

To Build or Buy?

A decision framework for
insurance pricing transformation

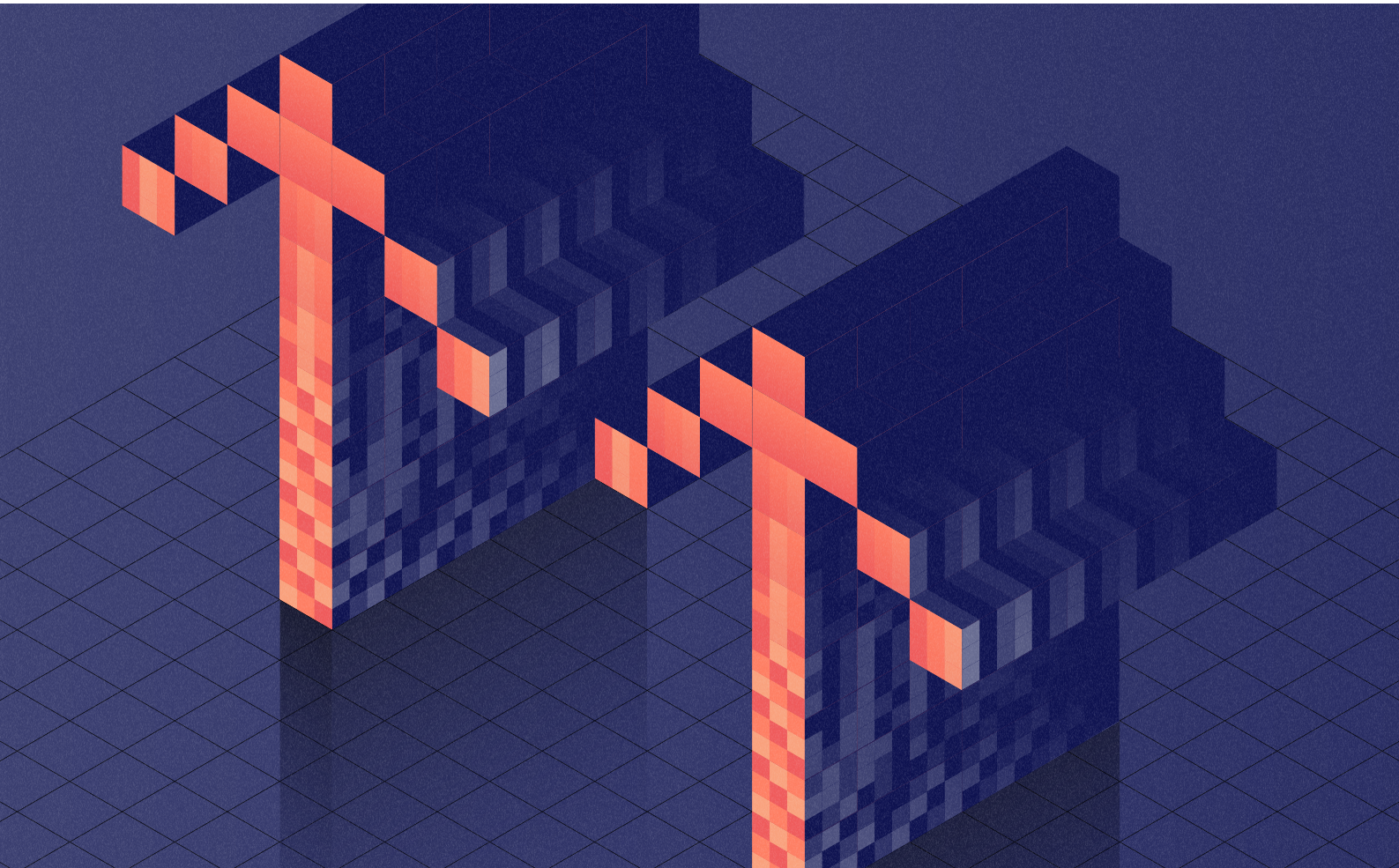


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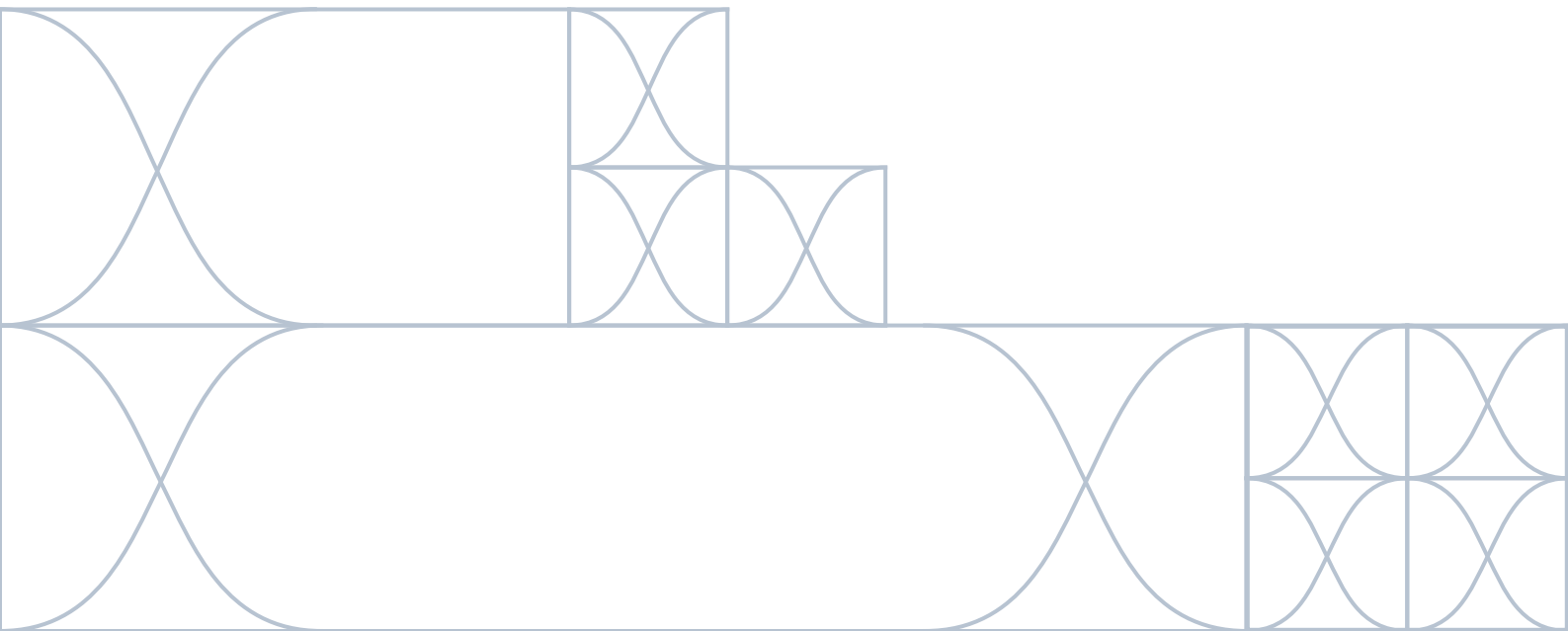
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01 Introduction

Technological advances are inspiring new waves of innovative solutions to industry challenges. In response, accelerating digital transformation is a growing priority for insurers looking to stay competitive.

Pricing is one of the most impactful areas of transformation for carriers, estimated by McKinsey to improve combined ratios by up to 6%pts. A whopping 83% of Specialty and Commercial insurers surveyed in 2023 said their pricing technology needs improving. The question is, how?

Every pricing transformation we've seen looks different. Different starting points, resources, objectives, regulations, and timescales all affect decision making around whether to develop pricing software in-house or partner with vendors. Making the right decision for your business requires thoughtful exploration of the options available in the context of your business objectives and priorities. The question of strategy is our starting point, before delving into the trade-offs to consider for both build and buy, then sharing a framework for the impartial assessment of each option.



02 Software isn't strategy

A considered decision on whether to build your pricing engine in-house, partner with relevant vendors, or adopt a hybrid approach starts with your business objectives. What needs to be true for your transformation efforts to be a success? What opportunities will you have unlocked for the business? It's crucial to be clear and aligned on the answer to these questions before you choose the pathway to getting there. If not, you'll waste time, money, and talent.

Introducing new software—whether built or bought—is not a strategy. What you do with it is.

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A compelling question for executive teams is whether pricing is indeed a strategic lever to their business, or not. Those who conclude that it is are more compelled to pursue a best-in-class approach—looking to integrate different software in a decision intelligence stack—as they target a sustained competitive advantage”



