

Company Snapshot

Previsico



PREVISICO SUMMARY

“Previsico is a global flood forecasting company which spun out of Loughborough University in 2019. Our mission is to reduce the impact of flooding globally by delivering the absolute best flood forecasting technology to those who need it.

“Previsico’s cutting-edge FloodMap Live technology is underpinned by two decades of research at Loughborough University. This continuously forecasts up to 48 hours in advance; using hyperlocal weather forecasts and nowcasts in partnership with IBM’s Weather Company. Crucially these cover surface water flooding as well as small watercourses which are missed from existing tools.

“Every storm is different, hourly changes in weather patterns can cause floods which are not detected using traditional forecasting approaches. Previsico’s forecasts show the depth and time at which flood is predicted at a 25-metre resolution. These actionable forecasts enable people and organisations including the UK government to proactively mitigate flood impacts.”

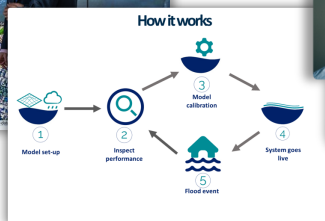
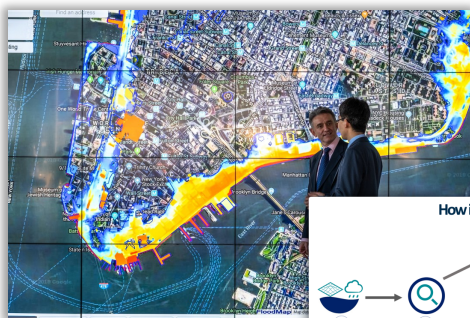
KEY METRICS

Product(s): **Real time Flood Forecasting**

Founded in: **2019**

Headquartered: **Loughborough**

Funding: **Privately owned**



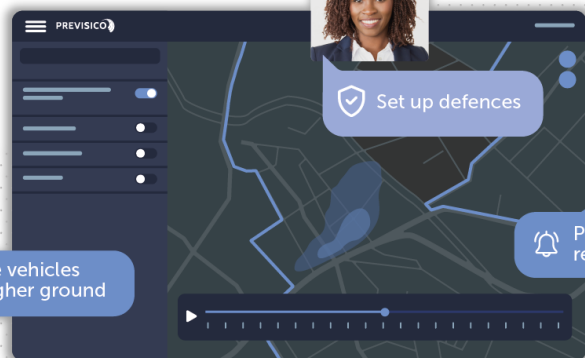
⚠ Move vehicles to higher ground



🛡 Set up defences



🔔 Prepare flood response team



ALTUS REVIEW

The cost of flooding is increasing dramatically, with the financial impact predicted to reach ~\$1tn globally by 2050. Facing into this challenge for the insurance industry, Previsico offers a real-time flood forecasting system for surface water flooding.

Using hyper-local weather data, its proprietary flood modelling software and an in-house developed real-time system, surface water flood forecasts are provided down to property level accuracy (25m x 25m) on a rolling 3-hour basis across the whole of the UK and expanding into the USA. Insurers’ risks can be mapped in the visualisation tool, FloodMap Live, easily highlighting at-risk locations from forecasted changes in water levels.

The Previsico technology can benefit insurers in two key areas, the mitigation of insurance losses through the proactive management of risks, and the use of long-term data.

Taking a proactive view, a number of use cases exist, including: providing early warning to claims teams, identifying fraud, and informing policyholders to take pre-emptive actions; all providing the ability for insurers to reduce losses.

Using historic and long-term data, pricing and underwriting models can be adapted and enhanced, as well as the management of the overall exposure to flooding of the book.

Altus Capability Mapping: Previsico

The **Altus Capability Model** enables organisations to define what they do using a common language and understanding of the make-up of an end-to-end Insurance business.

Using the Altus Insurance Capability Framework, we have mapped **Previsico** to our London Market Reference Model, across over 1,000 capabilities.

The diagram below highlights the core capabilities that the **Previsico** technology can enhance within the model. Additional, detailed, low level capability mapping has been captured in our PEAK platform and is available on request.

“Most flood impacts are avoidable. With actionable flood warnings showing depths and timings of events people and organisations have the tools they need to mitigate loss ”

Dr Avi Baruch

Co-Founder and COO, Previsico

A key area where Previsico’s solutions can enhance insurers capabilities and support the mitigation of losses are in the development of underwriting models and ability to identify risk from surface water flooding. This can be across any impacted line of business to property level detail, enhancing the accuracy of policy premium calculations.

Previsico’s flood modelling can enhance functions in Claims, including Catastrophe Management, 3rd Party Management, and Fraud.

Another key benefit to insurers is the ability to identify customers who are forecast to be impacted by flooding to enable pro-active messaging from the insurer to minimise impacts.

Claims Exposure and Portfolio catastrophe modelling to enable the management of capital.

Support and enhance the reinsurance premium and claims calculations, as well as the implementation of reinsurance rules.

Develop updated products and pricing models based on data and information from Previsico’s software.

Enables the ability to calculate exposure based on surface water flooding models to enhance ability for insurers to operate within exposure frameworks.

