



INT.

WHITEPAPER

# Reshaping Underwriting Landscape **With Focussing On Customer Experience**



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# INTRODUCTION

The COVID-19 pandemic has changed the behaviour of the economic factors in the insurance industry. There is a fall in global premium by 2.1 per cent, and the massive demand led by the crisis has redirected the logic of selling insurance from a “pure-product” to a “holistic service” approach. Ages before, when insurance was either considered mandatory or a basic necessity to deal with the catastrophe, insurers never considered moving beyond the product concept. Customer experience was the least priority. But time changes, so does customer behaviour. Due to the proliferation of the internet, the market power has shifted to the consumer. Easy exchange of information elevates the importance of customer experience in purchasing decisions.

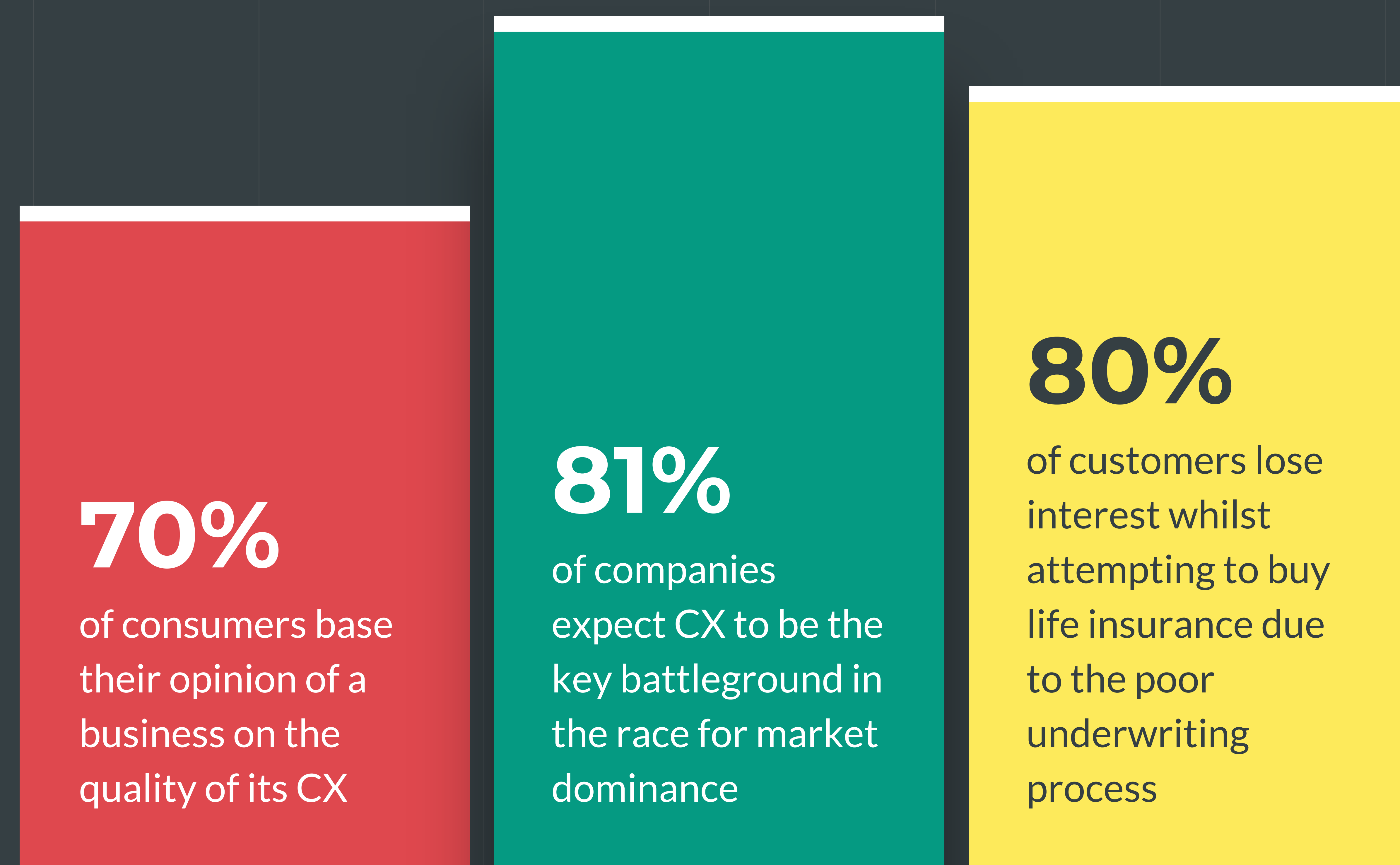
When we consider buying insurance, it is not anymore a tedious work as it used to be. Digital insurance is transforming the customer experience. 8 per cent growth in customers buying insurance online has been reported from 2011 to 2020 in the US. Despite rapid advancement in digital insurance, still, some bottlenecks pose challenges for the overall customer experience.

