Implementing Cyber Threat Intelligence in Dark Web Cybercrime Prediction

Xue Ling Teh

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Current Landscape

- Forensics and criminology research contribution
- Cybercriminal profiling
  - Individual/group motives
- Reinforce cybersecurity organization reputation
- Security welfare of netizens

Research Question

How has the implementation of cybersecurity techniques – particularly CTI – contributed towards cybercrime prediction in the dark web and what are potential gaps in mitigating future cybercrime?

Aims and Objectives

01

Evaluate existing literature

Literature that closely explores CTI implementation and/or dark web cybercrime prediction

02

Determine strengths, limitations and gaps

Current research's strengths, limitations and gaps

03

Identify CTI integration challenges

Potential challenges in integrating CTI into dark web cybercrime predictive modelling

01

Literature Design

Key literature, research design and strategy

Key Literature

(Schäfer et al., 2019)

CTI

Cyber Threat Intelligence sources, framework (e.g. BlackWidow)

(Horan & Saiedian, 2021; Basheer & Alkhatib, 2021)

Dark web

Hidden, unindexed, anonymous, limited traceability

STRIDE

Threat model

Cybercrime prediction

Predicting cybercrime trend

Methodology

02

Security Compliance

Ethics, compliance and risk management

Ethical Considerations

03

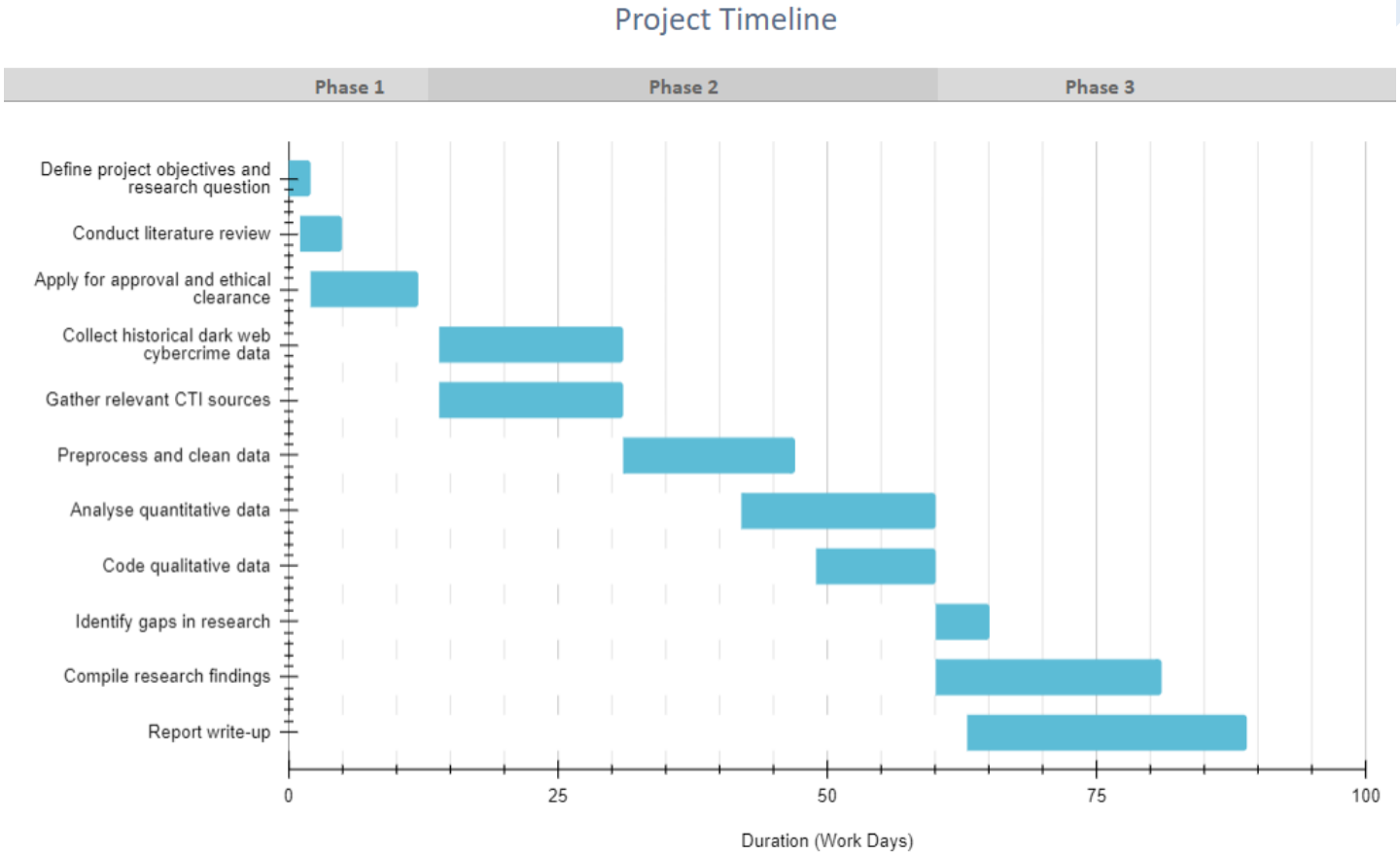
Deliverables

Proposed artefacts and timeline

Applicable Artefacts

Artefact		Description
	**Coded qualitative analysis data**	Theme, keyword analysis from unstructured open-ended data (Adu, 2019)
	**CTI Knowledge Graph**	Mapping relationships between actors, topics (Schäfer et al., 2019)

Proposed Timeline



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