IMRRA's technology development continues with Open-Source Intelligence data collection and integration of Avalanche AI technology.

Open-Source Intelligence data collection (OSINT) is an effective business intelligence strategy for identifying high-risk vessels potentially posing a threat to both safety of navigation and the marine environment. OSINT is based on the 'big data' algorithm by researching and analysing information from public or open source published vessel safety rating data.

In 2021 IMRRA has integrated its OSINT data collection utilizing new Internet cloud based technology 'Avalanche'. This proven software has been selected as IMRRA's preferred technology partner for maximising the potential of its OSINT data strategy to generate vessel risk safety ratings, and reduce the risk of Cyber security challenges.

IMRRA's customised Avalanche interface is divided into Static, Dynamic and Verified risk factors for further analysis. The software tracking robots keep a watch list of targeted resources critical for vessel safety – constantly analysing key public domain information sources for individual vessel improvements, or decline, in safety. The software also allows IMRRA's analysts to monitor social networks, blogs & forums from disaffected employees. Giving IMRRA's analysts the opportunity more time to spend on the human dimension of vessel risk analysis.

OSINT data is stratified into IMRRA's three vessel risk rating safety factors:

1. Static Risk Factors: criteria that does not significantly vary over time and are associated with longer-term vessel safety performance. E.g. Vessel Particulars including Class, Flag etc.

2. Dynamic Risk Factors: arise from safety risk events, their frequency, and severity. E.g. Casualty history, grounding and pollution incidents, radioactive contamination, PSC inspections, sanctions, smuggling, trading areas risk etc.

3. Verified Risk Factors come from the results of physical vessel inspections, which are always recommended (when possible) to be incorporated into the vessel risk assessment.

IMRRA's analysts are uniquely able to quickly take advantage of Avalanche's data to delve, or take a 'deep dive' into a vessel's past operating history and make an informed judgment that purely computer-based algorithms are unable to decipher. The value of this new information gathering process is speed of delivery reports to IMRRA's customers, increasing their competitive advantage, or more simply put, working with safer vessels.

The Future: IMRRA will continue to embrace and invest in rapidly evolving Internet technologies to deliver the highest quality vessel risk rating reports for its customers. Blockchain security, OSINT data acquisition strategies, and utilizing Avalanche AI software technology will enable IMRRA's clients to be at the forefront of technological evolution.

For more information on how IMRRA can solve your vessel safety requirements contact:

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Notes:

1. https://avl.team/
Avalanche Online is a family of automated Internet intelligence systems for solving a variety of tasks for monitoring online media, quickly re-targeting new topics and processing the collected information.