The legacy underwriting system is fraught with inefficiencies. Delayed generation of quoting premium results in poor customer experience as this requires carriers to collect a lot of information from the customer, including a lot of back and forth. Moreover, the wrong price quote by the carrier results in redoing the process from the beginning, which is unproductive from the customer perspective.

To remain competitive, insurers must accelerate the underwriting process. But in order to do so, carriers must deal with a rising agent and broker dissatisfaction with the underwriting platforms, competing with insurtechs and the legacy technology. Thus well-defined digital transformation for underwriting means a “rewarding customer journey from obtaining an initial quote through policy issuance, service and renewal”.

This paper will discuss the strategic challenges the underwriting process faces in digital transformation, proven solutions from across the industry leaders to stay ahead of the competitive landscape for the next decade.

## Why must the insurance underwriting process consider **customer experience as important for purchasing decisions?**

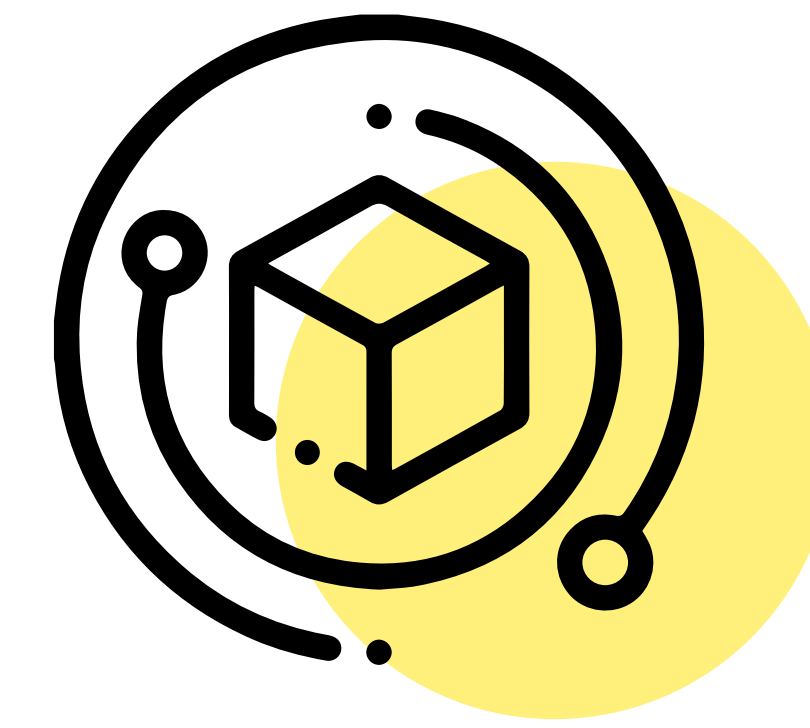


Source: Mckinsey



# Three Strategic Challenges and Imperative Solutions

## To Underwriting Transformation Journey



**Realizing** the full potential of Big Data



**Rising demand** for efficient Pricing Policy



**Higher Operational Cost** in traditional underwriting



## 01. Realizing the full potential of Big Data

With market dynamics evolving at a tremendous pace, insurance industries are expected to stay aligned with the data-rich world. But, Quantiphi report suggests that “80 per cent of data received by underwriters is unstructured”. Mostly these are in the form of forms, email, pdf and images. Therefore extracting meaningful data from it leads to a huge processing time which lowers the efficiency of the underwriting team.



