate in the market. Source: Oxbow Partners analysis

### 2. Data collection

The flow of data through a Pure Algorithmic Underwriting decision engine captures data at the point of submission, including risks that are subsequently declined or NTU. This leads to a significant increase in the volume of data collected, enriching the management information (MI) a carrier gains from their portfolio.

### 3. Increase new business

100% lead line Pure Algorithmic Underwriting models have unlocked new pools of premium by writing risks with smaller premiums. These are risks that would otherwise not

be commercially viable to write through Lloyd's. Syndicated follow Pure Algorithmic Underwriting models have also provided new sources of premium for carriers setting up within the syndicated marketplace.

We also heard in our interviews that the scalability of these propositions through decoupling GWP from underwriting headcount is of significant interest to carriers. This interest is fuelled by both the admin ratio benefits and also the flexibility to enter and exit opportunities.

# Pure Algorithmic Underwriting continued

# Capabilities required for Pure Algorithmic Underwriting

## Technology integration and process optimisation

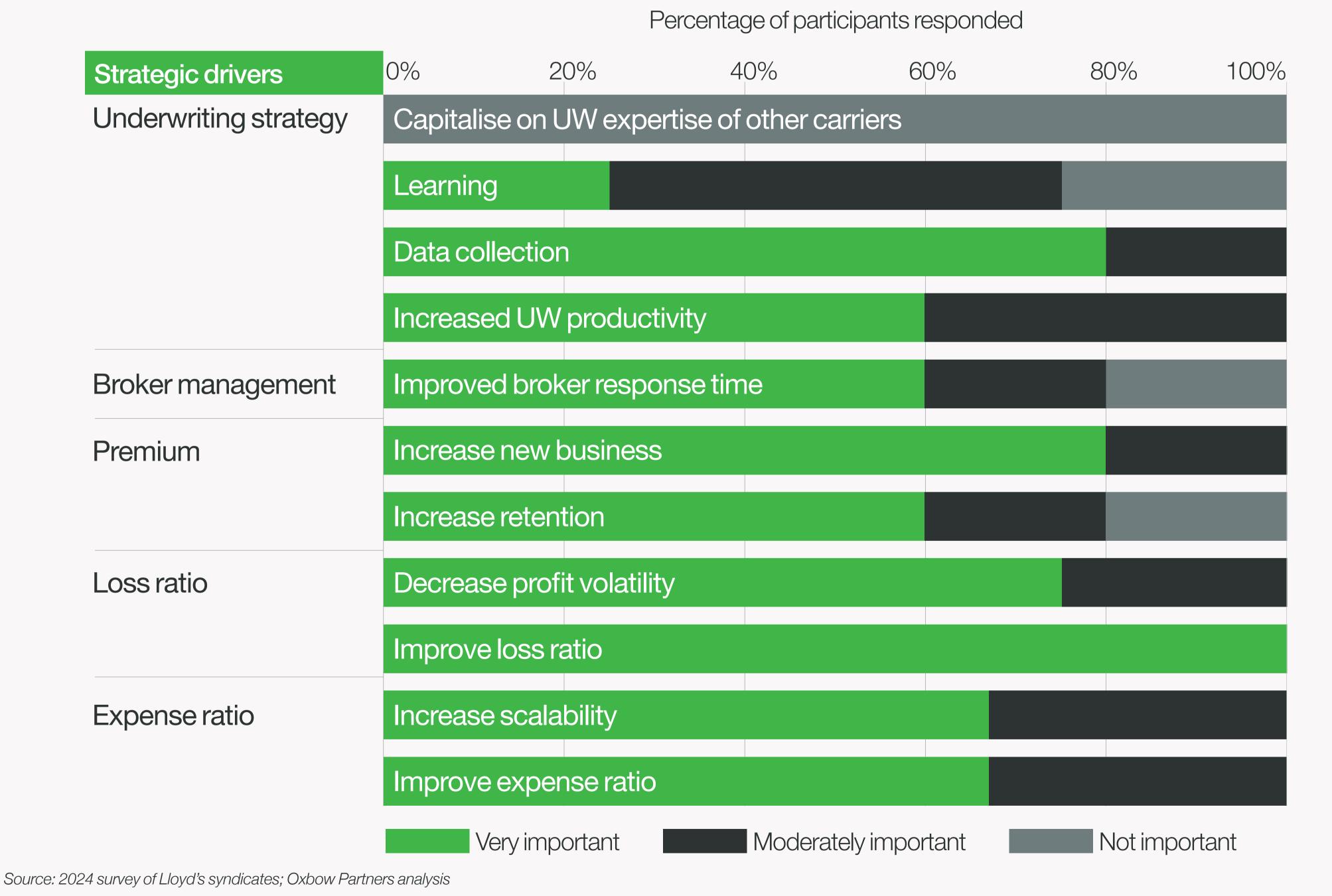
Pure Algorithmic Underwriting propositions use submissions via API or webform that a broker fills out. This controls the data quality of the submission and ensures that all required data is received.

The end-to-end process is then codified and automated, including sanctions, other compliance checks, exposure management, pricing and underwriting risk assessment. Propositions that write 100% lead lines can then bind automatically and attach the risk to a line slip, including issuing of relevant documentation. In the syndicated market, although the process from submission to firm order can be automated, market infrastructure is not yet technically advanced enough to be able to bind a risk automatically via API. This is coming as Whitespace and PPL build out their capabilities but currently remains a necessary manual step.

## Data science and analytics

When building and iterating these algorithmic models, both data science and traditional actuarial analytical skills are required. While these models often initially begin as the codification of human underwriting expertise, they tend to evolve in data sophistication beyond this before being entrusted with the underwriting pen. Additionally, in our interviews, this model was consistently identified as the most likely application of generative AI and machine learning within the next 10 years at Lloyd's. Therefore, when considering future applications of these models, it is crucial that teams are equipped with the capability to acquire and understand the skills necessary for the likely advancements of these models.

