



Actuarial Transformation

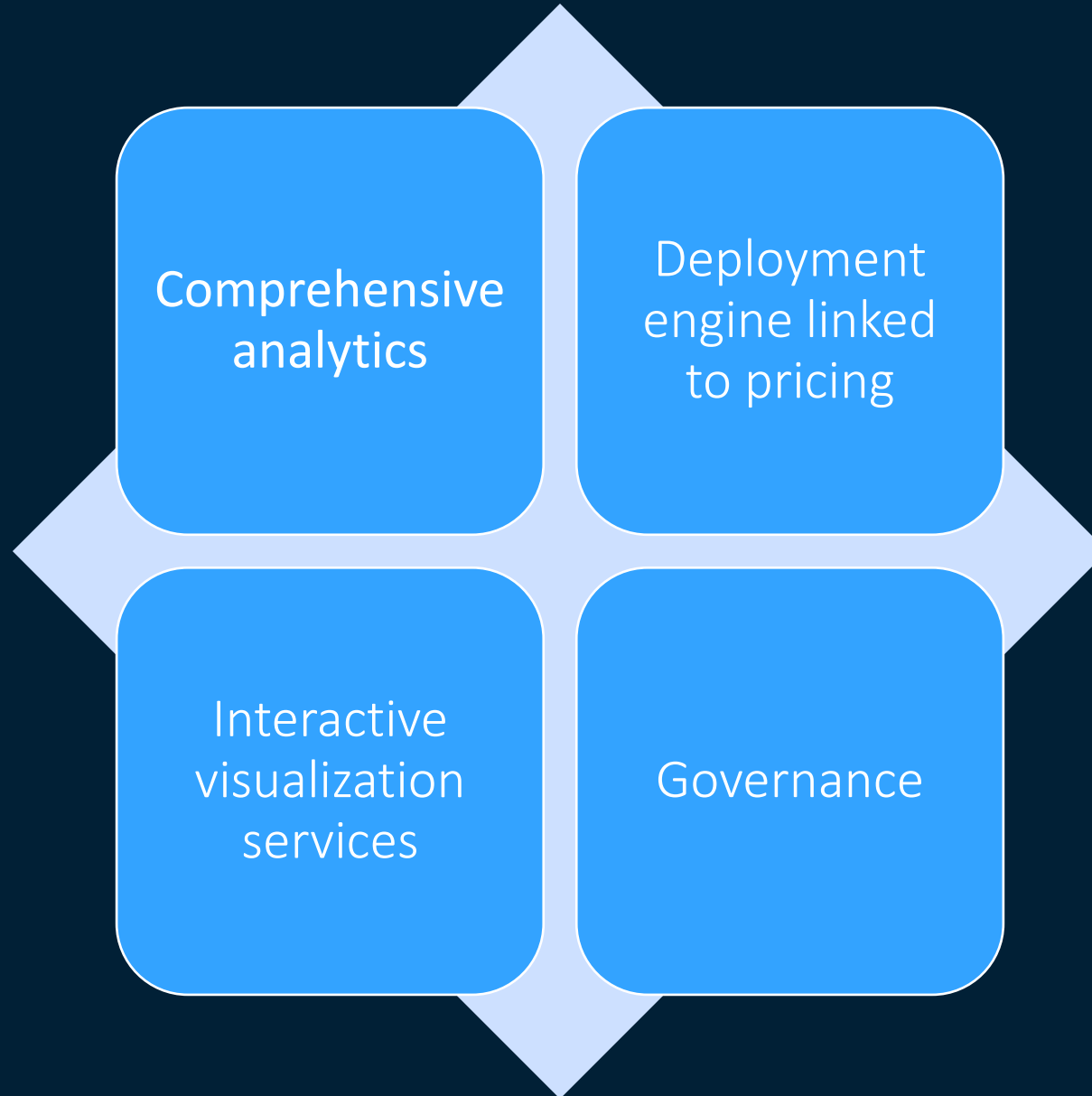
GI Pricing



Agenda