**of data received by  
underwriters are in the  
unstructured form**

Source: Quantiphi





## Challenge 01

### **Confluence of unstructured data and legacy system prevents from making actionable insights**

In a traditional insurance system, there is a barrier to seamless integration among different data depositories. It is often noted that each business has its own way of capturing data which they fail to communicate or share with other business units. Therefore, preventing insurance companies from realising the full potential of data.

**Solution:** Build an integrated single platform that integrates new and existing data sources and makes data actionable by leveraging advanced analytical tools.

## Challenge 02

### **Deployed actionable data insights only for the product level and not at a customer level**

Often customer insights are lost in silos more because they are scattered across the functional lines of the process. Also, there is a lack of predefined terms on customer insights; thus, insurance companies fail to recognise customers at different stages of the policy life cycle. Also, other business units fail to convey the insight for a particular customer to the other business unit, which further leads to an increase in expenses.

**Solution:** Build customer-centric analytics solution for precise marketing, customer retention and increasing profit. This will make each business unit enhance the customer value across the policy lifecycle.



# Big Data in Insurance

Core Data Type	Why Insurance?	Application in	Data Sources	Technology Partner's Proposition
IoT	<ul style="list-style-type: none"><li>◦ Record data on policyholders driving patterns and lifestyle patterns.</li><li>◦ To get accurate information on the scale of damage</li></ul>	<ul style="list-style-type: none"><li>◦ Automotive Insurance</li><li>◦ Life Insurance</li><li>◦ P&amp;C Insurance</li></ul>	<ul style="list-style-type: none"><li>◦ Telematics</li><li>◦ Blackbox</li><li>◦ GPS tracker</li><li>◦ Electronic sensors</li><li>◦ Wearable devices</li><li>◦ Glucose sensors</li><li>◦ Depression sensors</li><li>◦ Smart Devices</li></ul>	<ul style="list-style-type: none"><li>◦ Cloud Migration Infrastructure</li><li>◦ Robust Data Analytics Tools</li></ul>
Cognitive Data	<ul style="list-style-type: none"><li>◦ Gathered information from customers behaviour to get 360-degree view of customer behaviour in buying journey.</li></ul>	<ul style="list-style-type: none"><li>◦ Across all Insurance sector</li></ul>	<ul style="list-style-type: none"><li>◦ First party agents: lead generation, cookie tracking, etc.</li><li>◦ Third Party source</li></ul>	<ul style="list-style-type: none"><li>◦ Perform risk modelling</li><li>◦ API</li><li>◦ Predictive analytics</li></ul>



# Big Data in Insurance

Core Data Type	Why Insurance?	Application in	Data Sources	Technology Partner's Proposition
Social Media Data	<ul style="list-style-type: none"><li>◦ Collected information for quoting premium</li></ul>	<ul style="list-style-type: none"><li>◦ Life Insurance</li><li>◦ Home Insurance</li></ul>	<ul style="list-style-type: none"><li>◦ Facebook</li><li>◦ Twitter</li><li>◦ LinkedIn</li><li>◦ Instagram</li></ul>	<ul style="list-style-type: none"><li>◦ Compliant with third party rules and regulations in seeking customer information</li></ul>
Climatic Data	<ul style="list-style-type: none"><li>◦ Record data on policyholders driving patterns and lifestyle patterns.</li></ul>	<ul style="list-style-type: none"><li>◦ Property and Casualty Insurance</li></ul>	<ul style="list-style-type: none"><li>◦ Impact Forecasting</li><li>◦ RMS</li><li>◦ JBA</li><li>◦ Hazardhub</li><li>◦ Katrisk</li></ul>	<ul style="list-style-type: none"><li>◦ API</li><li>◦ Automation</li></ul>
Geospatial Data	<ul style="list-style-type: none"><li>◦ Gathered information to know the exact location of the customer to assess risk and dispatch vital documents to the right place.</li></ul>	<ul style="list-style-type: none"><li>◦ Property and Casualty</li></ul>	<ul style="list-style-type: none"><li>◦ Apps</li></ul>	<ul style="list-style-type: none"><li>◦ Geographical Information System</li></ul>

Source: Data source from DataArt  
Concept: INT.





