



# BACK TO THE FUTURE

*Tomorrow's hype, yesterday's attacks, today's problem.*

# Red Team | Alternative Analysis

To fight and conquer in all our battles is not supreme excellence; supreme excellence consists in breaking the enemy's resistance without fighting.

*Sun Tzu, Art of War*



# Cyber Threat Landscape | Today



Estimated annual damage cost of global cyber crime by 2021.

The percentage of global organizations surveyed that are already using advanced big data analytics to model for and identify threats.



The average number of records lost to hacking in 2017.



# Cyber Threat Landscape | Today



**US\$5.7  
TRILLION**

The percentage of global organizations that identify threats.

Estimated

**The lack of knowledge provides an ample canvas for our fears. Our fears do not map to the reality of risk.**

*James Andrew Lewis*

**50%**



**780  
THOUSAND**

The average





# Cyber T

**US\$5.7 TRILLION**

The percentage of global identify threats.

**780 THOUSAND**

## People also ask

What is the formula for risk?

The **risk** equation I use is quite simple: **risk** equals impact multiplied by probability weighed against the cost: **Risk=Impact X Probability / Cost**. Impact is the effect on the organization should a **risk** event occur. Probability is the likelihood the event could occur within a given timeframe. Apr 30, 2010

[searchsecurity.techtarget.com > magazineContent > The-real-information...](#)

[The real information security risk equation - SearchSecurity](#)

Search for: [What is the formula for risk?](#)

How do you calculate relative risk?

How do you calculate a company's risk?

How do you calculate risk return?

How is risk free rate calculated?

[Feedback](#)

[www.researchgate.net > post > There\\_is\\_a\\_definition\\_of\\_risk\\_by\\_a\\_fo...](#)

[There is a definition of risk by a formula: "risk = probability x ...](#)

22 answers

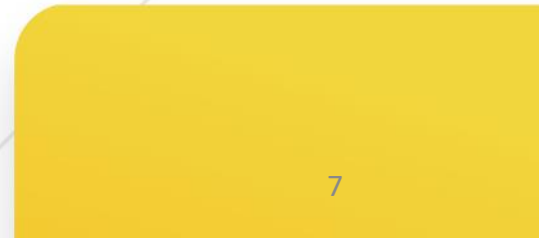
Many authors refer to **risk** as the probability of loss multiplied by the amount of loss (in monetary terms). Is this ... **Calculating the risk with the formula, you have:**