Figure 32: Improved loss ratio is a key strategic driver of Pure Algorithmic Underwriting Question: How important are the following strategic goals of Pure Algorithmic Underwriting at your company?



# Pure Algorithmic Underwriting continued

# Portfolio analysis and steering via algorithm adjustment

Fundamental to all Pure Algorithmic Underwriting propositions is the ability to quickly tweak the algorithm. In the same way that senior management can issue a blanket hiatus to underwriting teams on new US property catastrophe (CAT) business as a hurricane approaches, or issue corrective directives if an issue in the portfolio is identified, the operators of Pure Algorithmic Underwriting propositions can quickly make changes to stop new business being written. One interview participant described this as an 'exit ramp' that allowed a carrier to cease writing business that could cause outsized losses. Associated with this is a portfolio management capability that allows insurers to identify changes in performance promptly and react accordingly, either by ceasing business or adjusting pricing or line sizes.

# What concerns are associated with Pure Algorithmic Underwriting?

The top 3 concerns of Pure Algorithmic Underwriting highlighted by survey participants are:

## 1. Loss of control of underwriting decisions

The main concern is the removal of humans from the underwriting process. However, this misunderstands Pure Algorithmic Underwriting. In these models, underwriters act as engineers of the risk-processing system, not the processors themselves. In all cases, algorithms had been built and adjusted by humans; we encountered no examples of 'self-improving' algorithms. Machine learning was employed in some cases to identify ways to improve the algorithm, but the implementation of these suggestions was always done by humans.

Figure 33: Pure Algorithmic Underwriting requires extensive technology integration Capabilities required for Pure Algorithmic Underwriting vs. traditional open market



# Pure Algorithmic Underwriting continued

## 2. Algorithmic biases

Algorithms may unintentionally reflect biases in the data they are trained on, such as underwriters' subjective preferences for or against certain assets, regions or industries. Most significantly, if algorithmic decisions across companies are based on the same data sets, or if carriers start licensing their algorithms, this could drive more systemic bias. In response to this, data teams seek to stay sceptical. They constantly assess the effectiveness and reliability of data sources, and do not take underwriters' preferences at face value but instead seek to (dis)prove through impartial data analysis. However, individual companies are less able to identify systematic bias.

## 3. Regulatory concerns

Market participants also referenced concerns of antiselection against faceless insurers through the market cycle: placing brokers using their best business to support relationships, only turning to 'faceless' web-based platforms when unable to place risk elsewhere. For this to be avoided, interviewees recognised that algorithmic propositions may still require market-facing distribution capabilities. In addition, algorithmic platforms are seeking to provide data to demonstrate the level of anti-selection.

Figure 34: Lack of control and algorithmic biases were the main concerns with Pure Algorithmic Underwriting Question: What is the reasoning for your organisation not pursuing Pure Algorithmic Underwriting? Percentage of participants responded 0% 10% 15% Reasons for not pursuing Lack of internal capability Data & technology concerns Data quality concerns Regulation Regulatory concerns Performance Control UW decisions Objectivity of algorithms Keep humans in the loop Not viable for speciality Waiting on competitors Market and competitive position Market cycles Lack of business need Investment case Cost of implementation Traditional relationships Customer and broker relations Market connectivity Customer experience Source: 2024 survey of Lloyd's syndicates; Oxbow Partners analysis



# Digital and Algorithmic Broker Facilities

# Defining Digital and Algorithmic Broker Facilities

Over the past decade, the Lloyd's market has become increasingly facilitised, as brokers seek to place business in an efficient manner and charge carriers additional fees for their services. Many brokers have released cross-class facilities, such as Marsh Fast Track, Aon Client Treaty (ACT), Howden ReThink, Amwins' Amplify and Ardonagh's Lectio.

More recently, Digital and Algorithmic Broker Facilities have entered the market – in particular, McGill's Auton and Howden ReThink (note: there are multiple instances of Rethink, of which one is algorithmic). We also heard that some of the large established cross-class facilities are 'on the verge' of digitalisation.

We define Digital Broker Facilities as facilities that are integrated into brokers' placing and workflow systems and have APIs to carriers. Digital Broker Facilities also provide real time data analysis. Algorithmic Broker Facilities are differentiated by allowing carriers to dynamically and digitally change their risk appetite within the facility.

Figure 35: Digital and Algorithmic Broker Facilities integrate into brokers' systems, digitally connecting them to carriers Sub-models: Digital and Algorithmic Risk-by-Risk Underwriting Portfolio Underwriting Models Traditional Traditional **Traditional** Pure Digital and **Augmented Open Market** Algorithmic Algorithmic Delegated Underwriting Broker Facilities Authority Market Follow Lead **Broker Facilities** Underwriting Underwriter manually assesses individual Use of algorithmic Digital and Traditional binder Full no-touch Broker facilities, Supports Description algorithmically risks based on judgement. automation of single-and outperforming judgement to arrangements. No enhancement is involved. books of business support human adjustable underwriting cross-class. broker facilities. decision making. decisions without via quota shares human intervention. and consortia. Sub-models Rules-based Digital triage Algorithmic Risk scoring Risk insight Source: Market interviews, 2024; Oxbow Partners analysis



# Digital and Algorithmic Broker Facilities continued

# Figure 36: Lloyd's has become increasingly facilitised since the 2010s

#### Evolution of facilitation in Lloyd's, 2010 – present 2010s Present Increasing facility sophistication (incl. cross-class facilities) Emergence of Digital and Algorithmic Broker Facilities Advance of broker facilities Brokers increased number of facility offerings as the soft Brokers respond to negative sentiment by increasing Brokers have begun experimenting with digital facilities market led insurers to prioritise securing placements over sophistication of facilities However, most facilities remain in early stages of maintaining optimal portfolios Improvements include better data utilisation and more digitisation and still rely on traditional processes Aon's partnership with Berkshire Hathaway on their sidecar streamlined operations Only a small number of facilities are digital or have moved facility accelerated the advance of facilities ACT was the first to leverage 'big data' to enhance risk to algorithmic Launches prompted initial fears that facilities undermine assessment offerings traditional underwriting Subsequently, 2016 saw a cluster of launches by the top brokers, including cross-class facilities 2016 2013 2020 2021 2023 2015 Aon Sidecar facility launch **Aon Client Treaty** Howden ReThink launch Marsh Fast Track launch (ACT) launch WTWGlobal 360 launch Aon Marilla launch Amwins Amplify launch Aon Project Marlin launch Ardonagh Lectio Launch Marsh Cyber Echo launch Brit Ki launch Marsh D&O Echo facility launch Source: Oxbow Partners analysis