## 02. Rising demand for efficient Pricing Policy

As the insurance industry undergoes a massive digital transformation, many processes have started to change. Starting from automating manual processes to pricing policy, underwriting is bound to add more value to the business. But, unfortunately, the insurance industry is yet to change the old fashioned style of risk assessment as the advent of comparative raters makes it possible for the customers to compare the policy prices instantly. We often see two types of quoting tendencies in the Insurance Industry.





### Challenge 1: **Quoting too high**

Insurance industries have tendencies to create coverage cushions. This inflated coverage price leads to a loss in market share as customers switch to other insurance companies, missed sales targets and fails to attract new customers.

### Challenge 2: **Quoting too low**

Insurance companies also tend to quote low for increasing customer acquisition. Low policy price attracts the market thus helping in gaining new business. Thus in future when policyholder claims they face poor customer experience. Due to lesser premium dollars bought in her policy, policyholders are not covered properly. Thus this damages the brand value of the insurance companies.



## Why Shift from **Generalised Linear Model (GLM) In Pricing Policy?**



It is a manual  
process for  
interaction  
identification &  
feature selection



Fails to capture  
complex  
interactions in  
the data



Low accuracy as  
results may not  
be in line with  
the future

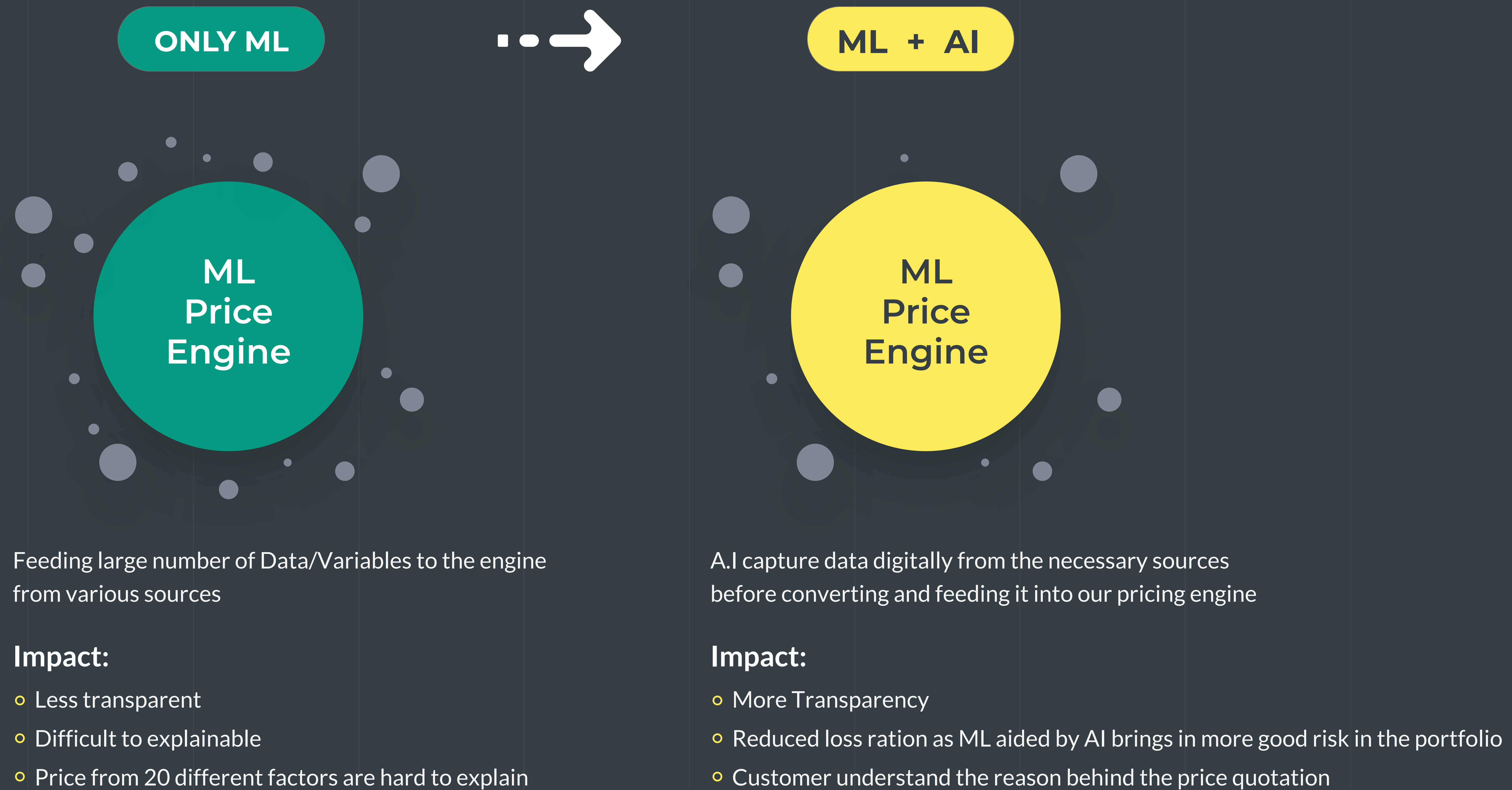


Inaccurate  
pricing is costly  
for insurance  
companies



Solution:

## How AI and ML are improving the rigid pricing structure of Insurance?



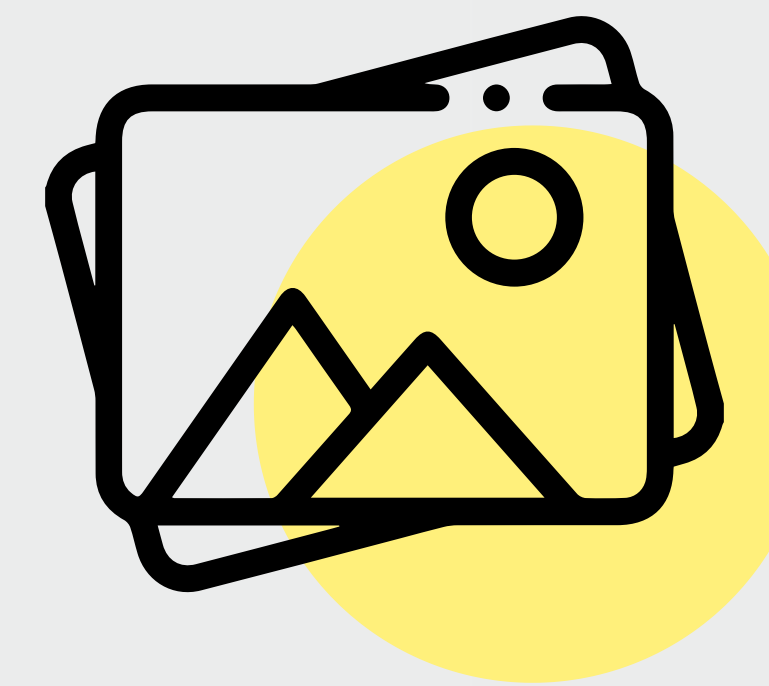
Source: Data Source Artificial



When Machine Learning is deployed on the existing pricing structure of a commercialised product, it creates more problems rather than solving the pricing issue. Switching to a complex pricing algorithm can only create a black-box pricing model as per Artificial. If the ML price engine is fed up with a vast amount of data, it becomes less transparent for the insurers to explain which factors are causing the premium's high price.