**50%**

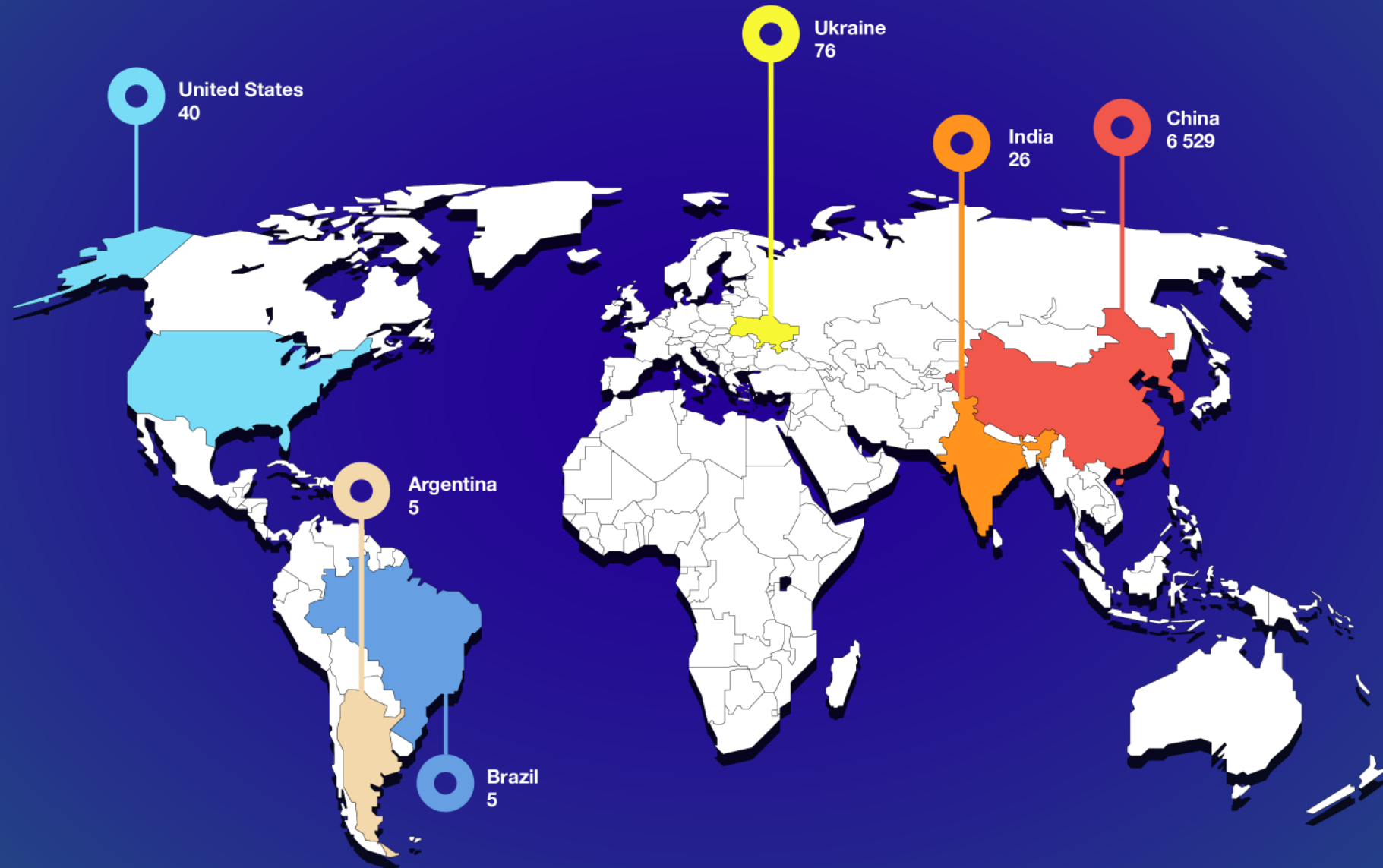


## *Cyber attack **paradigm shift***

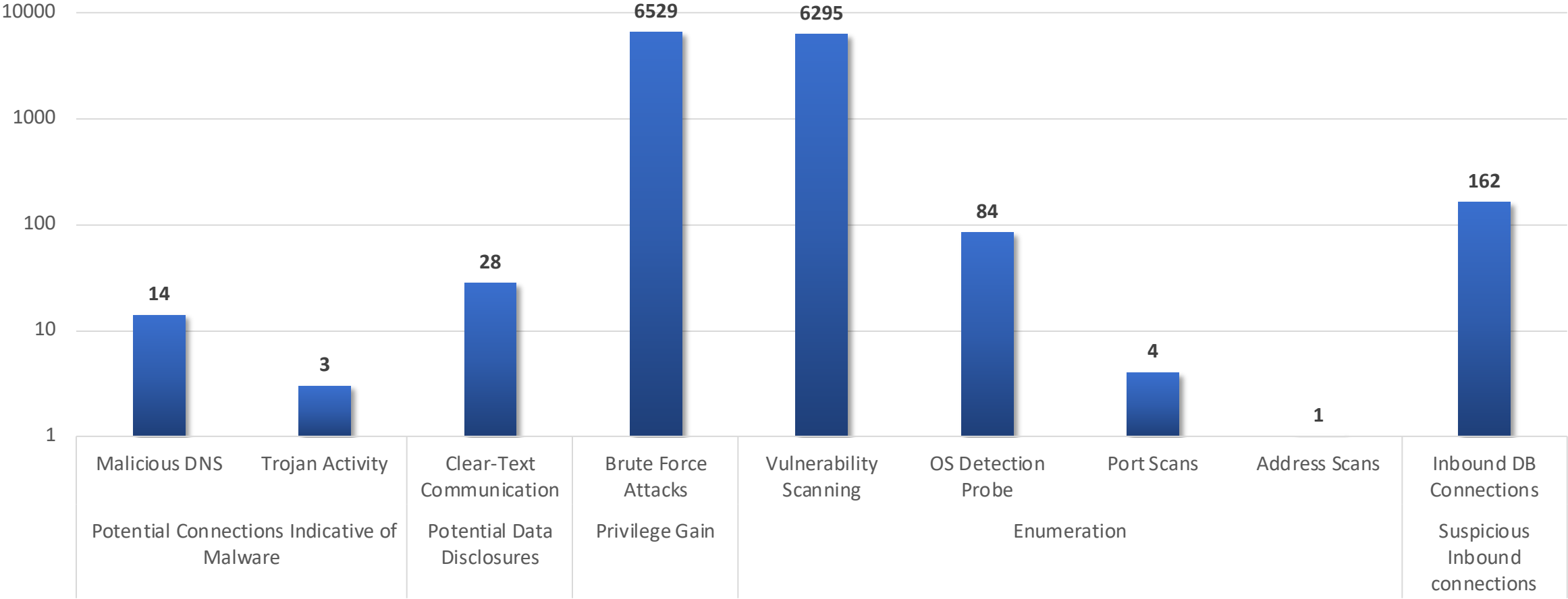
- Economies of force
- Thresholds of attack
- Mirror imaging
- Asymmetric heritage
- Existential random risk