Digital Broker Facilities have several characteristics that differentiate them from traditional facilities:

- Integrated into broker's workflow platform: All eligible risks flow through the facility, preventing anti-selection by brokers.
- APIs exposed to carriers: Carriers access real-time data, though traditional bordereaux are still used for non-APIready carriers.
- Dashboards & MI: To add value to the carriers, brokers are seeking to offer real-time dashboards that display

data on the business written through the facility. This can include metrics such as RMS modelling or realistic disaster scenario (RDS) impact analysis.

Algorithmic Broker Facilities have additional characteristics that differentiate them further still:

- Dynamic risk appetite: Underwriters can set their appetite more precisely by risk code, industry, geography and capacity.
- Flexible lines: Underwriters do not write a line on all business that goes through the facility. Note that there is

- a commercial tension here. Carriers must write a minimum proportion of risks through the facility but have the flexibility to choose additional business beyond this minimum, unlike traditional cross-class broker facilities.
- Algorithmic allocation: Based on each carriers' appetite, risks will be allocated to the relevant markets algorithmically.

We note that the characteristics of Algorithmic Broker Facilities are not dissimilar to characteristics of Pure Algorithmic Underwriting market platforms, like InsurX or

# Digital and Algorithmic Broker Facilities continued

Neuron. The key difference is that Algorithmic Broker Facilities are one-to-many (i.e. single broker to many carriers), whereas the market platforms are many-to-many. This has a signficant impact on various vested interests at play, as outlined in the risks and concerns below.

# Why are brokers developing facilities, and why do carriers participate in them?

Most brokers are looking to introduce cross-class facilities, though most are not enhanced. Regardless, the strategic drivers for brokers are the same: to increase margin. On traditional cross-class facilities, brokers claim a 3-to-4-point fee for their services to carriers. Those looking to launch Digital Broker Facilities are seeking additional fees, justified by the benefit to carriers of improved efficiency and the provision of quality data, such as Risk Management Solution (RMS) modelling. The impact of these additional points of margin is significant to the overall profitability of the broking economic model.

Interestingly, some brokers are considering passing up to 50% of the additional 3.5-to-5-point margin back to clients. There are two reasons for this: it makes the product more attractive to clients, although the discount is small since it only applies to the c.20% of the risk covered by the facility. It also incentivises brokers to do direct business through the facility, as they must offer clients the best-priced capacity. This approach helps encourage brokers to adopt the facility internally, which can otherwise be challenging.

Brokers also develop facilities to improve speed of placement, allowing 20-30% of a slip to be routinely placed through the facility. This is especially true for Digital Broker Facilities, where the workflow platform handles much of the process. In theory,

this could offer headcount efficiency opportunities for brokers, but we have not seen evidence of this.

Carriers choose to participate in cross-class facilities for several reasons:

- Facilities provide exposure to low-volatility business at scale by placing small lines (<5%) across large, diversified portfolios.
- Participating in major broker facilities enhances carriers' lead propositions and strengthens relationships, as these facilities are integral to brokers' strategies.
- Facilities provide valuable data insights, helping carriers identify potential business opportunities they may have missed. One carrier reported participating without profit solely for the data benefits.
- Carriers leading facilities (often referred to as 'lead followers') can earn additional fees, choose lead markets and set the structure and terms.
- Facilities reflect a flexible way to increase and decrease total GWP without significant capital outlays or headcount increases.

These strategic reasons apply to both traditional crossclass and Digital and Algorithmic Broker Facilities, with additional benefits for the latter. Digital Broker Facilities integrate directly with policy administration systems, reducing middle office costs, and provide data analytics to validate portfolio quality. Algorithmic Broker Facilities enable carriers to selectively underwrite the broker's book, though anti-selection risks remain (discussed below).

# Capabilities required for Digital and Algorithmic Broker Facilities

### Portfolio analysis and steering

Portfolio analysis and steering are key to managing crossclass broker facilities. While carriers may be tied in through the course of the contract, real-time data will allow carriers to adjust reserving and course correct elsewhere in their portfolio. In addition, to get the most out of the facility, mining the data received to test portfolio hypotheses is key.

### Technology integration and process optimisation

Traditional facilities do not require technology integration, and Digital and Algorithmic Broker Facilities, cognisant of the fact that many carriers are not ready to absorb data via API, also provide bordereaux data via Excel. However, to obtain the value that Digital and Algorithmic Broker Facilities offer, integration into the carrier technology stack is required.

# What concerns are associated with Digital and Algorithmic Broker Facilities?

Some concerns carriers have historically had towards facilities remain, as outlined below.

#### 1. Anti-selection

Historically there have been issues with the anti-selection of cross-class facilities as placing brokers have put hard-to-place business through the facilities. Broker management is incentivised to make broker facilities a success, and significant attempts to address this issue are underway, through the provision of indexation data, and through edicts from broker management that business able to fit into a facility must do, unless specified by the client.