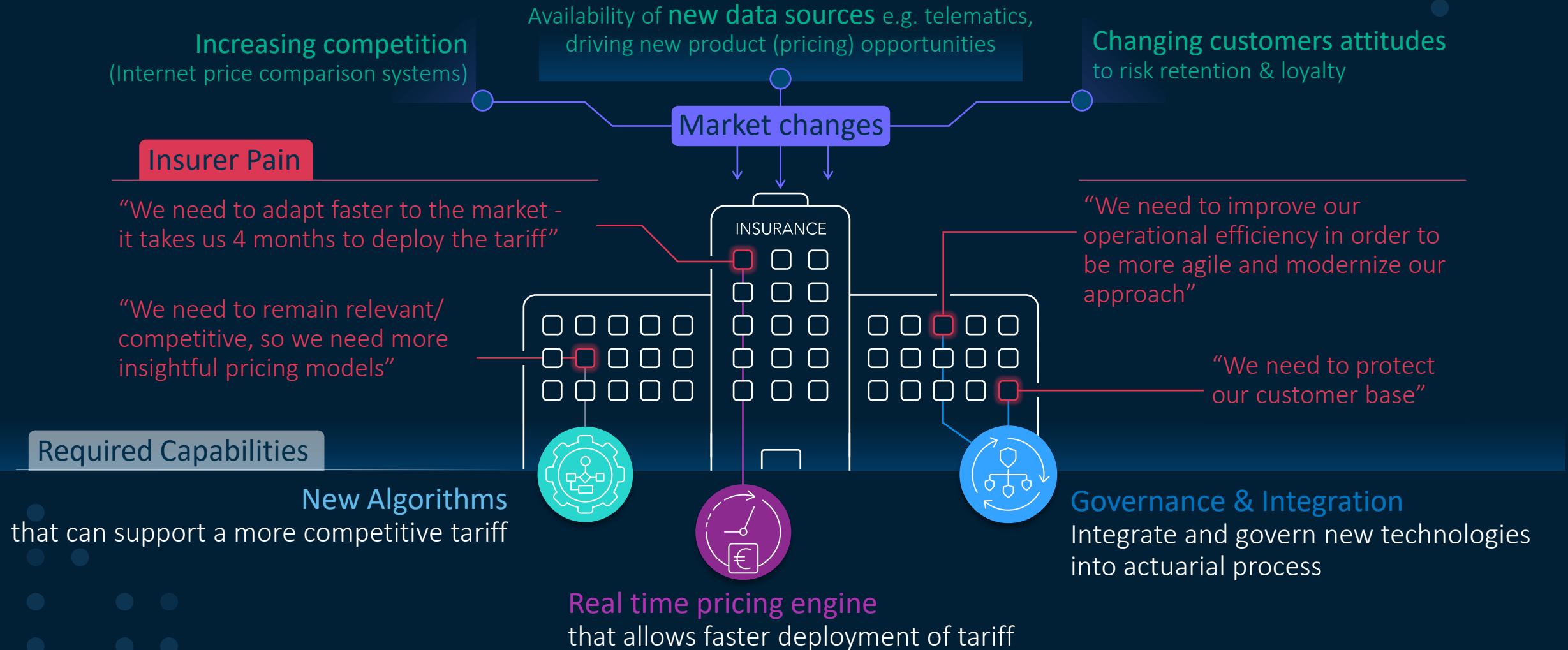
1. Actuarial Transformation – GI Pricing
2. Renewal Optimization
3. Q & A

