

Example applications within Insurance

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Our Data Science consulting practice

Extracting real business value from data science requires the right combination of technology, culture and insurance domain expertise

About us

- Our Data Science consulting practice is a team of Data Science experts with practical experience of successfully deploying machine learning and AI techniques within an insurance context.
- By collaborating with the WTW consulting teams, we provide a unique combination of technical Data Science delivery with domain expertise and industry experience.



Best practice review and roadmap development

- Helping insurers to extract business value from Data Science teams in various contexts – across General and Life insurance, in stable and changing systems environments.
- The creation of Data Science sophistication roadmaps, by carrying out best practice reviews of the existing technology and capability.



Infrastructure Design

Supporting insurers with integrating Data Science tools and platforms with existing insurance processes & systems, identifying and recommending operating model changes to increase efficiency and reduce risk of errors.



Data Science delivery

Working with insurers to identify the use cases across various teams, carrying out the analytics to identify opportunities and deploying the analytics into production to extract business value.

Some examples

Claims analytics

- We are currently working with large insurers in the UK and US to deliver a comprehensive Claims Data Science transformation. This transformation covers a review of current capability, technology as well as the delivery of use cases across the claims lifecycle.
- We have worked with large insurers within the Middle East and Asia, to build various predictive models with the objective of increasing efficiency of claims processes, which were then deployed within the Radar suite.
- Our unique Data Science and Claims consulting capabilities, combined with our technology that is tailored to insurance is the reason we are able to effectively realise the value of analytics for insurers across the globe.

Improving customer experience

- A large UK insurer was experiencing issues with an **increasing lapse rate** over time. The client was unable to identify the source of the issue.
- WTW conducted an initial discovery exercise, working with the **analysts, call handlers and senior stakeholders** to understand the existing processes.
- Historical data was **analysed** using Data Science techniques, and the **drivers** of the observed lapse rate increase **over time** were identified.
- The core issue was identified and this, combined with other recommendations from WTW such as **outgoing communications**, allowed the insurer to not only **reduce lapse rates** to previous levels, but also provided insight on how to reduce this further.

Tangible value from AI

Select examples of the benefits we have delivered

Top 3 UK personal lines insurer AI transformation

Delivered a comprehensive strategy and roadmap (80 models) for motor and (60 models) home **AI transformation** feeding into the execution of initial Gen AI solutions.

1. **End-to-end motor pricing AI transformation**
2. **Liability decision Agent**
3. **Total loss Agent**
4. **Third Party Prioritisation Agent**

Included real-time integration into operational claims systems, leveraging unstructured data, **Powered by Radar leveraging open-source and NLP.**

Delivering **\$40m+ of annualised benefits** and leaving the organisation with a scalable, self-sufficient capability to deliver the remaining models on the roadmap.

US based multi-state insurer (\$5bn GWP)

Helped Exec review 5 AI models in relation to the following specific needs

1. Confirming the models are well-built and performing as expected.
2. Governing the model-building process.
3. Comprehensively evaluating the impacts of the models on behaviors/outcomes.
4. Understanding whether the models are well-integrated into the claims processes.
5. Managing and maintaining the growing stable of models

Provided recommendations based on identified areas of improvement to help scale and accelerate value realisation.

Trygg-Hansa real-time claims fraud detection

We leveraged on both structured and unstructured data from the client's underwriting and claims records, claims suppliers and third-party data providers.

Our model was able to identify fraudulent claims that had gone completely undetected previously, resulting in a **>100% increase in claims fraud detection rate**

"Radar Live works behind the scenes, enabling use of advanced analytics to assess **structured and unstructured data** to uncover hidden fraud patterns and complex relationships within social networks, giving us the **capability to deliver scoring for fast review and accurate assessment.**"
Sascha Firle | Director Advanced Analytics – Trygg Hansa

International financial services provider

We leveraged AI to

- 1) Identify **customers most likely to purchase additional products** after their child trust funds mature
- 2) Prioritise them for **outbound engagement by call centre and face-to-face teams.**

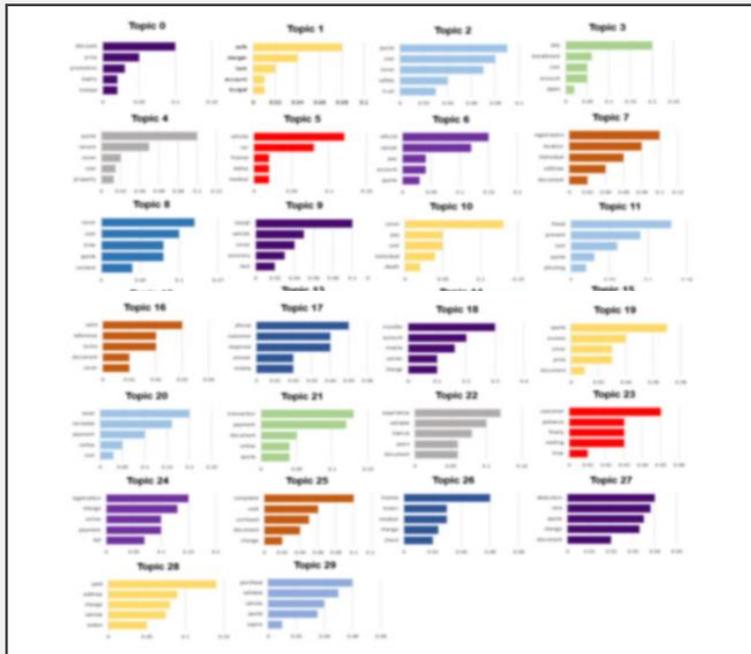
We delivered models which **reduced attrition and increased upsell**, integrating seamlessly with existing processes.

Achieving a **15% improvement in revenue**, primarily driven by prioritising outreach based on predictive modelling of customer behaviour.

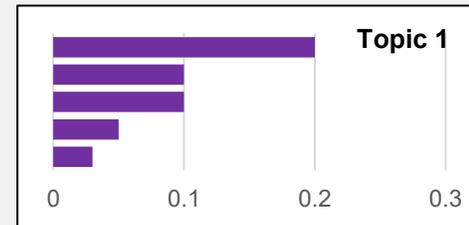
NLP before LLMs were (as) cool

The insurer had an issue with increasing lapse rates

LLMs applied to call centre transcripts extracted several trending topics



Highlighted a new systems issue that affected a specific segment of customers: Lapses in this segment had more than doubled.



“... I’m changing my cover for my ... online...”

“...website not responding after entering details...”

“... tried to purchase online, but it didn’t go through...”



“...tried multiple times but not working frustrating”

“...tried renewing but struggling to navigate...purchase not working...”

“...add a new item but won’t let me...website crashed...”