

The Effect of Consumer Portfolio on the Risk Profile of Cloud Provider

Empirical Analysis on Provider Size and Consumer Industry Sector

SIGCOMM '21 Demos and Posters, August 23–27, 2021, Virtual Event, USA



PRESENTER:

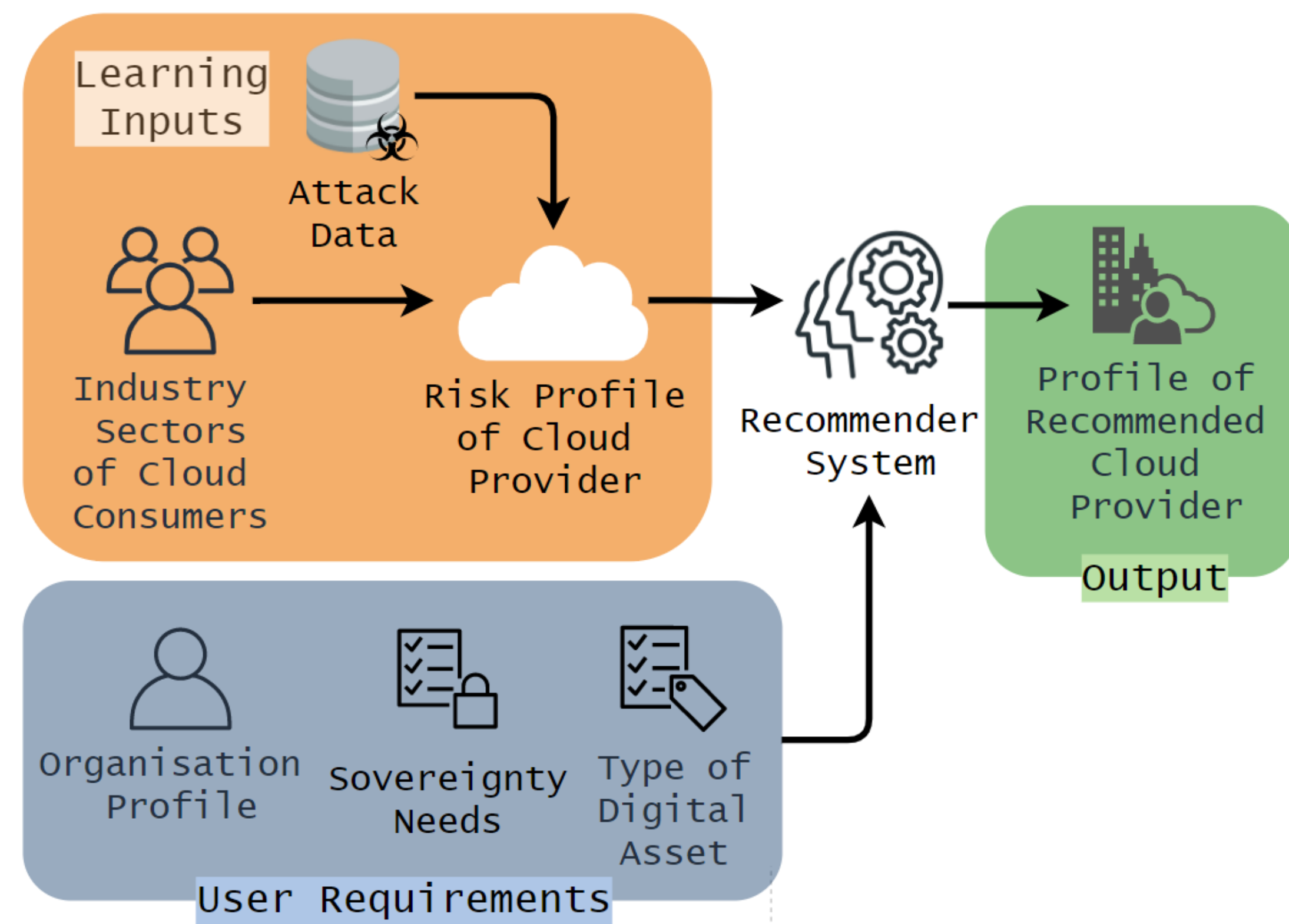
M. **Yasir** Muzayan Haq
m.y.m.haq@utwente.nl

BACKGROUND:

