



BOXTRAP

Complexity, complexity, complexity,...simplicity

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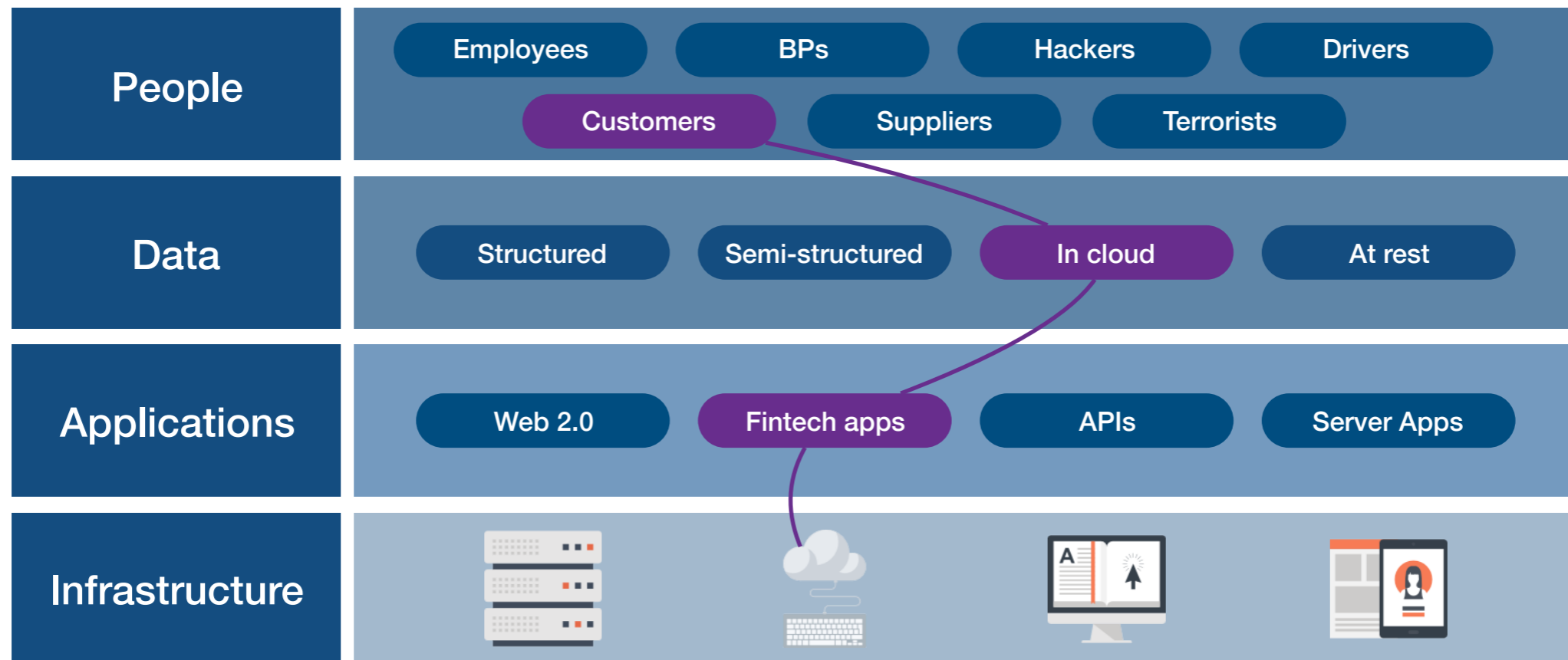
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Challenge

IT world is getting dangerously complex

Physical and logical world collide every second at billions of places



**Data environment is getting extremely complex, vulnerable and fragile.
People can not handle the vast amount of data today - how we would like to govern an
industries of the future?**

Challenge

It is extremely difficult to make decisions in this complex world

- Hard, complex, tricky, easy, simple, ... **no decisions at all (SOC)**
- An integral part of ones life determine the direction of our future advancements (personal and professional cross-roads)

35 000

Number of unconscious
decisions an average
person make every day
(crossing road) (Source:
Huawei)

10[^]3

Number of conscious
decisions an average
person make every day
(what is my next
business move)
(Source: Huawei)

Decisions are the most trickiest parts of our lives and it includes business
How does one make a decision in such a complex world?

Challenge

To understand vast amounts of generated data an AI is needed

- Data (statistics) & Information (meaning, QnA) & Knowledge
- **Fact #1.:** The amount of data generated has been growing rapidly through years (IoT,...)
- **Fact #2.:** Our capability to get an actionable insight out of this data does grow way slower (today = structured logs, un-structured data?)

2

Quintillions

Of bytes generated every single day (Source: IBM)



From data to knowledge

Our capability to understand data grows way slower then the amounts of data generated. There is a need for artificial intelligence to come to our aid.

Challenge

Statistics, automation, compliance

Efficiency of cyber-adversaries is growing and there is not enough cyber-security experts. AI based cyber-attacks are imminent.