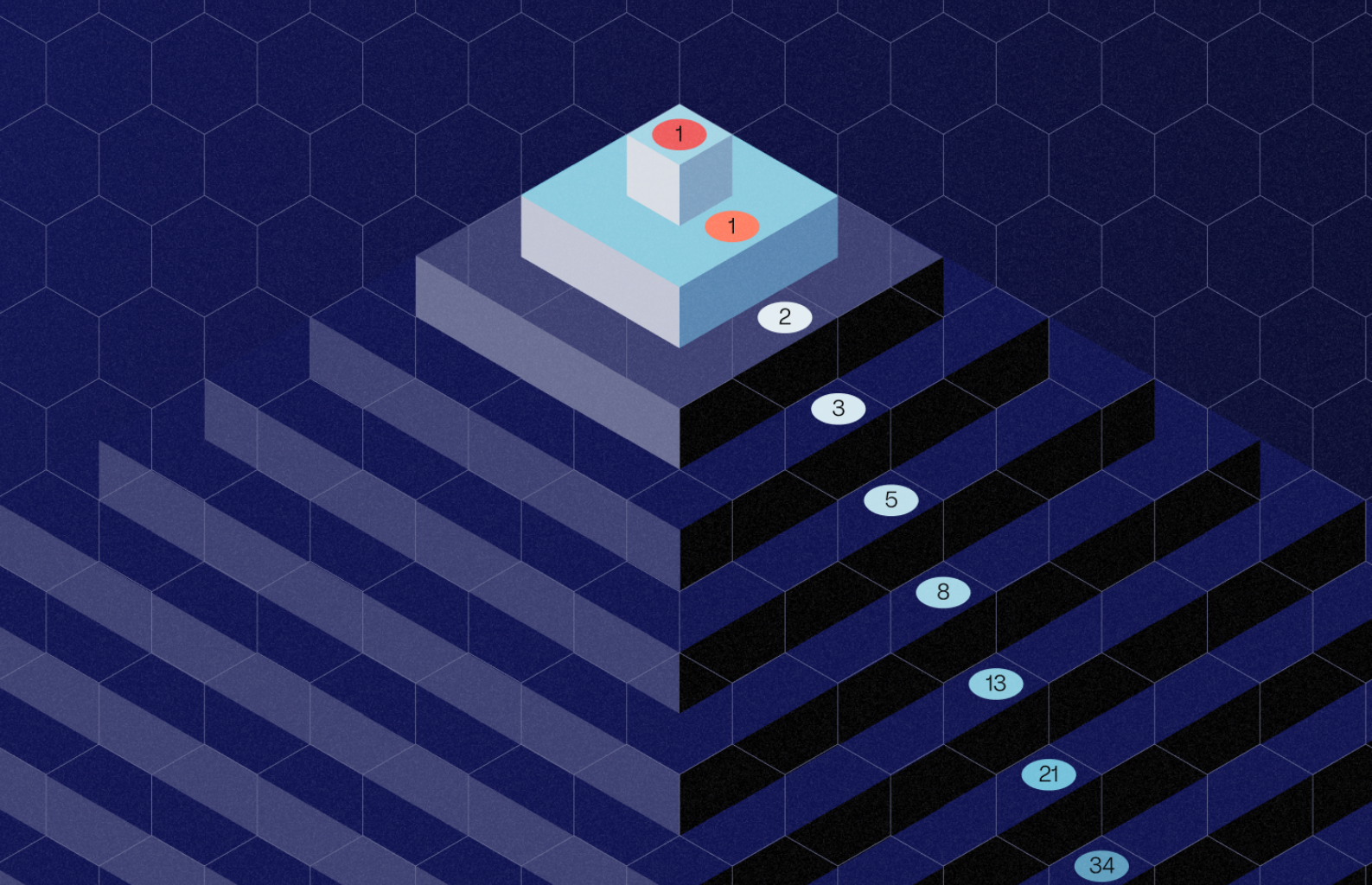
Tom Chamberlain,
VP Customer & Consulting

Define your strategic objectives

Clearly define how you want your pricing engine to support your differentiation and competitive advantage in the market in the short and long-term. Here are a few themes to prompt your thinking as you set your objectives:

THEME	OBJECTIVE
Streamlining the underwriter workflow	Attracting and retaining top talent amongst underwriters and improving their efficiency is key to our strategy. We therefore want to build a working environment which is both efficient and reflects modern tooling.
Powering rapid innovation in product offerings	As a capacity provider, we want to be market leaders in how quickly we can roll out to a new product line or geography. As a result, we want our Actuaries to be able to get a standard prototype in Underwriters hands in no more than a few days and live in 2 weeks.
Making data-driven pricing and underwriting decisions	To improve our loss ratio, we want to make better informed and more strategic risk selection and pricing decisions. To do so, we want to have the most accurate pricing models possible and give underwriters easy access to better data and insights at the point of underwriting.

Articulate how your investment will benefit your clients, for instance by enabling underwriters to respond to brokers more quickly, being more transparent about risk selection and pricing logic, or offering more competitive rates. Keep your objectives front and centre as you move through the planning and technology decision-making process.



Define your KPIs

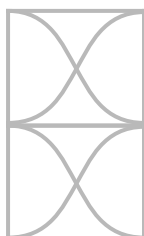
How can you demonstrate the impact of introducing new technology? Defining KPIs for reengineering your pricing system will vary depending on the specific goals and objectives of your organization. Improving combined and loss ratios are the macro metrics that insurers are looking to effect, but more directly measurable KPIs we see across customers include

- Reducing time-to-quote
- Reducing quote-to-bind times
- Improving rate adequacy
- Reducing time spent rekeying
- Increasing pricing model usage
- Reducing time-to-build of new models
- Reducing model update roll-out times
- Improving internal compliance
- Reducing time-to-market for new products
- Optimize product profitability

How urgently do you need to move the needle on your key metrics? Knowing this will help you set timelines for delivery.

Define functional and non-functional requirements

Once you know what you want to achieve and how you're going to assess progress against those objectives, you need to draw up the functional requirements for executing your pricing strategy and achieving the intended transformation. This is where you confirm what your pricing engine must do, including features and workflow integrations. You also need to research and establish what the non-functional requirements look like—the general properties of the system and infrastructure needed to ensure performance, security, and data compatibility.