# Digital and Algorithmic Broker Facilities continued

Anti-selection concerns remain in several scenarios:

- Where placing brokers are not required to use the facility

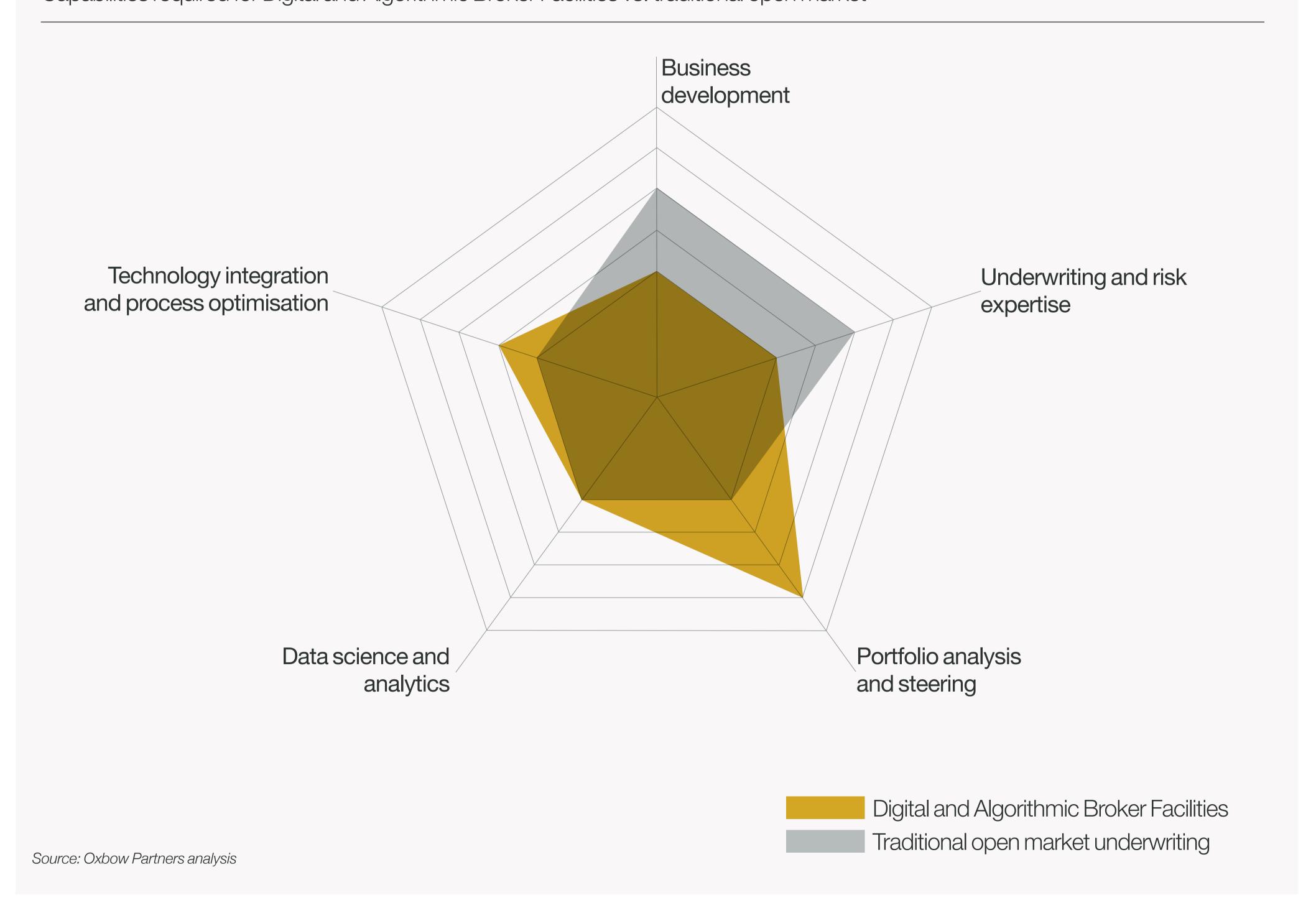
   this is the case in some broking houses.
- Where placing brokers are required to use a facility but have a choice of facilities to use. In some cases, placing brokers may choose to place business through their class-specific facility rather than the flagship, cross-class facility.
- Where facilities are designed to be a placement channel for other regions to easily place business into London, the concern is that good business will be written locally and poor business placed automatically into London.
- Where cross-class facilities are over indexed in less rateadequate classes of business, due to placement being driven through capacity needs.

Some interviewees argued that Algorithmic Broker Facilities remove the risk of anti-selection because carriers will only write risks within their appetite. However, unless all risks go through the facility, there remains a residual risk that placing brokers try to 'game' the algorithm, by placing poor business that appears in appetite.

On the other hand, Digital Broker Facilities that are plugged into the brokers' workflow and placing system do mitigate this risk because broker management can guarantee that all risks that could be written under the facility, will be.

Proponents of broker facilities argue that regardless, the anti-selection risk is overblown. This is for several reasons. Firstly, small lines across a diversified portfolio reduces volatility, and therefore downside risk. Second, the lead underwriting panel will still have assessed and priced the risk, regardless of quality. Finally, even if some anti-selection

Figure 37: **Digital and Algorithmic Broker Facilities require UW portfolio analysis skills** Capabilities required for Digital and Algorithmic Broker Facilities vs. traditional open market



# Digital and Algorithmic Broker Facilities continued

remains, this is outweighed by the benefit that the broker facilities provide through additional GWP or diversification of exposure.

### 2. Market cycles

Broker facilities, especially those of the major brokers, are essentially a market tracker play. Carriers have concerns that through the depths of the market cycle, this could result in a negative net underwriting result.

For those leading the broker facilities, digital or otherwise, the leader fees may mitigate losses through the soft market, especially when aggregated over the cycle.

# 3. Increased reliance on large brokers; changing commercial relationship between brokers and carriers

Some interviewees raised concerns that if carriers obtain a significant portion of their premium through the large broker facilities, they may become increasingly reliant on the larger brokers for business. We do not believe this changes the status quo; we estimate that around 35-45% of carrier premium is placed by the big 3 brokers, and 20-30% by the next major London market brokers. Carriers are already reliant on a few markets for business and have been since the market saw widespread broker consolidation in the 2000s and 2010s.

However, we do see a risk that broker facilities impact the commercial relationship. Joining a broker facility may improve and deepen the relationship in the short term; leading a broker facility even more so. However, as the market moves through the cycle, coming off a broker facility may result in challenging commercial conversations. Equally, while carriers may technically be allowed to change their appetite rules in an Algorithmic Broker Facility, they may encounter commercial tension when they seek to do so.