# Origin of Attacks at Mining Client (5 Days)



# Threat Landscape



# Our global presence today





# CO.ZA | Situational Awareness

If you know the enemy and know yourself you need not fear the results of a hundred battles.

*Sun Tzu, Art of War*



# What we have learnt about SA,...

- SA **first-in-line** for new advanced attacks and malware.
- Traditional **signature-based** defences are not enough.
- You need **proactive** detection and response.
- You cannot **rely on signatures** alone.
- **SA is a target** for new advanced attacks.





# Mass Effect: Leveraging social media for **cognitive influence**

Using the #FeesMustFall protests as a case study to showcase the enriched capabilities of cyber intelligence, Snode was able to apply its analytical tools to delve deeper into the anatomy of the Tweets, and even discover that outside influencers were making an impact.

Links to the published articles below:

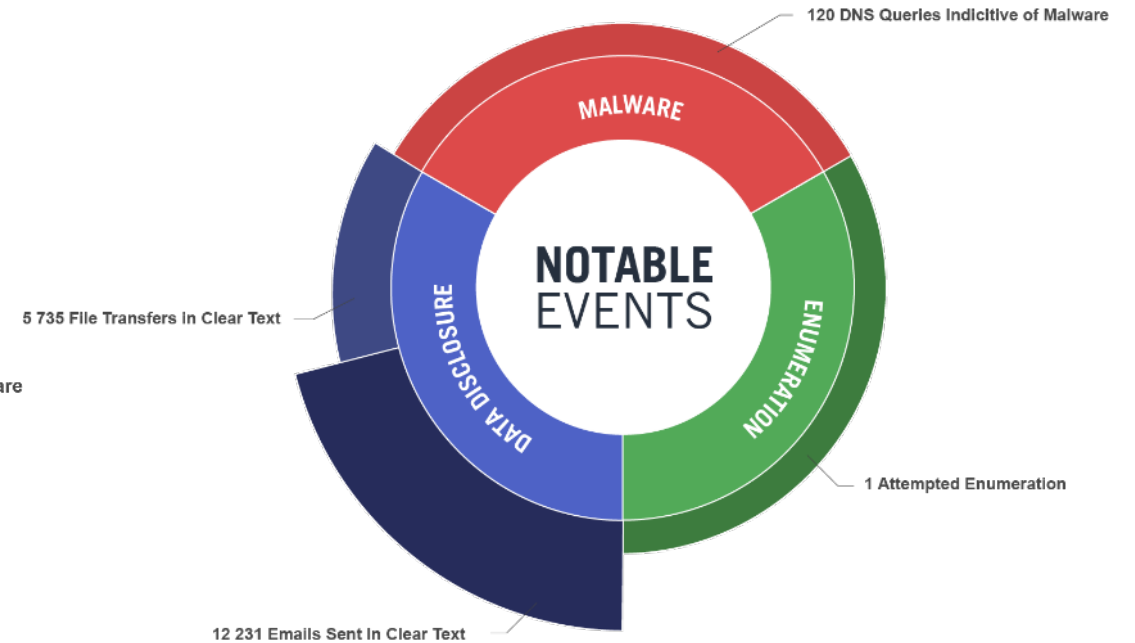
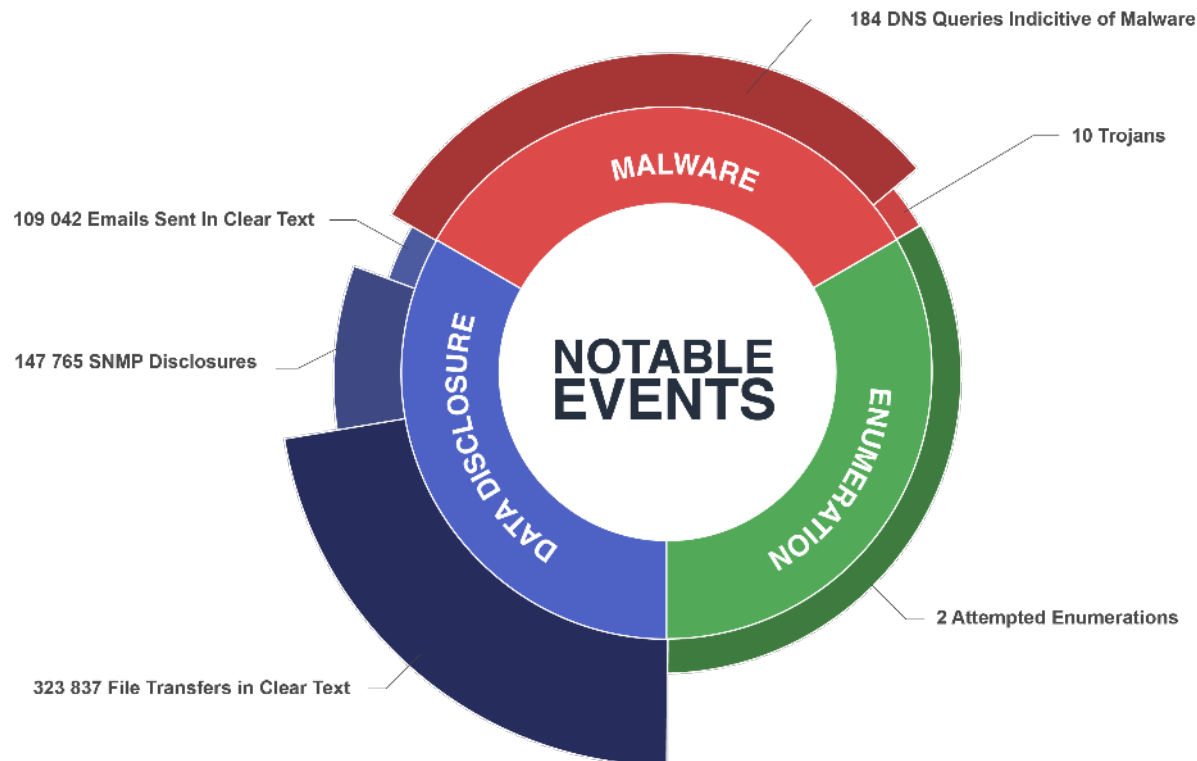
- <https://www.htxt.co.za/2016/12/15/analysis-of-feesmustfall-tweets-reveals-startling-trends/>
- <http://www.techsmart.co.za/business/Snode-uses-cyber-intelligence-to-drill-deeper-into-the-FeesMustFall-protest>



# Information Disclosure

## Disclosure Trends for SA

1. Transactional data flows
2. Personally identifiable
3. Financial reporting



4. User account credentials
5. Passwords, PINs and OTPs
6. IT alerting and reporting
7. System configurations
8. Email communications

# Problems we see

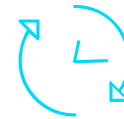
In our experience, what we have found is that our customers face the following key challenges when trying to address cybersecurity concerns within their organization:



**Skills  
Shortage**



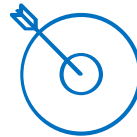
**Heterogeneous  
Architectures**



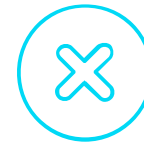
**Reactive  
Approach**



**Budget  
Constraints**



**Mechanised  
Attacks**



**Inability To  
Respond**

# *!SUM(\*.parts)* | Synergy

The opportunity to secure ourselves against defeat lies in our own hands, but the opportunity of defeating the enemy is provided by the enemy himself.