Key Actuarial Transformation Trends



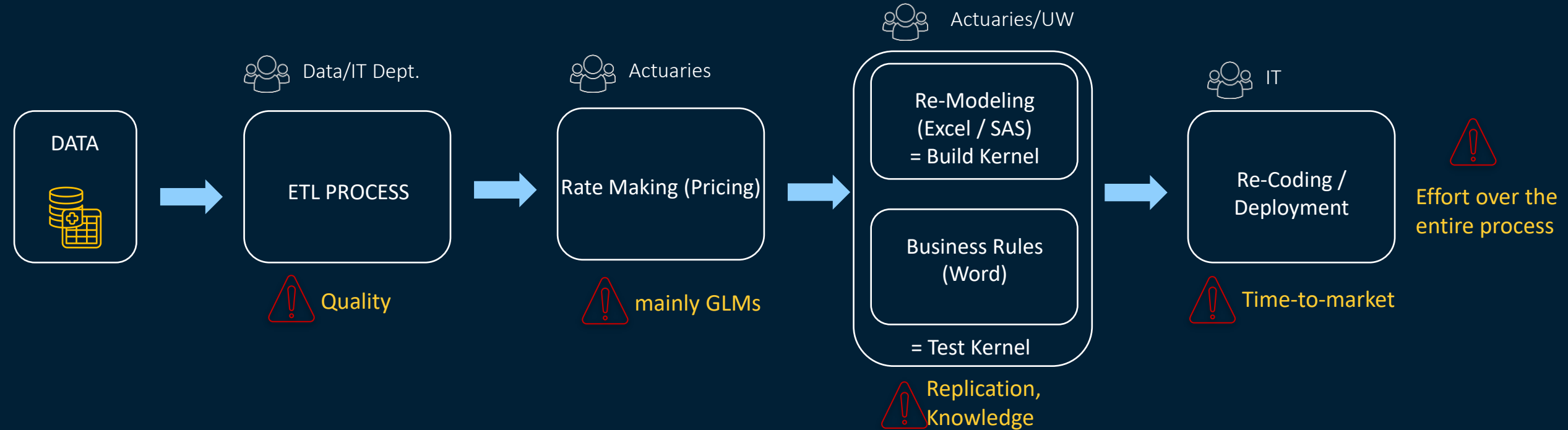
What is Actuarial Transformation?

Why Insurers Should Invest Now



Actuarial Transformation – GI Pricing

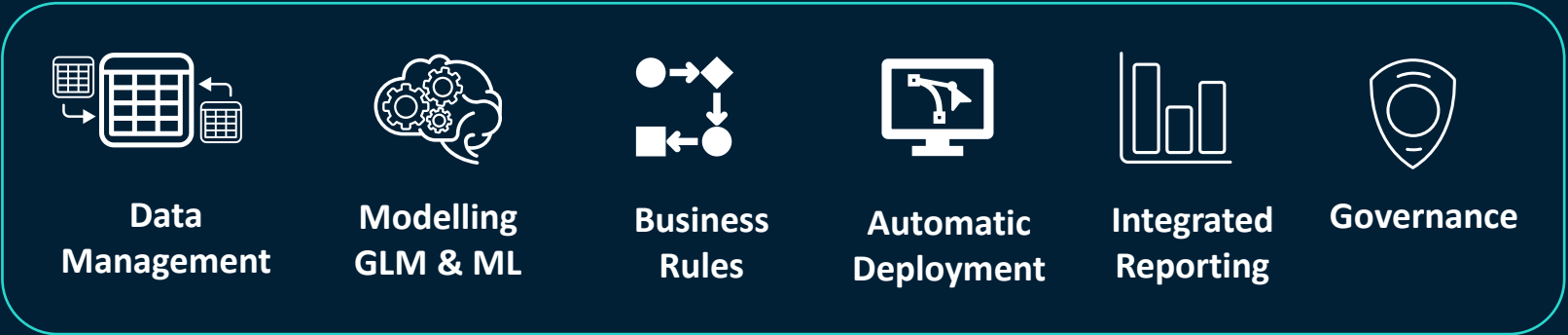
Customer Challenge – Sample Customer Process



End to End GI Pricing



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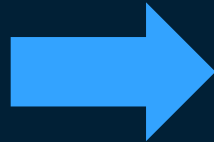
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Difference made with Actuarial Transformation

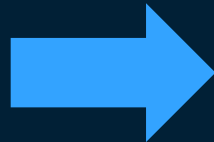
Real life examples

BREAK DATA SILOS



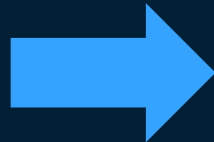
↓ 15% of DQ issues in data used for modeling
↓ 20% of time used to integrate external sources