Figure 38: Net underwriting results are negative through the bottom of the cycle, indicating a threat for insurers managing market tracker propositions Aggregated Net Underwriting Result by Class of Business \$8bn \$6bn \$4bn \$2bn \$0bn -\$2bn -\$4bn Marine Energy Casualty Aviation -\$6bn 2014 2020 2023 2013 2015 2016 2017 2018 2019 2021 2022



Source: Oxbow Partners analysis, syndicate financial statements

# Digital and Algorithmic Broker Facilities continued

# 4. Analytics provided by Digital Broker Facilities are not harmonised with the rest of the portfolio

Some interviewees said that they liked the analytics on facilities provided by brokers, but questioned whether this additional benefit justified additional broker fees. They also thought that this data was less useful when viewed without the context of the rest of the portfolio – especially exposure and Realistic Disaster Scenario (RDS) data. Over time, they expected to build integrations with this data, at which point the value of it on a stand-alone basis diminishes.

## 5. Increasing fees

As facilities become a more established way to place business, and competition to be on the facilities increases, brokers may look to increase fees. We heard that carriers and brokers alike will need to be careful that if increases are not returned to the client, the net result of these additional fees are not simply reallocation of premium to the broker. We also heard that there may also be pressure on the facility leader to share leader fees with the broker.



# **Active Portfolio Trackers**

# Defining Active Portfolio Trackers

Active Portfolio Trackers are a model that aims to outperform the market by backing well-performing books of business with capacity via consortia or quota share arrangements. Supporting strong lead underwriting teams with capacity is nothing new; however, the explicit strategic focus and intent of these propositions is innovative. This model has been adopted by follow-only syndicates (Beazley Smart Tracker, Nephila, Hampden Risk Partners),

and more recently through a proliferation of Portfolio Solutions teams within established carriers.

## Why are carriers investing in Active Portfolio Trackers?

In this model, the work of winning, assessing and processing each risk is delegated to the active underwriting partner. This removes the need to hire underwriting, middle office and claims teams, leaving the Active Portfolio Tracker with admin costs of up to eight points lower than average. Some interviewees believed that theory here can be belied by reality; it can take time to recognise the efficiencies and Portfolio Solutions teams can erroneously see outsized internal shared costs allocated to their P&L.

The small team size (often just a handful of people) also makes it much faster to start an Active Portfolio Tracker proposition, and with considerably lower operational risk

Figure 39: Active Portfolio Trackers supports the books of high-flying underwriting teams Sub-models: Quota shares and Consortia

	Risk-by-Risk Underwriting				Portfolio Underwriting			
Models	Traditional Open Market Lead	Traditional Open Market Follow	Augmented Underwriting	Pure Algorithmic Underwriting	Traditional Broker Facilities	Digital and Algorithmic Broker Facilities	Active Portfolio Trackers	Traditional Delegated Authority
Description	Underwriter manually assesses individual risks based on judgement. No enhancement is involved.		Use of algorithmic judgement to support human decision making.	Full no-touch automation of underwriting decisions without human intervention.	Broker facilities, single-and cross-class.	Digital and algorithmically adjustable broker facilities.	Supports outperforming books of business via quota shares and consortia.	Traditional binder arrangements.
Sub-models			Rules-based triage	100% lead line		Digital	Quota shares	
			Risk scoring	Syndicated follow			Consortia	
Course on Market interview	o 000 1. Oub ou Doute ou o o o best		Risk insight					
Source: Market interview	s, 2024; Oxbow Partners analysis							

Executive summary

# Active Portfolio Trackers continued

compared with starting a new syndicate writing a traditional combination of lead and follow in the open market. It is also highly scalable, because underwriter headcount is largely decoupled from GWP.

The other key aspect at the centre of the Active Portfolio Tracker proposition is the opportunity to partner with the best performing underwriting teams in the market. This offers opportunities to achieve a better-than-average loss ratio. It is also attractive for capital providers who otherwise may not have the opportunity to access this high-quality risk.

Finally, depending on the lines written, the volatility of Active Portfolio Trackers could be lower than traditional open market underwriting because they are writing small lines across many diversified classes of business. (Note: teams still can and do make a strategic choice to follow more volatile business). More broadly, Active Portfolio Tracker teams that are part of larger businesses often choose to place capacity in classes of business they do not write elsewhere, diversifying their portfolio and offering capital benefits.

The lead underwriters being backed benefit in several ways. The additional capacity allows them to lay down larger lines, increasing relevance in the market. They can also charge additional consortia or leader fees. There are clear justifications for these fees; efficiency savings for followers can sit comfortably in the mid-to-high single digit points. However, as with any commercial tension, there is a tipping point and if fees are too high, the economic model breaks (Note too that the regulator will expect fee increases to be justified as appropriate.).

Executive summary

The top 3 strategic drivers of Active Portfolio Trackers highlighted by survey participants are:

### 1. Capitalise on UW expertise of other carriers

Active Portfolio Trackers enable carriers to benefit from the few 'true leaders' in the market, allowing them to benefit from top quartile underwriting performance in any class of business. This model is a cheap and flexible alternative to assembling a high-performing team of lead underwriters.

### 2. Learning

Providing capacity through an Active Portfolio Tracker allows carriers to gain insights from the leads they follow within new classes of business. This is jointly beneficial to the carriers' actuarial team, which can use the claims data on these books to inform their own pricing models.

## 3. Improved loss ratio

Through following high-performing lead underwriters, carriers will expect to experience a significant reduction in loss ratio. However, it is important to be conscious of leader or consortia fees, which dampen any overall COR benefit.

Instinctively, carriers may expect an expense ratio benefit from an Active Portfolio Tracker model. However, it is important to consider that the risk that admin cost benefits may be matched (if not surpassed) by additional commissions and fees charged by lead underwriters – especially as Active Portfolio Tracker propositions proliferate and competition heightens.



