Mitigating Security Risks within the Corporate Supply Chain

Over the past few months, the Cabo Delgado province in Mozambique has been [wrought with violence](), sparked by the expansion of the Al Sunnah wa Jama'ah, an Islamist guerilla group. The group has beheaded and killed scores of people and has burned and damaged significant property, threatening the success of the region's multibillion dollar oil and gas industry. In June, local staff at Anadarko, an international oil and gas company, refused to go to work, fearing an attack. Foreign staff members of the company were later asked to refrain from leaving their compound. Other oil companies, such as Wentworth Resources, have also [slowed]() their operations in the region as a result of the increased violence.

The sourcing of raw materials, such as crude oil, is key to the success of many major corporations today. However, as conflict and insurgencies continue to grow across the globe, many businesses are finding their raw material reserves, supply chains and employees coming under threat. While the threat of nationalization of key industries is no longer as big of a threat today as it was in the latter half of the 20th century, raw material reserves continue to change ownership hands against the state and/or the home country of the company, posing a regulatory risk in the millions, if not billion, of dollars in fine. Subcontractors and sub-tertiary actors in the supply chain can be exploited due to the business volatility and intentional corporate sabotage. The movements of the delicate supply can also be stifled due to sanctions, violence, or inter-state geopolitical maneuvers. As a result, it is vital that these companies have access to timely and relevant intelligence about regions they operate in, and the risk factors associated with these regions. Geopolitical risk analysis is one avenue of acquiring these data points and insights. Geopolitical risk analyses can monitor and account for a number of vectors related to political, economic, social and reputational, environmental and security shifts. These can include the introduction of tariffs, legislative changes, fake news, extreme weather events and emerging terror threats.

Currently, there are a range of actors conducting geopolitical risk analyses for companies. The current value of the global market for risk analysis is [approximately $8 billion](), including crisis management services. However, the size of this market is significantly capped by the limited set of offerings provided by these traditional risk consulting companies. Typically, such companies have relied on human moderators and monitoring agents who manually sort through large swathes of data in order to conduct risk analyses, identify potential threats online and translate findings into actionable decisions. However, given the massive quantity and scale of content online, this has proven to be a challenging task, and one that usually takes place in a qualitative and inconsistent manner. For example, Starbucks, the international coffee and beverages company, relies 80% on manual processes while relying on ARCHER for regulatory purposes of local partners, such as cocoa farmers and manufacturing distribution channels, and for understanding geopolitical risks. Yet it only looks at the country-level, as it is all it can do without a heavy investment in big data.

Machine learning (ML) and artificial intelligence (AI) can provide an effective solution. Through the use of ML and AI, the process of monitoring and moderating online content can be streamlined and can become more thorough, rapid and effective. At Omelas, we automate the labor intensive, high-skilled and demanding process of collecting disparate datasets and detecting digital propaganda and disinformation. We collect open-source intelligence (OSINT) data from publicly available sources including news sources and social media platforms, as well as the deep and dark web, in order to quantify and map the online information environment, including bots. Through this, we are able to provide an up to date and geographically specific view of risks and threats to physical and human assets including supply chains and

employees. This allows brands and businesses to better understand their threat landscape and to shield themselves from threats both online and offline.