Leveraging Disparate Enterprise Data for Cybersecurity Purposes

Introduction

A vast array of data can theoretically be useful for cybersecurity purposes

- Yet it is rarely fully leveraged because the data is not clean, complete, integrated, or searchable.
- Creation of a cybersecurity data lake may seem like the answer, but the result of such efforts may not bring the intended results.
- By approaching the task from the perspective of the desired end results, efficient translation to business insights is achievable.

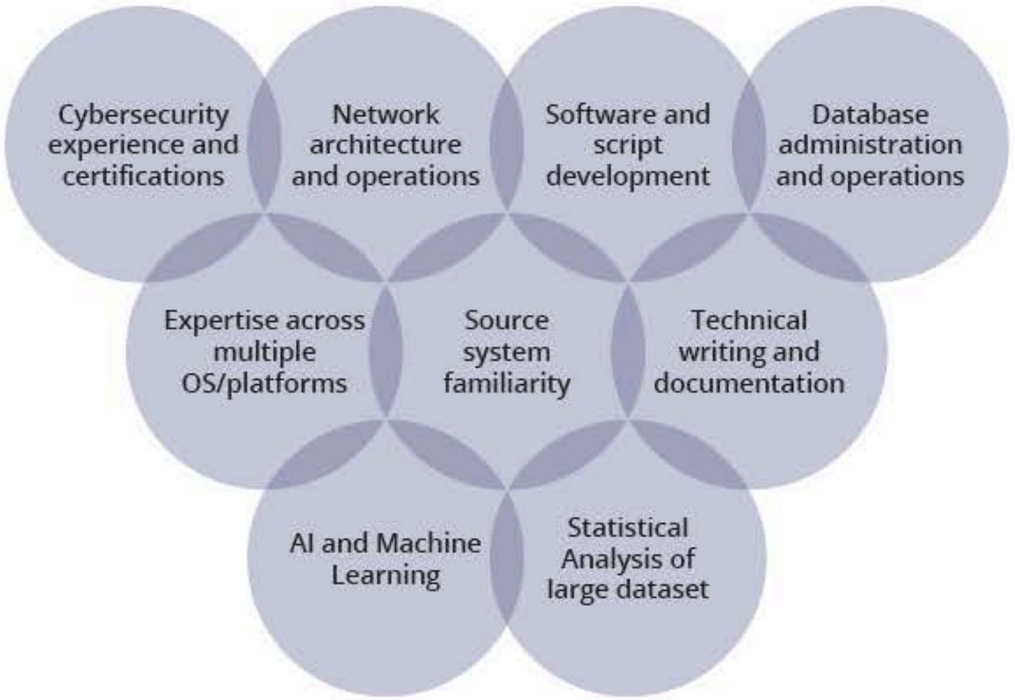
Methods

- Aim for a usable lake, above having a large lake
- Fully evaluate each potential source before ingestion
- Focus efforts on preparing the data for efficient analysis
- Consider early how to reduce volumes of scanned data, for cost and efficiency purposes

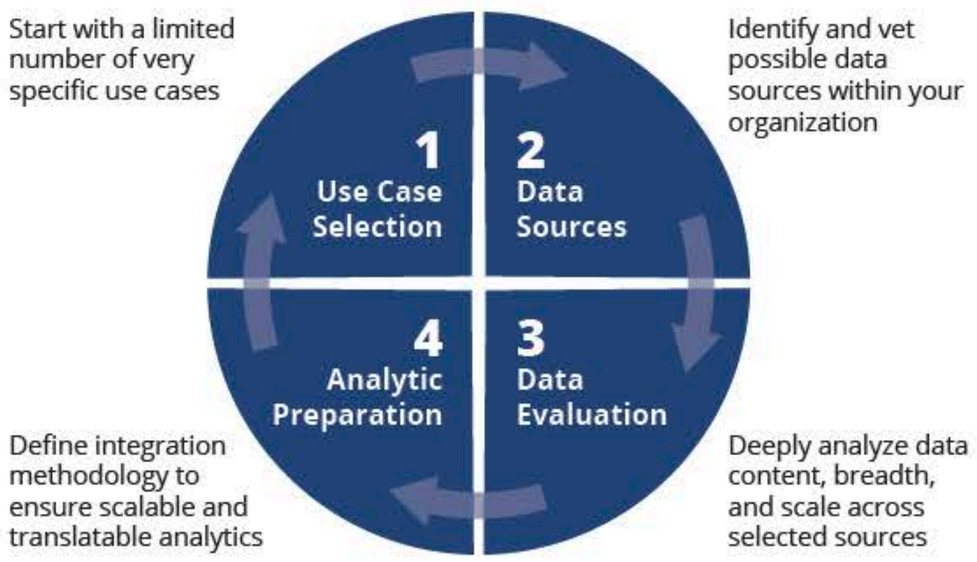
Results

- A cyber data lake poised to address the most pressing cybersecurity use cases expeditiously and efficiently
- A replicable process for augmenting the lake with additional future data sources
- Enhanced ability to interpret results accurately and translate them to business insights.
- Platform for integrating AI/ML models

FUSION TEAM



APPROACH



Unique Capabilities

- Extensible architecture designed to facilitate additional data sources and further functionality
- Incorporates the organization's custom business rules (e.g., NAC, VLANS, etc.) to elucidate behaviors of source systems
- Provides scalability, but also history and granularity (not just a bigger hammer)
- Enables data correlation across disparate retention periods

Multiple cybersecurity uses:

- Hunt
- Investigate
- Model
- Predict
- Validate
- Monitor
- Multiple analytic use cases:
  - Data Exfiltration
  - LRCs
  - Beaconing
  - Anomaly detection, etc.

Recommendations

- Recognize the full implications of building in the cloud
- Paradigm shift
- "Cattle, not pets"
- Implications are often obscure

Conclusion

It is possible to create a large-scale, cloud-based data lake that is sustainably positioned for data modeling, based on careful preparation and thorough data evaluation.

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