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INSURTECH INNOVATION: NEW USE CASES ENABLED BY SPACE TECHNOLOGIES

Abstract

Space has steadily become a resource for innovative industries that increasingly need a data-driven approach with high information content data for the creation of semi-automatic processes and decision support tools. In the emerging paradigm of the New Space Economy, space technologies enable the birth of innovative business applications, which often trigger new opportunities and business models, disruptively revolutionising entire sectors. In this context, Fondazione E. Amaldi, as ESA Business Applications Ambassador Platform for Italy (AP-IT) and ESA InCubed+ national contact point, analyses the most promising markets that can most benefit from space technologies with the aim of supporting start-ups, SMEs and large companies in the creation of new innovative ideas, building connections between entrepreneurs and stakeholders and enabling alternative finance instruments focused on space technologies. The aim of this paper is to present the most interesting use cases for one of the markets identified by AP-IT as one of the most hungry for innovation from space technologies, i.e. Insurtech. Satellite data have, de facto, consistently proved to be extremely useful for insurers, providing them with accurate and up-to-date information on weather conditions, floods, fires, land cover and land use, and natural disasters. Technologies based on these data enable actuaries and insurers to make quick and accurate risk assessments, automating and optimising verification processes by minimising expert intervention. The emergence of new models, e.g. on-demand or parametric policies, further intensified the potential of satellite data. On-demand insurances can use near real-time data to track individuals' risk profile and provide coverage tailored to their needs. This data enables previously uninsurable risks to be taken on and cover to be offered at competitive prices due to greater accuracy in loss estimation. Parametric policies, by contrast, can exploit satellite information to trigger automatic and certified payments when a loss threshold is reached, while reducing the premium for the insured by underwriting a policy tailored to their needs. This study will present the results of discussions and continuous interactions with several stakeholders in the insurance and reinsurance sector including Swiss Re, Reale Lab 1828 and Italian Insurtech Association. The needs identified in collaboration with the stakeholders will be presented along with the innovative solutions that space and its technologies can offer.