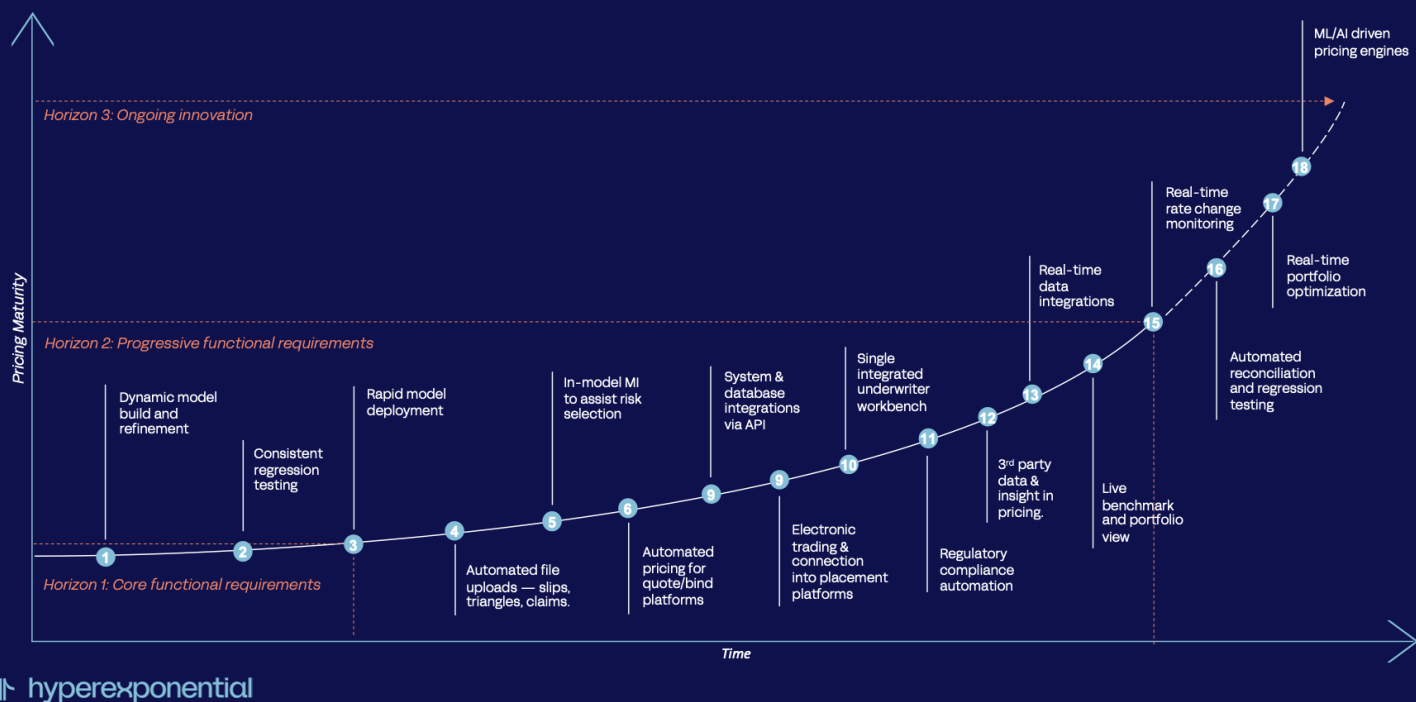
If you would like to see a list of expected functional and non-functional specifications for a modern pricing platform, please do [reach out here](#) and we'll send one your way.

Define your development philosophy

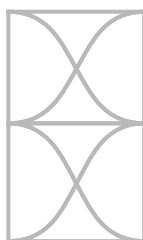
Big transformation projects can be exciting and intimidating in equal measure. On the one hand, you have a big vision of what the future looks like. On the other you have the sizable lift to make that reality happen. An important thing to remember is that you don't have to commit to all or nothing.

Whether built, bought, or combining both, we strongly advise taking an iterative approach to any technological transformation project, building a roadmap of enhancements that sees you get an early version of your product into the hands of users sooner rather than later. This approach means you can start seeing results from investments sooner and can adapt to learnings as you go, making efficiencies and optimizing ROI as part of the development process.

Pricing transformation roadmap



While taking an agile approach, insurers need to consider if and how the decisions they make on day one will enable them to expand their horizons and increase pricing maturity once their core requirements have been met. Also take into account the non-functional requirements of the system that are required to ensure it performs reliably, securely, and efficiently.

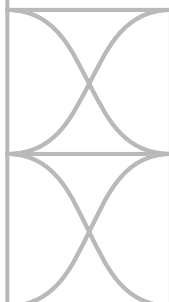


Reach out if you would like to learn more about the non-functional requirements of a pricing platform, based on our experience across the market.