*Sun Tzu, Art of War*



# Applied Intelligence

**Real-time** processing of disparate data sources on a massive scale.

**Machine assisted** analytics platform empowering data driven decision making.

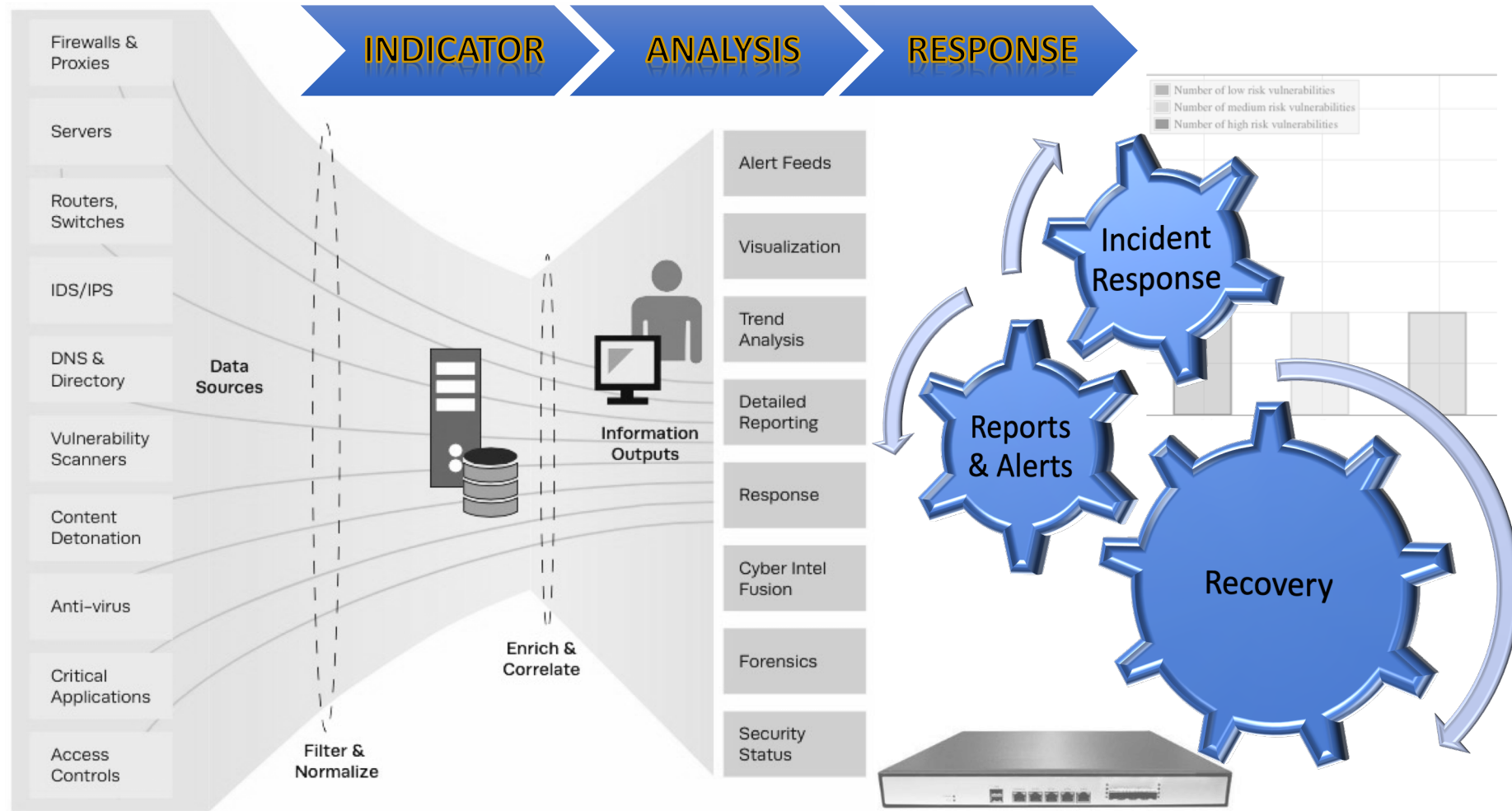
**Dynamic** data visualization allowing analysts to interact with data at any level.

