Describing a CyberSA Analysis Model

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Context

Confusion / Misconception	Direction / Guidance
• Most things are branded CyberSA when they are not. • Mechanisms that underpin evidence collection or gathering are often labelled CyberSA, when, in fact, they are not. E.g. Big data repository, data collection etc. • Mechanisms that enable intelligence sharing are often regarded as CyberSA, when they are not. E.g. Intelligence Sharing Partnerships, Threat Intelligence, and CTI	• CyberSA Definitions / Processes and Examples (See Ref. 3-5) • CyberSA Requirements – FR and NFR (See Ref. 2) • CyberSA Building Blocks & Re-usable Artefacts • CyberSA Standardisation Initiative – IETF / RFC / Large Consortia etc

Requirements

- Consistency
- Quality
- Repeatability
- Reliability
- Interoperability
- Conformity
- Open Process
- Productisation
- Industrialisation

- Relevance
- Foundation
- Fundamental building blocks
- Measurable
- Tools
- Terms
- Metrics
- Robust
- Transparency

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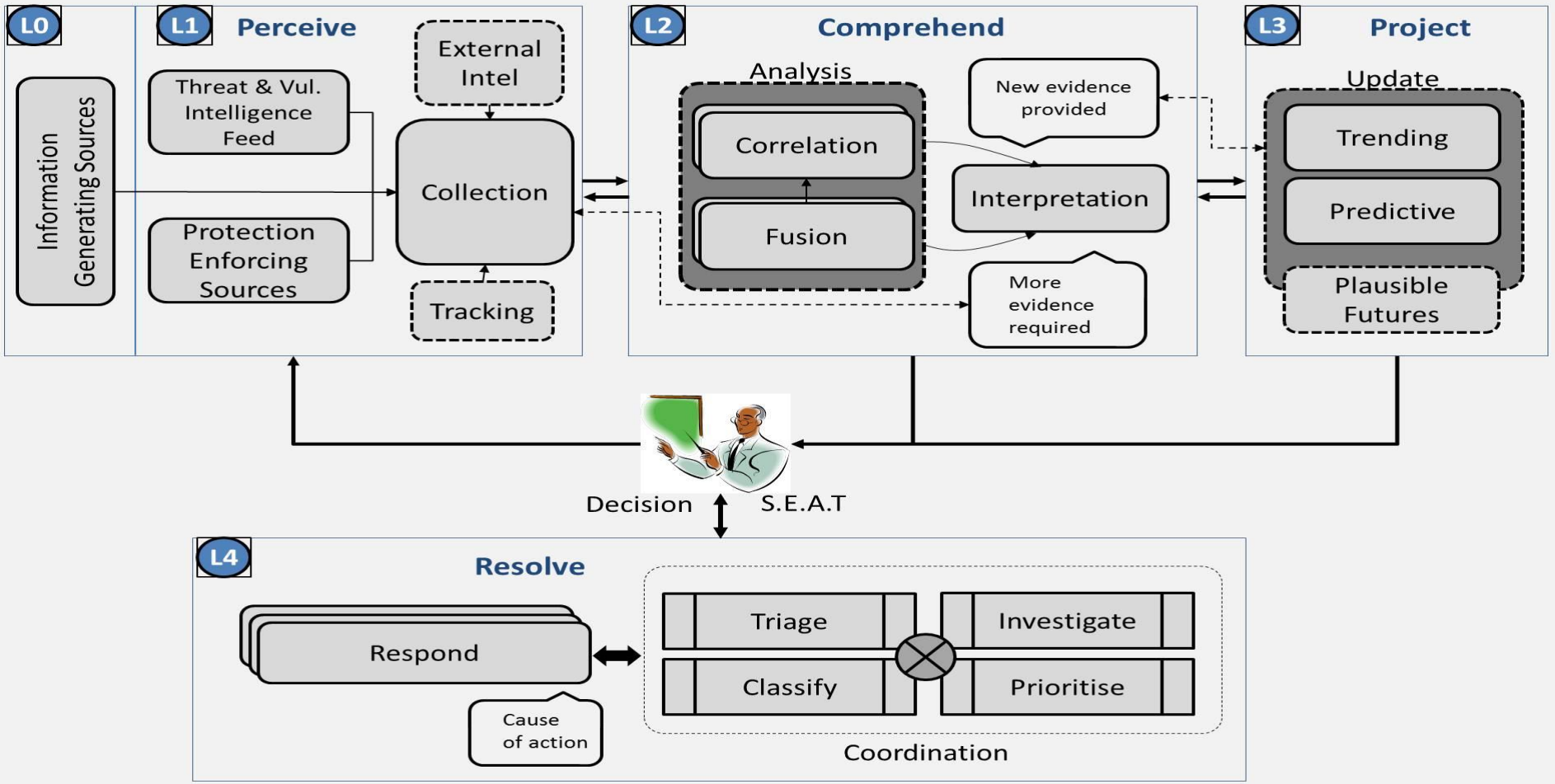
CyberSA Analysis Model



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Conclusion

- Cyber Situational Awareness is a multidisciplinary specialism – comprising human factor, cognition, cyber experts, HCI, complexity theorist, data scientists etc.
- Dealing with multi-dimensional problems and issues, complex situations that often require, pace, speed and accuracy.
- We need a standardisation effort aimed at harmonising our collective collaborative efforts to address our current problems.

Thank you!

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Future Work

Facilitate Standardisation through IEEE Standards Association / Working Groups on Cyber Situational Awareness

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