But, when we switch to ML aided by Artificial Intelligence, it improves the accuracy of the pricing for the customer. Information is available from any source, but considering all the data and feeding it into the engine can only make things difficult to explain. Thus, "AI captures data from necessary sources and before converting and feeding into ML price engine". With AI, the pricing policy has become more accurate and quicker.

## Some Uses Of **AI In Risk Assessment**



### **Photo Analytics**

Verifies the damage of the property



### **Geospatial Imagery**

Reduce risk exposure and increase pricing mechanis



### 03. Higher Operational Cost in traditional underwriting

The whole insurance business model is resting on the underwriting. Underwriting is a complex and time-consuming task if done manually as pricing the policies can either make or break the insurance business. For a good customer value, the pricing should be accurate again it shouldn't be less than the profitability rate. Therefore the process needs attention.

Accurately determining risk extensive information sourcing, data processing and aggregation. If done manually, then the private insurance companies reach to the agents or brokers for sourcing data. The insurance representative makes a questionnaire and send it out to the policyholders. This back and froth process consumes a lot of time and keeps on adding to the cost. Error-prone manual processing also affects the time required for analysing data for determining premium pricing.



According to  
**Accenture**, more than

**50%**

of the average carrier  
underwriter's day is spent  
on core processing  
and repetitive tasks instead of  
higher-value work

Solution:

**Intelligent automation in  
underwriting optimises the  
cost**

Automation is revolutionising the insurance industry. To streamline operations, underwriters are automating the process. For the generation “now”, the automated underwriting process is powered by Robotic Process Automation and Artificial Intelligence



## Benefits of Intelligent **Automated Underwriting:**

- Helps in digitising the quote for insurers.
- Automated underwriting software aided by AI can iteratively learn and improve over time.
- The software can tweak its algorithm and reflects inaccuracies in the original process and changes in consumer behaviour.
- Raises flags for cybersecurity issues and thus preventing fraud.
- Identifies new signs of fraud.

## Propositions of the **Technological Partner**

- **In-Built Claim Tracking and Reporting:** Keeps track of individual claims, ensuring customers claim to stay on track. The simplistic reporting system also enhances the transparency between insurers and customers.
- **Paperless Application Process:** An e-application features fast track the process and delivers quote at digital speed, thus accelerating quote turnaround.







## How **INT. can help** underwriters

INT. backed up with a strong in house team are dedicated to bringing digital innovation for insurers. Leveraging their expertise in data science, our team is successfully deploying data analytics and behavioural models with strong credentials; INT.helps you at the end to end journey of technology implementation.

The software solutions discussed in this paper are a few ways insurers can use technology and software consultancy to improve the underwriting value chain. Our other articles have covered extensively how AI and Machine Learning can improve the insurance value chain. If you are an underwriter and looking for robust underwriting solutions, then we will be happy to discuss our capabilities with you in more detail. Advancement in technology and scalable solutions can scale your underwriting process in this digital age.



## Reference

[https://www.eulerhermes.com/en\\_global/news-insights/economic-insights/Allianz-Global-Insurance-Report2021-Bruised-but-not-broken.html](https://www.eulerhermes.com/en_global/news-insights/economic-insights/Allianz-Global-Insurance-Report2021-Bruised-but-not-broken.html)

<https://blog.dataart.com/big-data-and-the-insurance-industry-using-data-to-increase-your-bottom-line>

<https://www.propertycasualty360.com/2020/01/28/three-challenges-to-effective-data-analytics-use-in-insurance/>

<https://www.automationanywhere.com/company/blog/rpa-thought-leadership/improve-insurance-underwriting-with-intelligent-automation>

<https://www.rapidvaluesolutions.com/casestudy/97-automated-insurance-underwriting/>

<https://artificial.io/company/blog/part-one-how-can-i-use-ai-to-improve-my-companys-pricing>

<https://artificial.io/company/blog/algorithmic-underwriting-what-is-it-and-how-can-it-help-insurance-syndicates>

<https://www.datarobot.com/webinars/ai-insurance/>





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