Software developers have long embraced minimum viable products – a version of a product that includes only essential features, allowing for rapid development, testing, and iteration while providing value to users far more quickly than full development affords. This approach is more cost-efficient and risk averse than building everything before release. With regular opportunities for user feedback and validation, teams avoid over-engineering solutions or investing heavily in building tools and features that don't satisfy user needs on delivery.

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The question about continued innovation is often the tipping point of insurer decision-making. If pricing is seen as an administrative step in your underwriter workflow, and not something which you expect to evolve over time, then insurers are more inclined to build this themselves as it may require less investment over time.”



Jamie Wilson,
Head of Pricing & Innovation

When buying a pricing software, you can apply the same approach. Rather than doing all the setup and integration work upfront, focus on one or two priority use cases and rolling the essential functionality out to users. This applies to model development within the software too. Instead of building your full suite of models and then deploying them at once, build and deploy a key model first. This gives you the opportunity to start using and seeing the impact of the software more quickly, and to gather feedback from underwriters to improve how you build and roll out future models.

Going into the build vs buy decision process knowing what your essential use cases and functionality looks like and with a sense of future horizons will help you confirm priorities and time frames.

03 Build vs buy: the trade-offs

With clarity around your objectives, metrics, and priorities, you're equipped to start scoping out the ideal pathways to delivering them. Do you build, or do you buy?

Before applying any kind of decision framework, you need to thoroughly research what building your pricing engine vs partnering with suitable vendors will entail. You may find that critical requirements rule out certain options without the need to dive deeply into an evaluation process, such as the total cost of ownership for building in-house solutions, or a critical capability that no vendors offer. Here's a run-down of typical pros and cons for each approach.

Building your own pricing engine

Embarking on the journey of building your own pricing engine is a strategic undertaking with implications for the efficiency, competitiveness, and adaptability of your business. While demanding in terms of time, resources, and expertise, the prospect of internal development promises a proprietary and potentially differentiating asset that can shape the trajectory of your business.

We find that organizations opt to build their pricing engine if they have a cultural preference for developing and maintaining solutions internally, or they see proprietary technology as a core competency and how they'll achieve a competitive advantage in the market. Often, the decision is made from a belief that it will be more cost effective, but this is rarely the case when you take into account the costs of building and maintaining the underlying infrastructure (non-functional requirements), as well as innovating at the same pace as commercial vendors

On the next page you'll find a rundown of the common pros and cons associated with the build approach.

Pros and cons for building your pricing system

PROS

Full customization

In-house solutions can be fully customized to address the specific requirements and nuances of the organization, some of which may not be well-addressed by commercially available solutions.

Control over development and roadmap

The insurer has full control over the development process, including the ability to modify, enhance, and scale the solution as required.

Enables differentiation

Insurers can develop and own unique solutions that can contribute to their competitive edge, including the creation of intellectual property.

Attracts tech talent to IT team

Building an in-house solution can appeal to individuals seeking hands-on development experiences, bringing fresh tech talent into the business.

CONS

Substantial upfront investment

Building software demands hiring large teams and investing in substantial IT infrastructure, leading to significant initial costs.

Slow and uncertain time-to-value

Building even just a minimum viable pricing engine in-house can take 2–3 years, delaying the benefits and risking competitiveness against those adopting pre-built solutions.

Significant maintenance (and hidden) costs

After the build, maintenance and troubleshooting become an ongoing responsibility, often leading to hidden costs, especially as the company grows or scales their use of the solution.