INNOVATION IN MODELING



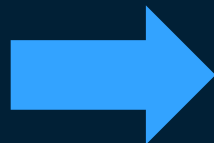
↓ 50% of cost of modeling premium

DEPLOYMENT AUTOMATION



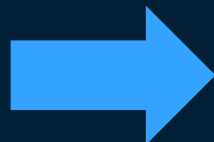
↓ 75% of cost of deployment

FASTER TIME TO MARKET



↓ 95% time of deployment

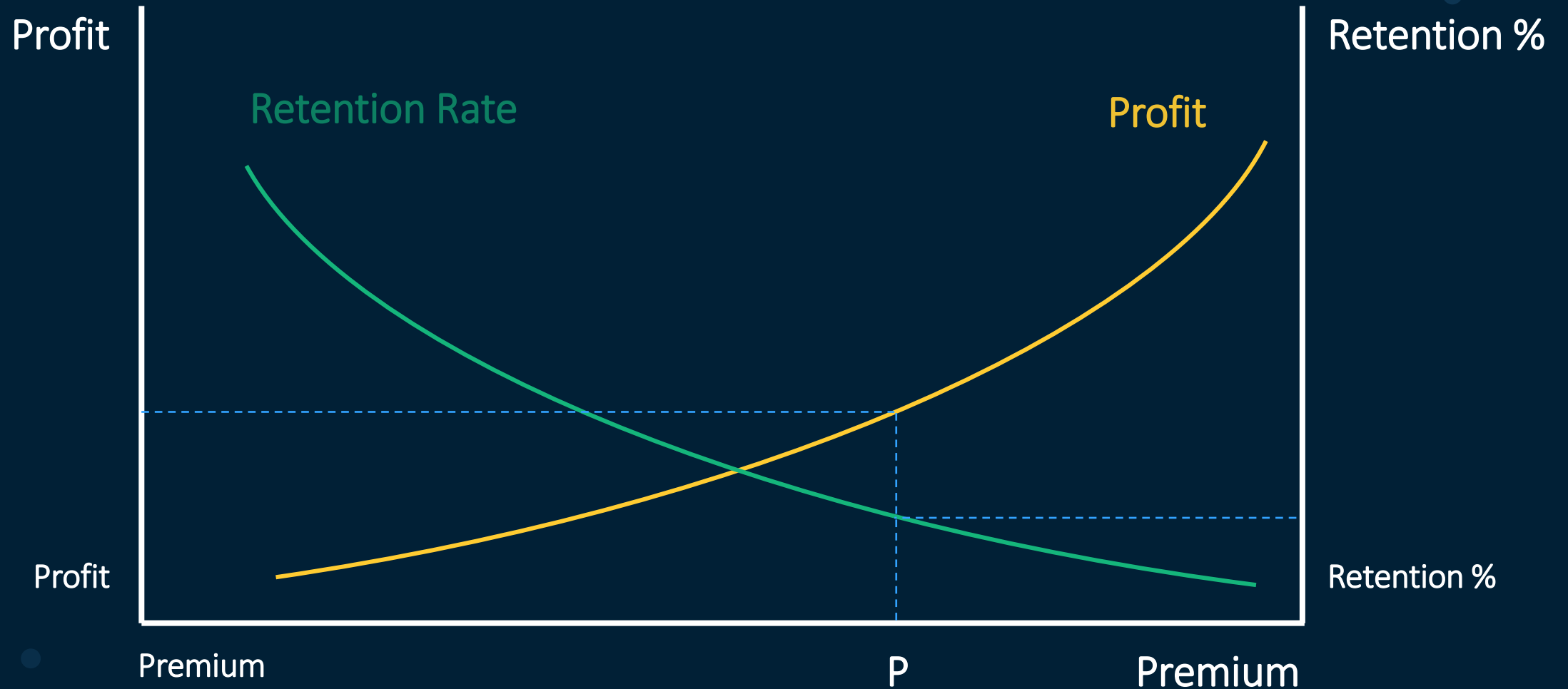
INTEGRATED ENVIRONMENT



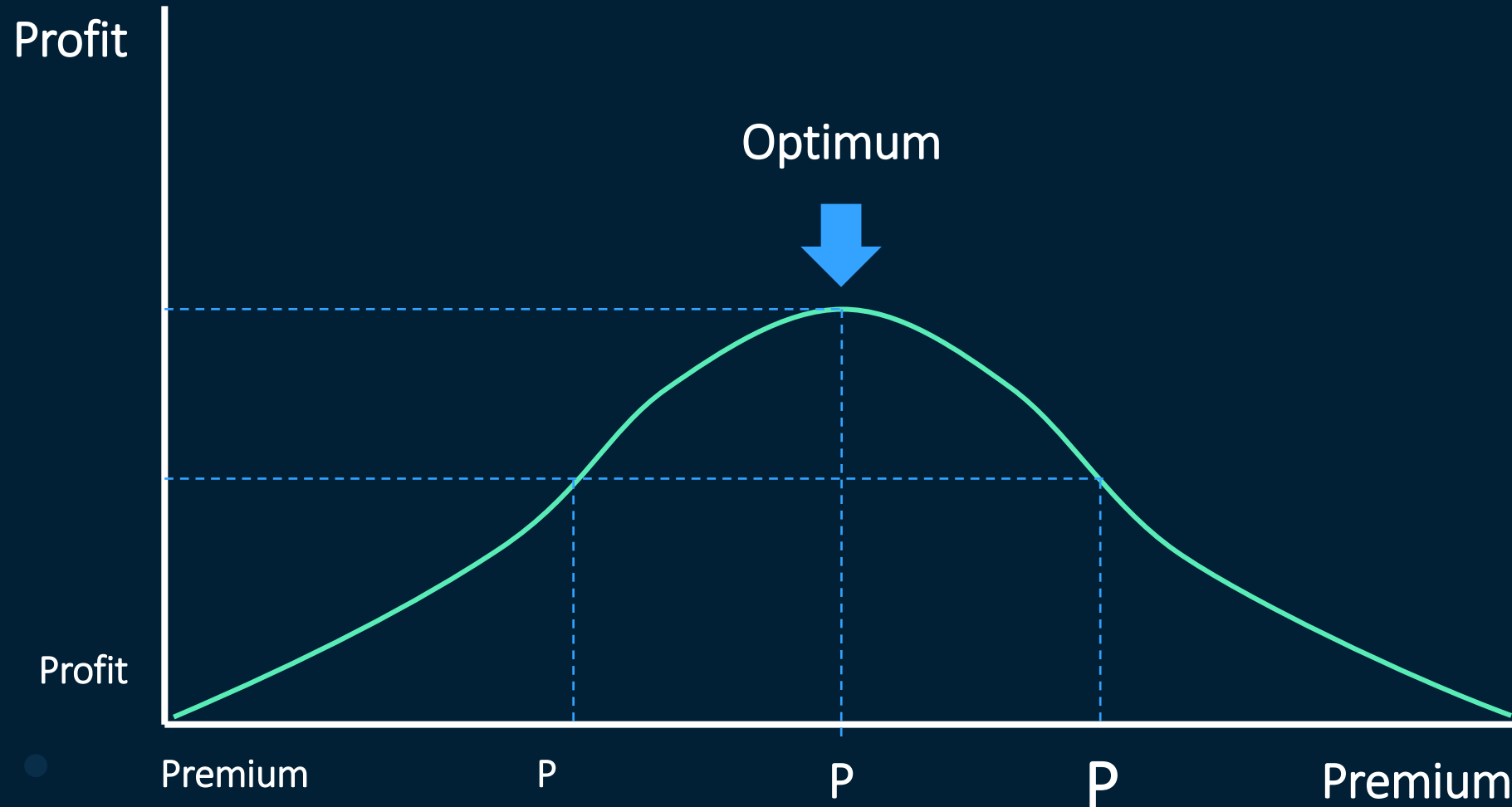
↑ 88% of Actuaries said AT improved their way of working