- Increasing use of Cloud service in organizations due to its efficiency and flexibility
- Recent Internet outages showed that Cloud is not immune to cyber attack
- Cyber attacks on big Cloud providers cause massive impact on Internet ecosystem
- Some industry sectors e.g., bank, are subject to more cyber attacks than the others

HYPOTHESIS

- Risk profile of a Cloud provider increases as it gets bigger and serves more high risk consumers



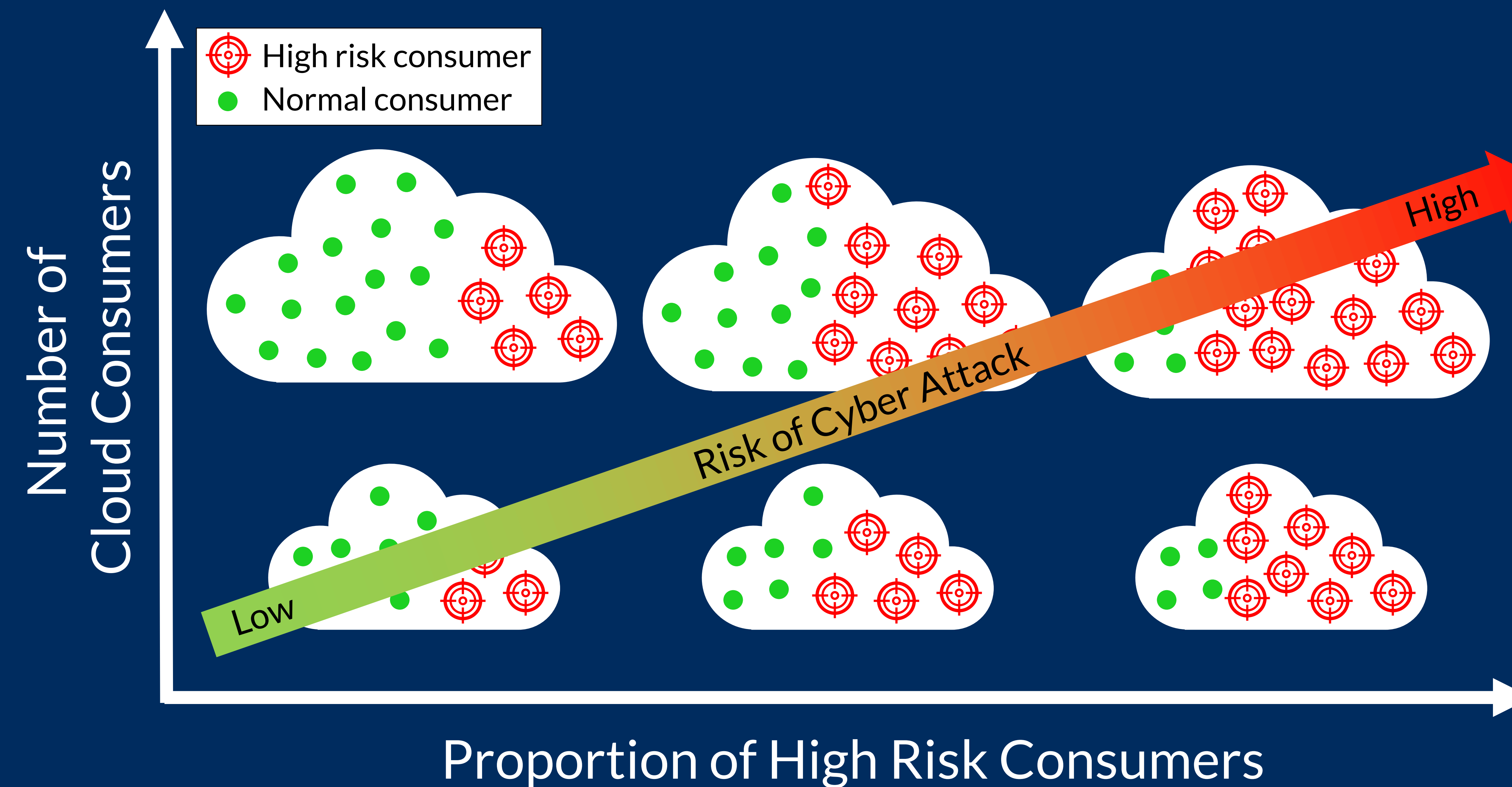
METHOD

- Empirical analysis on cyber attack data
- Additional profiling of the targets with information on their industry sector and Cloud provider
- Simulation study to observe cyber risk level on different Cloud market structures