Slower pace of innovation

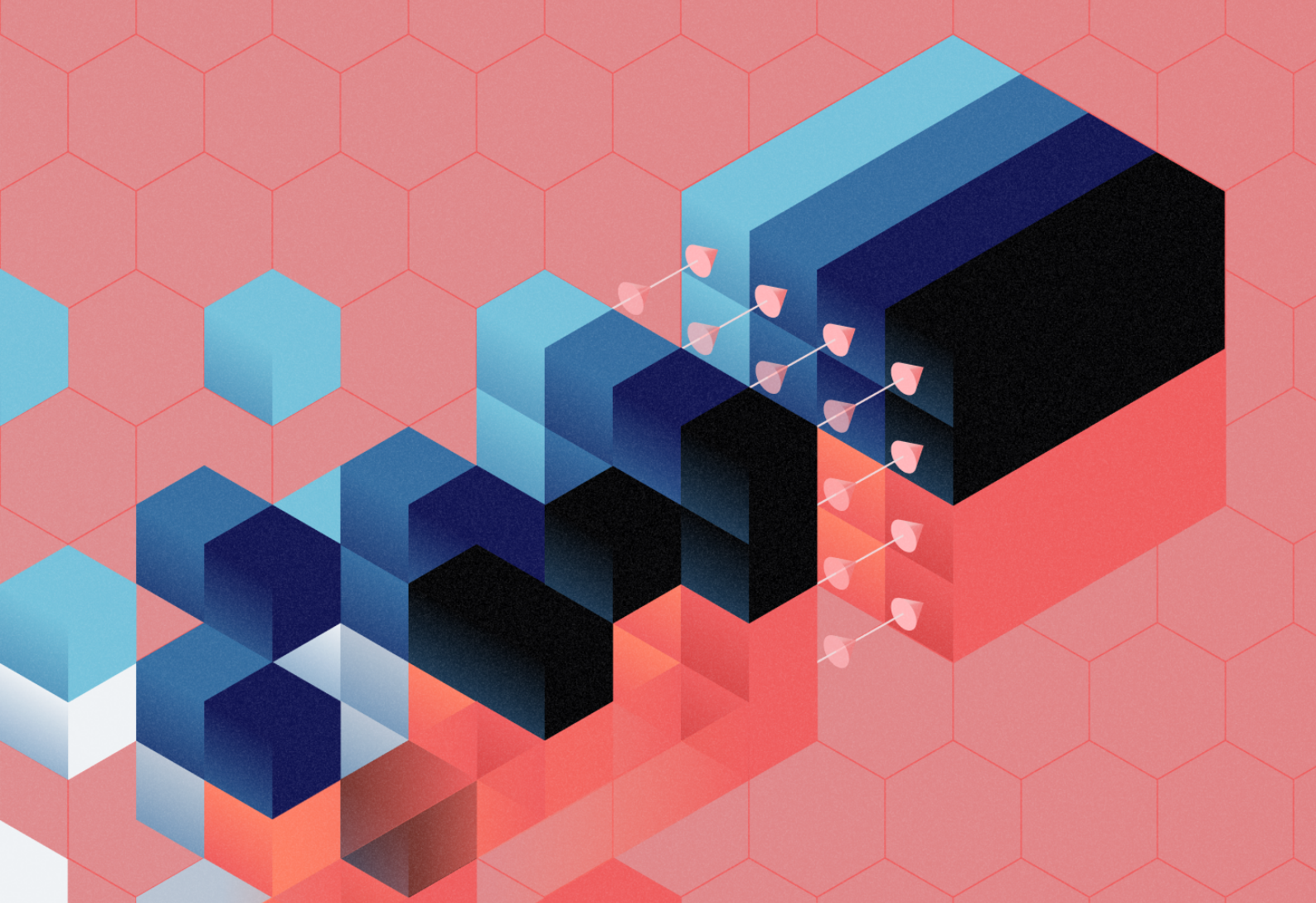
Internal teams may have a scarce supply of expertise in certain areas, including emerging skills like machine learning, leading to gaps in functionality and hampering innovation. The appetite to continue to invest may also wane, meaning your pricing teams are unable to continually innovate.

Security and regulatory issues

In-house solutions often fail to provide the same level of compliance as industry-specific SaaS solutions, struggling to monitor and keep pace with evolving standards.

Error-prone and lack of robustness

Governance of in-house code can be complex, and reliance on a small or thinly spread team can lead to issues and downtime, preventing effective underwriting.



Buying your pricing engine

Partnering with commercial vendors is a pragmatic and dynamic approach to delivering your pricing transformation, offering rapid access to a proven, pre-built system designed by industry experts. This route ensures a quicker time-to-value, enabling insurers to swiftly capitalize on advanced pricing methodologies, data integrations, and streamlined workflows without the prolonged development timeline.

While sacrificing some degree of customization and control over the product roadmap, your business benefits strategically from the provider's ongoing innovation, industry best practices, and the scalability needed to adapt to evolving market dynamics.

On the next page is snapshot of common pros and cons for the vendor approach.

Pros and cons for buying your pricing system

PROS

Lower total cost of ownership

External vendors handle build, updates, and maintenance, including all non-functional requirements, reducing the burden on internal resources and overall cost.

Insurance talent attraction and retention

Working with state-of-the-art software can attract skilled professionals and increase employee satisfaction. Younger talent increasingly expect to work with modern technologies.

Reliability and best practices

Market solutions benefit from vendor specialization and collective knowledge, so they are less prone to bugs and downtime and stay on top of regulatory standards.

Fast time-to-value

Vendor solutions are ready-to-use and typically quick to implement and see value from. You benefit from the full history of product development from the get-go.

Faster pace of innovation

Vendor solutions benefit from consistent investment in product development, using the latest technologies and ideas from across their customer base.

Access to expertise

External vendors often add value by sharing expertise and learnings from working with customers across the industry to solve similar problems.

CONS

Lack of control

Certain providers control model development, which makes them costly and slow to build and make changes to. Across all vendors, new feature development is dependent on their roadmap, which you can influence but not control.

Subscription fees or licensing costs

Usage typically requires continuous payment, resulting in ongoing costs that will likely increase as you grow and require more seats or capacity.

Professional services costs

Not all vendors are made equal. There will be some solutions which have a higher software licensing cost, whereas others may be lower but with considerable professional services support required.

Managing multiple vendors

You might have to manage multiple vendors to buy solutions that solve for all of your pricing requirements. Insurers who choose a best-in-class approach will need to be intentional about how they manage the set-up and integration.