Renewal Optimization

Renewal Optimization: The concept



Renewal Optimization: The concept



Pre-requisites for optimization

Experience



- We need experience on price changes prior to this process

Model



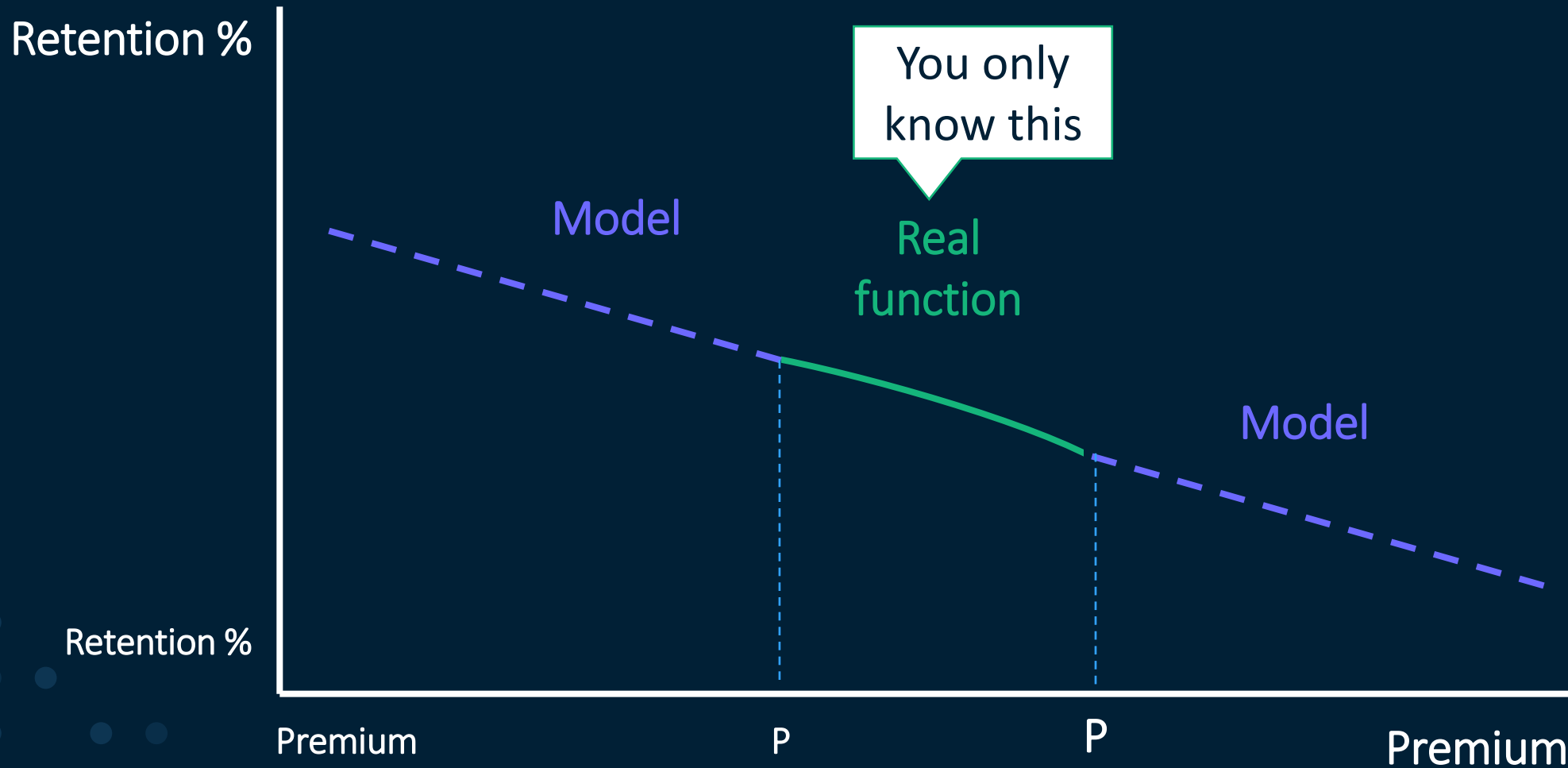
- We need a retention/lapse model based on experience, including price changes