OUTPUTS

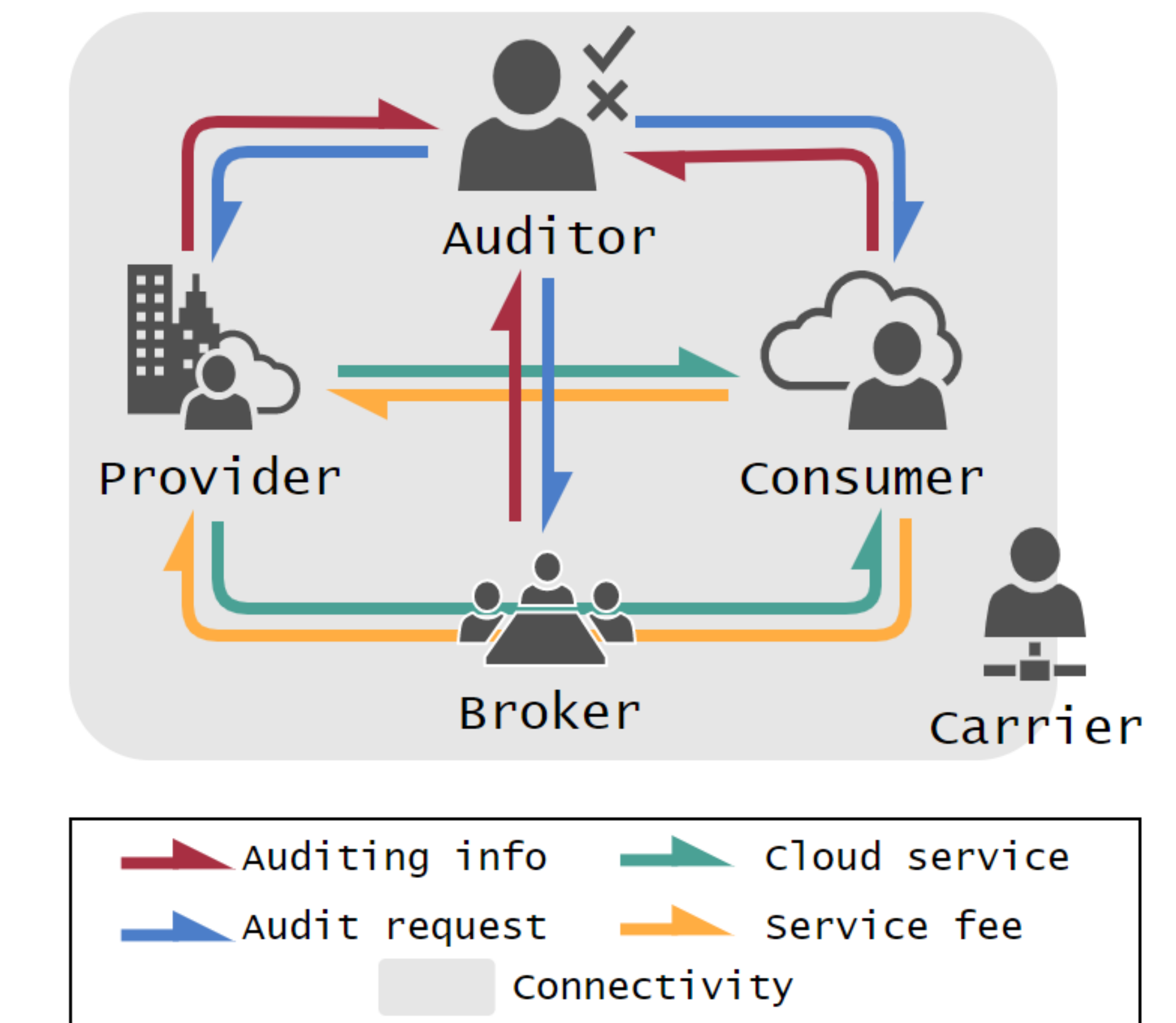
- Recommender system to help organizations select the appropriate Cloud provider
- Alternative market structure to lower cyber risk in Cloud ecosystem

If my **Cloud provider** also serves **millions of high-valued consumers**, am I **more at risk of cyber attack**?

