FinTech Accelerator Proof of Concept

BitSight - Cyber Intelligence Platform- External View of an organisation

Background

The Bank of England has recently set up a FinTech Accelerator to work with innovative firms and new technologies. Cyber Security is one key element of the areas that the Accelerator is examining. With an increasing number of cyber threats to identify and respond to, the Bank is keen to explore solutions that allow it to stay ahead of the rapidly evolving cyber landscape.

As it forms part of the UK Critical National Infrastructure, the Bank is keen to understand, in further detail, the threat landscape confronting the UK financial sector and the critical economic functions that underpin the sector and its participants. The Bank was interested to understand the possibility of highlighting potential cyber risks against the sector before they had the opportunity to materialise by using a tool that had potential to allow for triage. For this work, the Bank worked with BitSight, and also received consultancy advice on the BitSight product from Parker Fitzgerald.

The Proof of Concept

BitSight uses over 100 internet-facing data sources to provide an external view of an organisation's security posture. The tool provides a rating of an organisation based on various open source records and other data feeds, such as indications of data breaches and botnets. This rating would give a demonstration of any increases or decreases in an organisation's external cyber security posture over a one year period.

The results of BitSight's tools, for example, could highlight if an organisation inconsistently configures and manages externally facing systems, which may indicate a more general problem with an organisation's approach to security architecture.

The Bank chose to undertake a Proof of Concept (POC) with BitSight in order to understand the supporting technology, data sources and the metrics the tool produces and whether it could be used

to inform our understanding of cyber risks to the UK financial system. The Bank looked at the financial sector view provided.

We learned that the data sets within such tools are maturing and gaining greater validation over time. The tool provided a high level identification of firms' average ratings which showed the finance sector in general to be mature and fairly consistent, compared to other industries, though individual performance does vary.

The Bank worked with Parker Fitzgerald to gain an additional consultancy layer view from a firm experienced both with the tool and of assessing cyber vulnerability within financial services institutions, in order to better make sense of the results. We found this additional consultancy layer to be helpful in adding detail to the wider aggregate results.

Reflections and next steps

The Bank of England is in favour of tools that promote visibility of cyber security within the industry. The Bank takes a holistic approach to cyber security and encourages institutions to assess all aspects of their security, including their supply chain, without a sole focus on individual areas such as the perimeter. The Bank works with relevant firms to identify their individual threat landscape and any preventative measures they have in place.

Data focussed on the perimeter can provide indicative warnings of potential bad practice. Such tools in isolation may help provide increased visibility of an organisation's supply chain and their security practices. Comparing externally observable data with an internal view from in-house IT Security teams could complement an organisation's cyber security considerations.