# Active Portfolio Trackers continued

# Capabilities required for Active Portfolio Trackers

The capabilities required for Active Portfolio Trackers are not dissimilar to those required for effective Delegated Authority underwriting. Indeed, we have seen some Portfolio Solutions teams that are run by underwriters who were previously focused on Delegated Authority.

## Portfolio analysis and steering

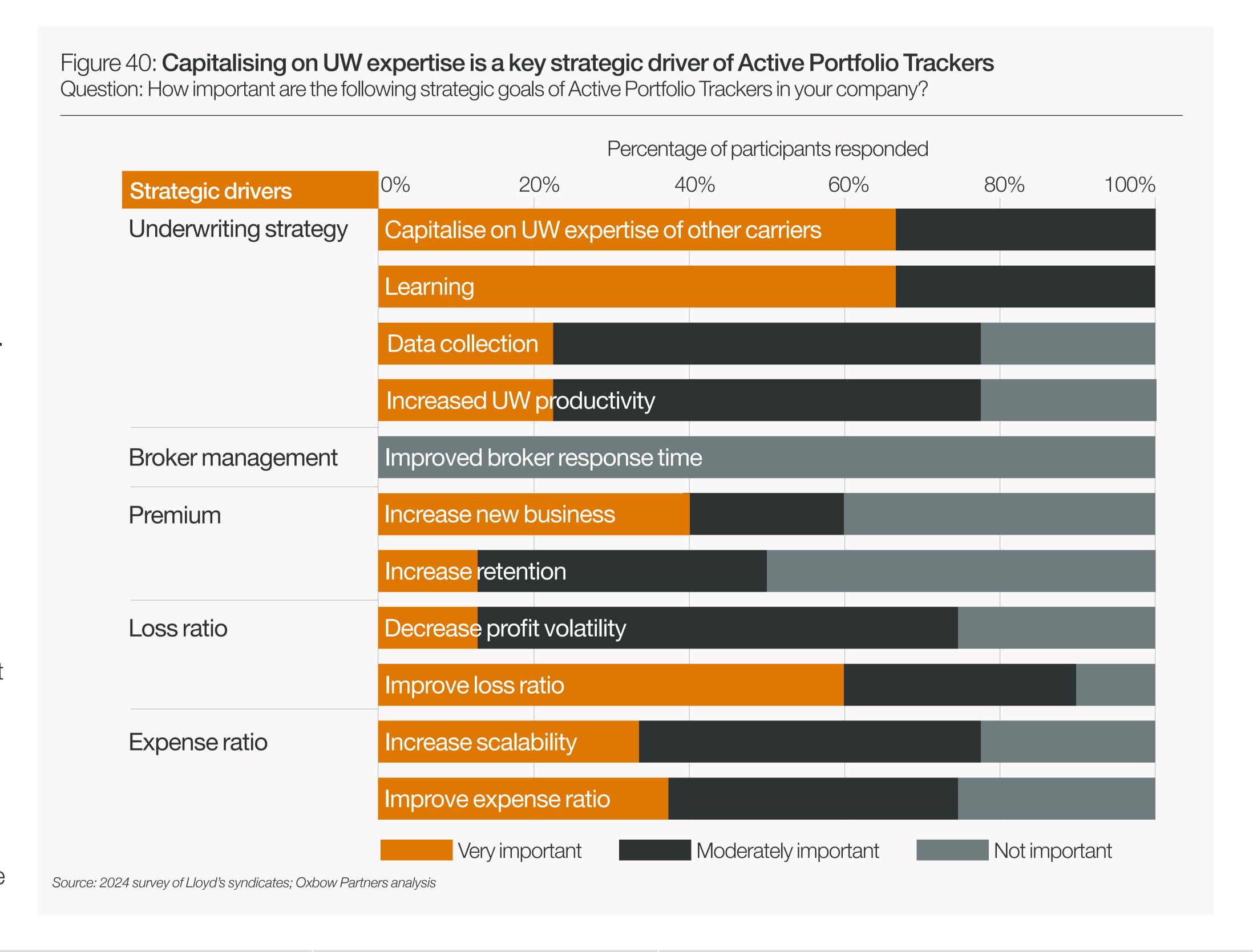
Portfolio management capabilities sit at the heart of the Active Portfolio Tracker model. Active Portfolio Trackers receive consortia data via market messages on a live basis. The best teams use this data to monitor the portfolio on a granular basis, identifying deviations from expectations quickly. They can then have targeted conversations with the active underwriting partner and update forecasts and reserving expectations. Quota share data arrives less frequently (e.g. quarterly) and can often be lower quality.

## Data science and analytics

Active Portfolio Trackers heavily rely on the ability to identify trusted and outperforming leads. The economics of this model rely on above-average underwriting results. These analytics skills are more akin to an equity researcher than a traditional open market underwriter. In some cases, market participants are hiring fund accountants to analyse underwriting performance of different classes and carriers in order to identify opportunities.

## **Business development**

At the core of the Active Portfolio Tracker proposition is the identification of good books of business to track. And, in a thread that runs through the history of Lloyd's, it tends to be the underwriting teams themselves, or even individual





# Active Portfolio Trackers continued

underwriters, that the Active Portfolio Tracker propositions are following, rather than the syndicate. Understanding who the outperforming underwriters are requires market intelligence, but significant data-led due diligence is conducted on the 'hearsay' that a particular underwriting team are outperforming market leaders.

Managing their active underwriting partners is a key capability for Active Portfolio Tracker propositions. Relationship management is a key cost, so Active Portfolio Tracker management seeks to balance having too many small deals with line size management. This is possible through having relationships with syndicates over multiple classes. Market interviewees had varying approaches to relationship management. Some take a hands-off approach, others have more frequent meetings and seek to share data – writing portfolios across the market offers an opportunity to spot wider market trends, and alert partners early.