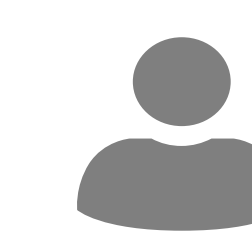
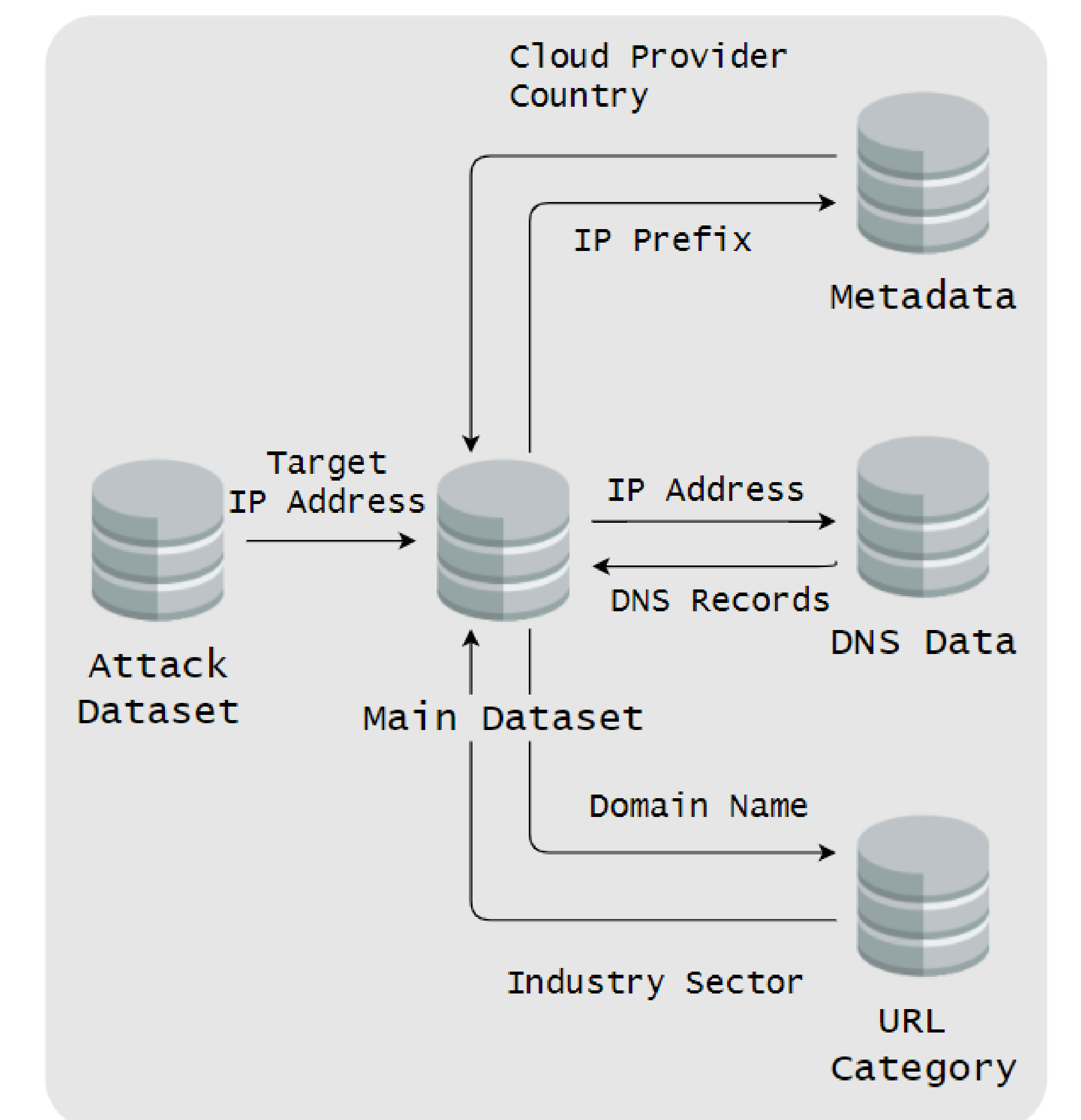


Take a picture to download the full paper

KEY STAKEHOLDERS IN CLOUD ECOSYSTEM



DATASET



Muhammad Yasir Muzayan Haq,
Abhishta Abhishta,
Lambert J.M. Nieuwenhuis