Integration challenges

Vendor solutions may not always seamlessly integrate with an organization's existing infrastructure, which can cause additional costs and data compatibility and workflow issues.

04 A build vs buy decision matrix

If you've identified a vendor solution that aligns with your objectives and priorities, but are weighing up whether to build internally, applying a decision matrix can help you approach the decision in a structured and objective way. It involves systematically evaluating multiple factors against specific criteria to make an informed choice. Here are the five steps involved:

Step 1: Identify your decision criteria

Confirm the key criteria that are relevant to your objectives and constraints. These criteria should capture the most important factors influencing whether to build an in-house solution or partner with a software vendor. You'll want to limit yourself to maximum seven primary criteria to make the weighting of each meaningful. Common examples include:

Time-to-market: Speed of implementation and deployment.

Scalability: Suitability for rolling out across lines of business.

Total cost of ownership: Initial investment, maintenance, and hidden costs.

Control: Level of control over the development process and customization.

Innovation: Ability to innovate and enhance capabilities.

Security: Level of security and regulatory compliance.

Expertise: Dependencies on people and access to expertise.

Importantly, your chosen criteria and their weighting (Step 2) should be clearly derived from your pricing strategy and objectives. If, for instance, you have identified that you want to differentiate yourself by how quickly you can deploy new pricing models for new lines of business, this should be an intense area of focus.

Step 2: Assign weights to each criteria

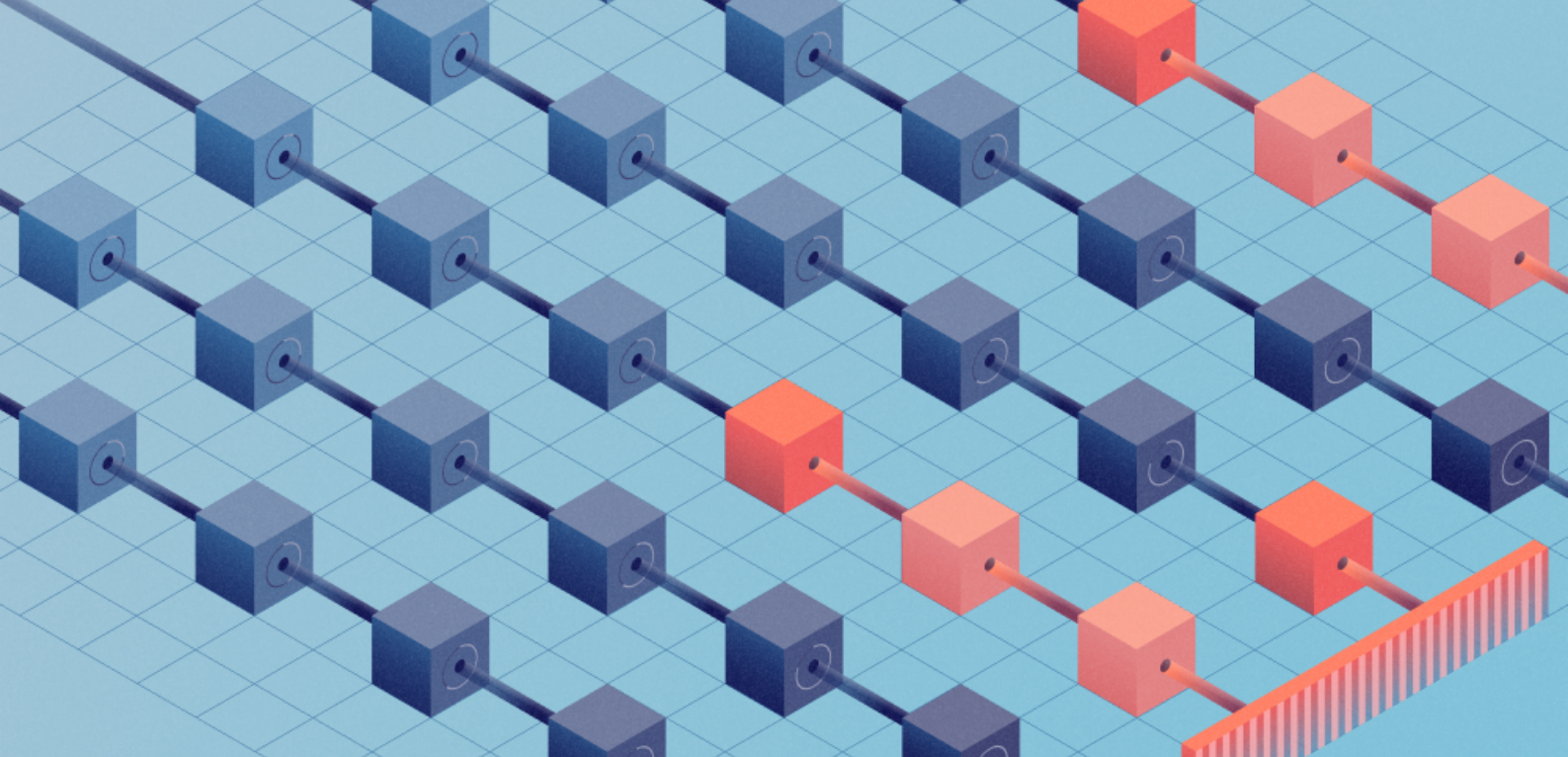
In collaboration with pricing transformation stakeholders, assign percentage weights to each criterion based on its importance in the decision-making process. The aim is to reflect the relative importance of each criterion in the context of achieving your business objectives and impacting KPIs. For example:

CRITERIA	WEIGHTING
Time-to-market	20%
Scalability	15%
Total cost of ownership	15%
Innovation	15%
Security	15%
Expertise	10%
Control	10%

Step 3: Research and evaluate your options

At this stage, you need to secure and review answers to key questions associated with your decision criteria.

- What's an estimated total cost of ownership for each option?
- How much internal resource can you allocate to the project?
- To what extent can you customize the solutions to your requirements and workflows?
- When could you expect to release a minimum viable product?
- What expertise will you have access to?
- How will regulatory standards be met and maintained?
- How quickly could you implement the solution across different lines of business?
- What does it take to integrate the solution with other key systems?



Evaluate each route, build and buy, against the defined criteria and then score them on a predetermined scale (e.g., 1 to 5, with 5 being the most favorable).

Be sure to include both your functional and non-functional requirements in the evaluation of criteria such as total cost of ownership and internal resource requirements.

CRITERIA	BUILD	BUY*
Time-to-market	2	4
Scalability	2	3
Total cost of ownership	2	3
Innovation	3	3
Security	3	4
Expertise	2	4
Control	4	2

* You may choose to do this scoring ahead of going through a vendor selection, however many insurers choose to apply this framework to multiple vendors, treating “Build” as one of the options in their procurement process.

Step 4: Calculate weighted scores

Multiply the scores by the assigned weights for each criterion and sum them up to get the weighted scores for both options.

CRITERIA	BUILD	BUY
Time-to-market	0.40	0.80
Scalability	0.30	0.45
Total cost of ownership	0.30	0.45
Innovation	0.45	0.45
Security	0.45	0.60
Expertise	0.30	0.60
Control	0.40	0.20
TOTAL SCORE	2.60	3.55

Step 5: Decision

Compare the total weighted scores for the build and buy options. The option with the higher total weighted score is the one that aligns more closely with your specific business needs and constraints across. If scores are close, lean on your understanding of the bigger picture, going back to your core business objectives and make your final decision on how to best allocate the resources available to you to drive profitability.

Final remarks

Navigating the decision between building or buying a pricing engine is pivotal demands a comprehensive understanding of strategic objectives and trade-offs. The build option, fostering internal control and differentiation, requires substantial investment and time, potentially risking delayed benefits and hidden costs. Conversely, the buy option, leveraging external expertise, offers faster implementation, innovation, and cost efficiency but sacrifices some customization.

The decision matrix provided serves as a structured guide, enabling an objective assessment of key criteria. Ultimately, whether building or buying, aligning with your unique business goals remains paramount in achieving sustainable and impactful pricing transformation.

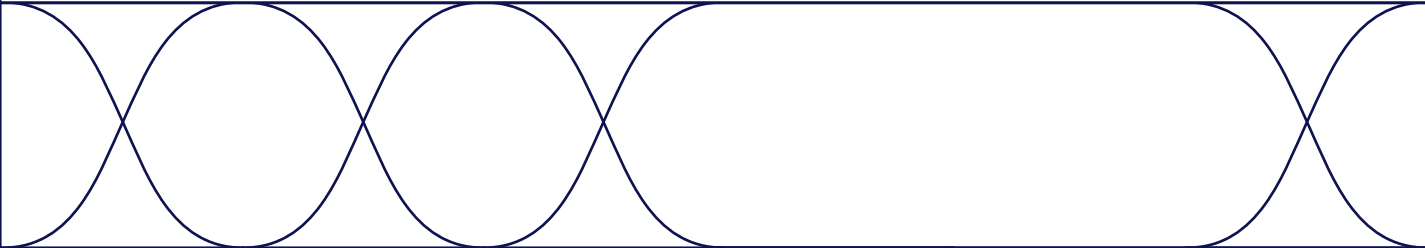
About hyperexponential

hyperexponential has built the world's first pricing decision intelligence platform for insurers, hx Renew. It reimagines the flow from data to decision, creating a feedback loop that continuously strengthens the data assets, insights, and decisions of insurers and ultimately their bottom line.

Some of the most established insurance brands write over £22bn of premium annually in hx Renew. hyperexponential is backed by Highland Europe, a global leader in software innovation. The company is headquartered in London, with an office in Warsaw.

For more information on how hx Renew can help you achieve pricing and underwriting excellence, [contact us today](#).

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