# What concerns are associated with Active Portfolio Trackers?

The top 3 concerns of Active Portfolio Trackers highlighted by survey participants are:

## 1. Market cycles

A large number of carriers are choosing not to pursue an Active Portfolio Tracker proposition over concerns that it will leave them harshly exposed to the soft market. Interview participants noted that when rate adequate business is sparse, lead underwriters may insulate themselves and retain greater premium. This then reduces the pool that these propositions can access.

Figure 41: **Active Portfolio Tracker teams require significant portfolio analysis capabilities** Capabilities required for Active Portfolio Trackers vs. traditional open market



# Active Portfolio Trackers continued

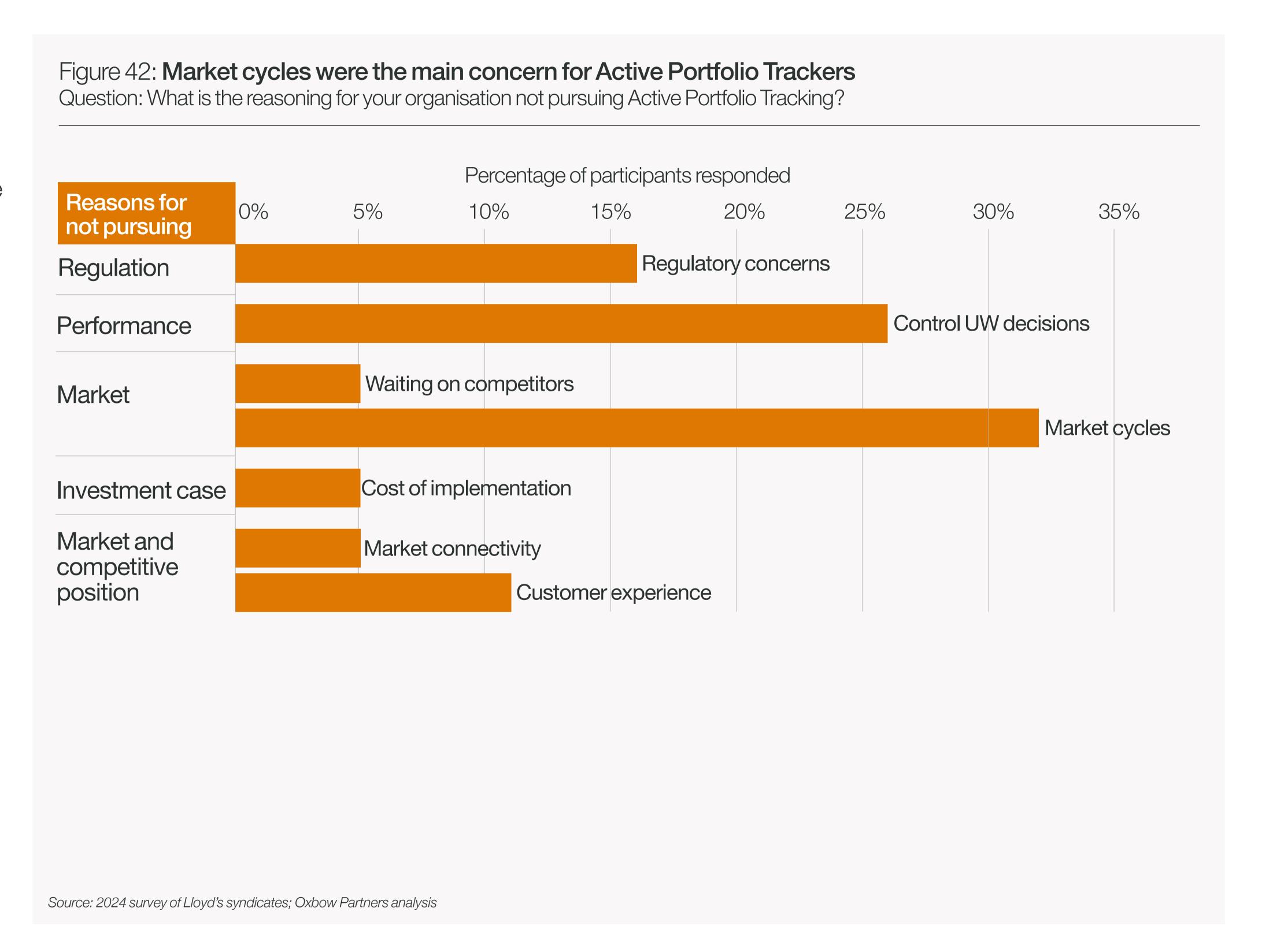
## 2. Loss of control of underwriting decisions

Carriers raised concerns that Active Portfolio Trackers were a form of blind follow, simply giving away the pen. We believe this to be a misunderstanding of the approach. Interviewees managing these vehicles were proud of the level of due diligence conducted on their partners – in some cases they told us it was more thorough than a typical coverholder assessment.

## 3. Regulatory concerns

There was a belief amongst several interview participants that the regulatory burden placed on follow-only propositions wasn't in proportion to their role on the slip. Given the success of this model rests on the ability to deploy capacity efficiently, the amount of regulatory process is a concern for some in their ability to deliver this model.

During our interviews, we also heard concerns about high competition for the best books of business driving up leader and consortia fees to the extent that the commercial benefits are being competed away. Additionally, we found that in some cases, reinsurers have been somewhat reticent to fully embrace this underwriting approach. They feel more removed from the risk-by-risk underwriting decision and, therefore, are less certain of the outcome, although this may improve with familiarity.



# Glossary

# ACORD (Association for Cooperative Operations Research and Development)

An international standards body that provides data standards and protocols for the global insurance industry.

#### **Active Portfolio Tracker**

An underwriting vehicle that provides follow capacity to selected lead underwriters through consortia or quota share arrangements. These include follow-only syndicates, such as Beazley Smart Tracker and Nephila, as well as in-house Portfolio Solutions teams.

#### Algorithm

A set of codified rules against which risks are assessed, and which result in a decision. Algorithms are precise and repeatable, and can be represented in flow chart or programming languages.

#### Algorithmic bias

Systematic errors in algorithms that lead to unfair or discriminatory outcomes, often caused by biased training data or flawed design.