Strategy

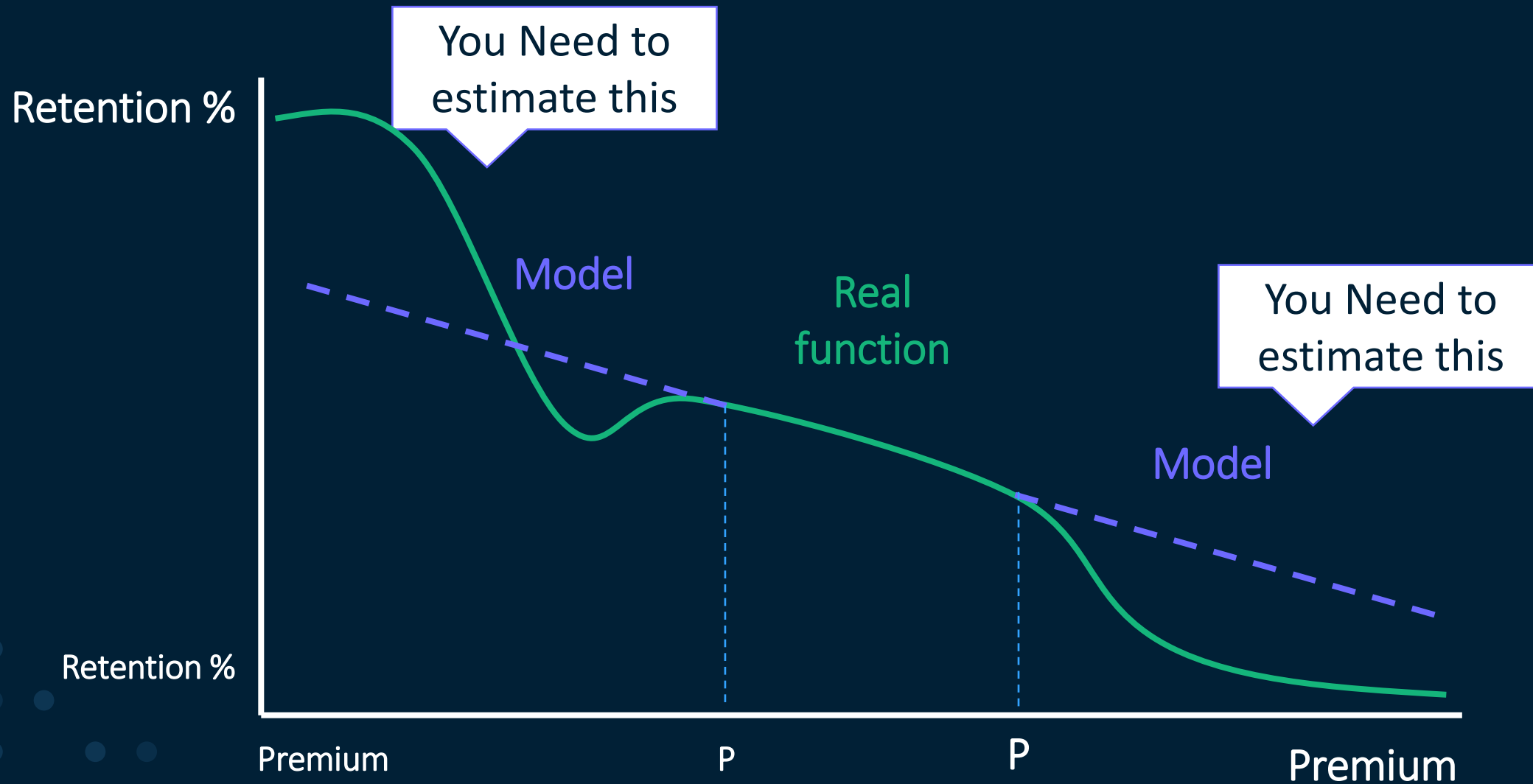


- We need to set a strategy and appropriate constraints for the optimization to fulfil the corporate objective