**Dedicated platforms** designed for forward engineering and rapid deployment.





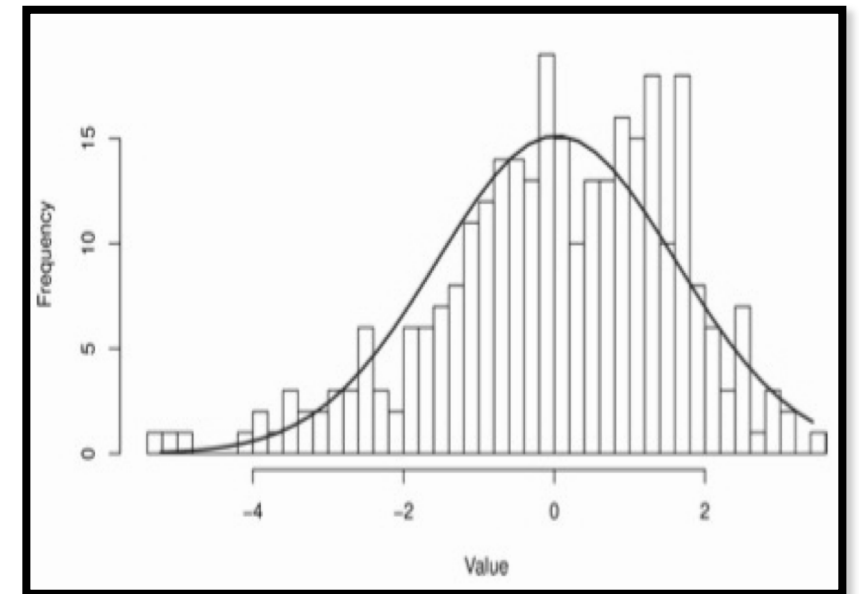
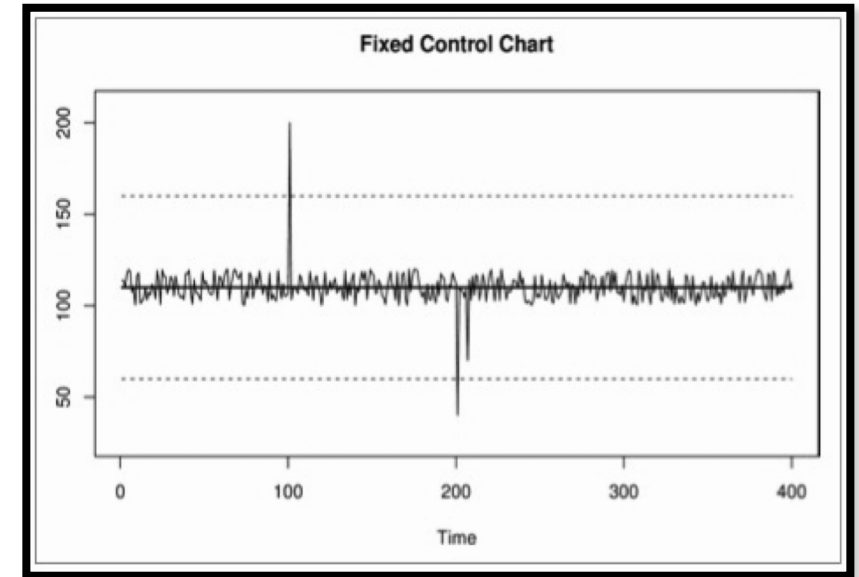
# Applied Intelligence



# ⚡ Street fighting **mathematics**

- ❑ The observer effect
- ❑ The butterfly effect
- ❑ Transaction velocity
- ❑ Abnormal transactions
- ❑ Holt, Fourier & Markov

*walk into a bar,...*





# BACK TO THE FUTURE

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