#### Algorithmic Broker Facilities

A Digital Broker Facility that allows carriers to dynamically and digitally change their risk appetite.

#### **Alpha**

An underwriting strategy that aims to outperform the market and achieve excess returns through strategic risk-by-risk selection.

#### Alpha beta

An underwriting strategy that aims to selectively track the best portfolios of business.

#### **Anti-selection**

Occurs when brokers only show carriers a subset of their portfolio, leading to a risk that the best risks are not seen. Historically (and in some cases currently), this has been a particular issue for cross-class broker facilities.

#### Application Programming Interface (API)

An API is functionality and a set of protocols that allows software applications to connect and 'talk' to one another.

#### **Augmented Underwriting**

A model of Enhanced Underwriting in which the human underwriter remains central to decision making, and where underwriters are assisted by data and algorithms that triage submissions, score the risk and/or provide risk-specific insights to support them in their decision making.

#### Beta

An underwriting strategy that aims to track the market.

#### **Bifurcation**

The division of something into two branches or parts – in this case, the increased separation of the insurance market between lead and follow underwriting strategies.

#### Black box models

The concept that the process to derive an output from a model cannot be scrutinised because the user does not know or understand the internal structure or design of the model. Input and output values are transparent but the internal processes are not.

#### Blind follow

Automated follow capacity being triggered and placed on a slip based solely on who the lead is, and with no additional underwriting assessments.

#### **CDR**

A structured data standard (Core Data Record) including critical transactional data required to be captured at written line including premium, claims, tax and regulatory details.

#### Consortia

An agreement where multiple syndicates poo capacity and exposure for a position on the slip. Business is written under a consortium stamp.

#### Cross-class broker facilities

A broker facility under which insurers provide capacity across a range of classes of business.

#### Digital Broker Facilities

Cross-class broker facilities that integrate with brokers' placing and workflow systems, and can connect with carriers via APIs to provide data.

#### Differential pricing

When follow markets offer discounts or loads on the price set by the lead underwriter.

#### Fast-follow

The use of Enhanced Underwriting models to automatically allocate follow capacity. Also referred to as 'smart follow'.

#### Follow-only

A strategic decision taken by some syndicates to not lead any risks, only providing follow capacity within the Lloyd's market. These syndicates then optimise their operating model to this approach.

#### Machine learning

A subset of artificial intelligence that enables a system to autonomously improve using data and algorithms.

#### Many-to-many propositions

A digital placement proposition whereby multiple brokers can access capacity from multiple insurers. Examples include broker-owned platforms such as WTW's Neuron and technology provider-owned platforms such as InsurX.

#### Many-to-one propositions

Either a digital placement proposition whereby multiple brokers can access capacity from one insurer. Examples include 100% lead line propositions such as Aegis' Opal and Atrium's AU Gold. Alternatively the reverse, a digital placement proposition whereby a single broker can place risk with multiple carriers.

#### Placement platform

A digital platform designed to automate the placement of risks through algorithmic matching, also known as an 'e-trading platform'. These include Whitespace and PPL.

#### Portfolio underwriting

An underwriting approach whereby risks are assessed and managed at an aggregate portfolio level.

#### Pure Algorithmic Underwriting

The full automation of underwriting decisions aiming for straight-through processing (STP) without human intervention, often referred to as 'no-touch underwriting'.

#### Quota share

Agreement where a (re)insurer provides (re) insurance to another insurer based on a preagreed fixed split of premium and exposure within a given period.

#### Quote-and-bind system

Another name for Pure Algorithmic Underwriting systems, aimed at straight-through processing, usually built by carriers.

#### Risk-by-risk underwriting

An underwriting approach whereby each risk is assessed and written on an individual basis by an underwriter.

#### Risk insight

The use of an algorithm to deliver information about a risk based on data analysis, which can then be used to enhance underwriting decision making.

#### Risk scoring

The use of an algorithm to provide a score or flag, indicating the quality of a risk.

#### Rules-based triage

The use of an algorithm to filter and sort submissions and renewals based on preset rules.

#### **Smart follow**

The use of Enhanced Underwriting models to efficiently allocate follow capacity.
Also referred to as 'fast-follow'.

#### Straight-through processing (STP)

The full automation of the underwriting process without human intervention. Also known as 'no-touch' underwriting.

#### Workflow

A set of individual tasks needed to compete an activity (i.e underwrite a risk). Can be done manually or automatically.



# About the authors

# Greg Brown Oxbow Partners Partner

Greg leads Oxbow Partners engagements on digital, operational and technology strategy and transformation. He spends most of his time in the Lloyd's and London market and European retail insurance.

Topics include digitisation in the London market and the impact of Lloyd's Blueprint Two, strategic choices available to syndicates around the bifurcation of lead/follow and using technology as a vehicle to drive underwriting transformation. Greg is a regular commentator on transformation and digital topics, and often speaks at industry events.

#### Max Deacon Oxbow Partners Principal

Max leads Oxbow Partners underwriting strategy and operations projects, with a focus on the Lloyd's and London markets. Max previously built a network of climate-focused politicians, launched a tech startup, participated in several political campaigns and consulted at Oliver Wyman. Max studied History at Balliol College, Oxford.

# Eleanor Ewen Oxbow Partners Senior Consultant

Eleanor works on engagements across strategy and operations. Recently, she has collaborated with a major London market insurer to advance their Digital Follow proposition, and in 2023, supported RenaissanceRe with its integration with Validus Re. Eleanor studied History at Cardiff University.

#### Struan Hancock Oxbow Partners Consultant

Struan works on engagements across operations, strategy and M&A. He has completed a due diligence for a PE acquisition in the London market, an operating model redesign for a global (re) insurer and an underwriting workbench implementation within a Lloyd's syndicate. Struan studied Philosophy, Politics and Economics at Brasenose College, Oxford.

#### Elias Formaggia Oxbow Partners Consultant

Elias has worked on engagements within our Strategy practice and Market Intelligence Unit. Elias studied Biology at The Queen's College, Oxford.

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