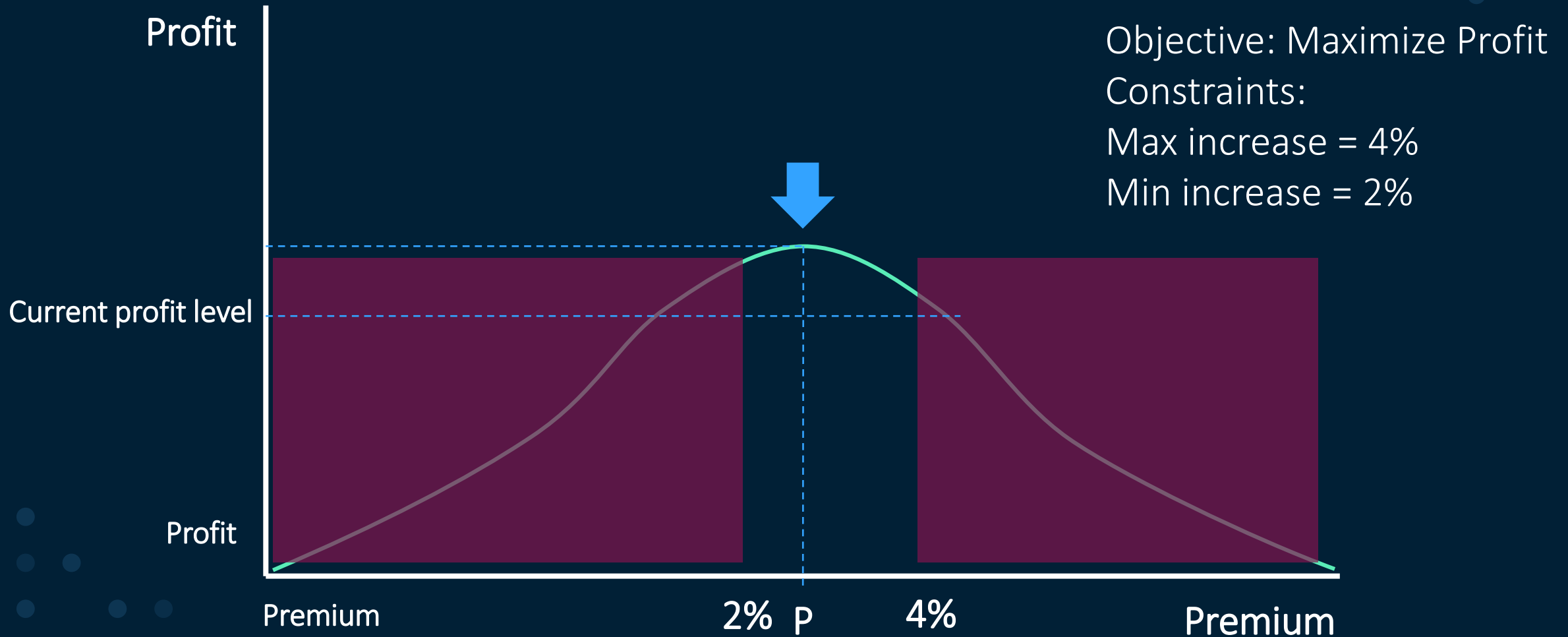
Experience is what we already know



A Model is needed to estimate what you do not know



Strategy is the kind of constraints and objective you want for your optimization



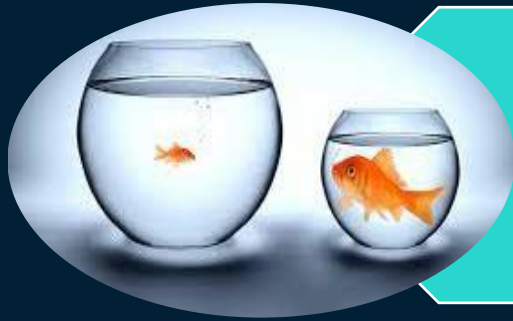
Portfolio Profit increase from 20 up to 50%



+20% to +50%

In our experience always has
ROI > 0% and
Payback < 1 year

What are the concerns?



Unfair pricing:
When the Price increase is completely unrelated to risk



Predate on the weak:
Vulnerable segments are usually inelastic to price (i.e. they would pay any increase)



Black box:
Optimization algorithms are Black boxes by definition, it is very difficult to explain

How to address these concerns?



Fair Pricing:

Use risk level or past claims history to set price increase
Good customer may have a DECREASE in their premiums



Protect the weak:

Use specific constraints to protect the vulnerable segments by setting the max increase for them



Transparent:

Combination of the constraints and a powerful data visualization tool can provide a clear view on the result

Conclusions - Pricing

An unified end-to-end pricing platform consists of

- data preparation and data exploring
- modeling with both traditional and advance machine learning capabilities
- real-time deployment
- integrated reporting

will significantly increase the efficiency and productivity

Conclusions - Optimization

Optimization is a powerful tool:

- Improves profit from existing portfolio
- Helps you to fulfil Corporate objectives

However, you need to be careful to:

- Comply with pre-requisites before starting
- Ensure pricing fairness in order to address regulator's concern



Thank You

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