10%

CEOs are ready to handle major cyber attack (Source: EY Risk report)

33%

Cyber security considered the most severe long-term risk (Source: Allianz Global Corporate Survey (824 participants (**)))

2%

Companies do implement measures for all parts of cyber-security lifecycle (Source: EY Risk report)

-1,8 M

Security expert shortage in 2020 (Source: IBM X-Force report)

(*) <https://techcrunch.com/2016/05/23/can-startups-disrupt-the-20-billion-cyber-insurance-market/>

Chain of command

Evolved AI for the future

Understand the behaviour of each significant asset within the corporation IT environment, point on events worth attention and provide **decision support for c-level staff**

Gather data



To prepare data semi-automatically - (classification - unsupervised learning)

Extract information



To map processed data to an internal logical structure and “**extract meaning**” from specific fields (semi-automated un-supervised learning, entropy)

Learn



To use various types of supervised and un-supervised machine learning and **auto-tuning feedback**

Decide

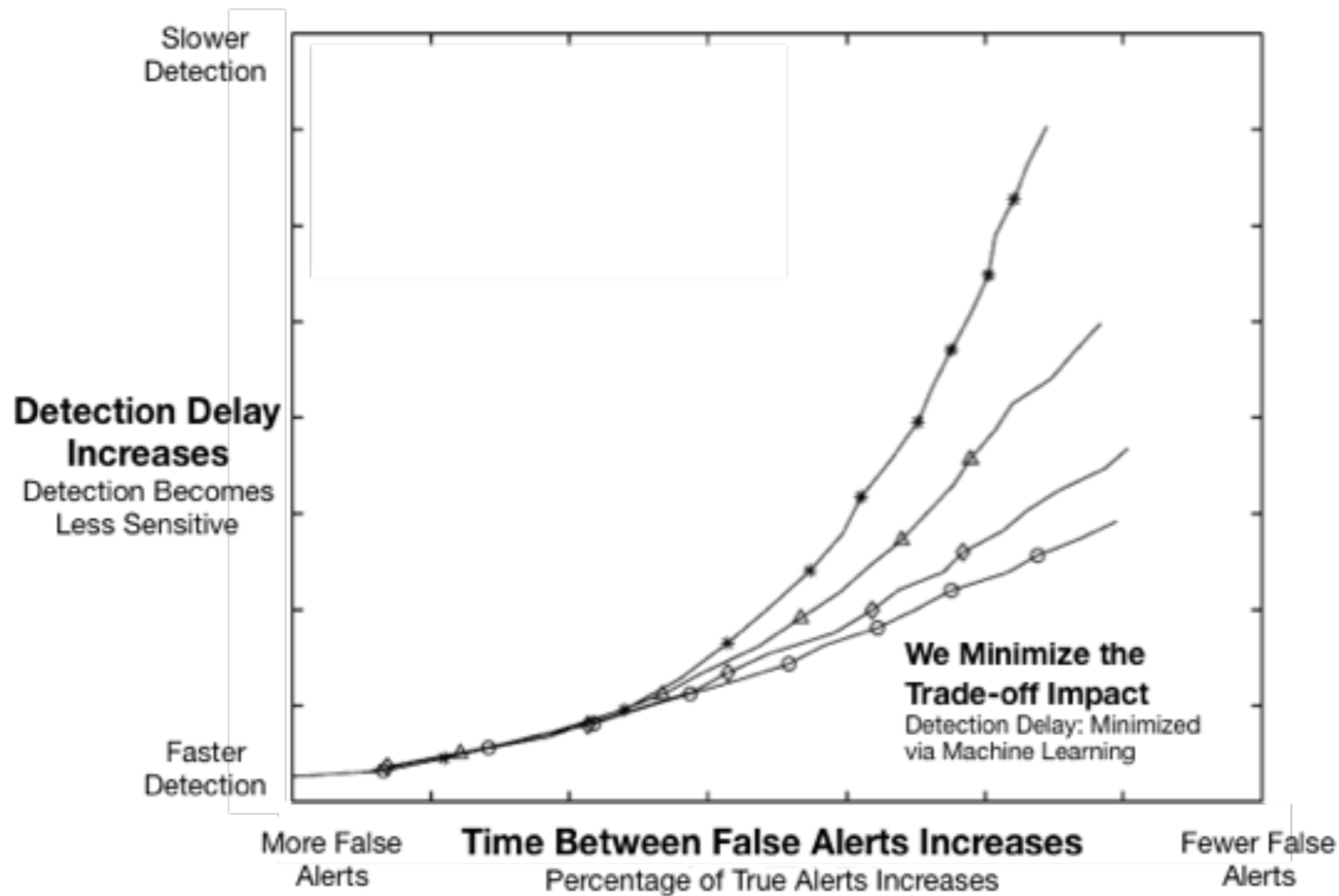


The most important part of an entire process. **Supervised learning techniques learn, measure and suggest what human operator should do**

Threshold tuning

Trade-off impact optimisation

5 FTEs to tune deterministic thresholds on average





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