



# Why am I here?

- A cyber security 'metaverse'
- Lessons from the limitations
- Practitioner feedback





#### Who am I?



**Gert-Jan Bruggink** 

cyber threat cartographer

&

founder Venation

10+ InfoSec.

High tech, manufacturing, financial services, governmental.

Cyber threat intelligence (CTI) based risk management.

Intelligence-led Red Teaming.

Capability building & leadership.

Strategic change through (CTI, SOC & Cyber) transformation programs.

Father x 2, Entrepreneurship, Gaming, Painting, Lego, Meme's.

♥ @gertjanbruggink

in /gertjanbruggink







# What am I going to talk about?

- ✓ Evolution & lessons learned
- ✓ Adoption & lessons learned
  - ✓ Usage & lessons learned

# Evolution . . . .

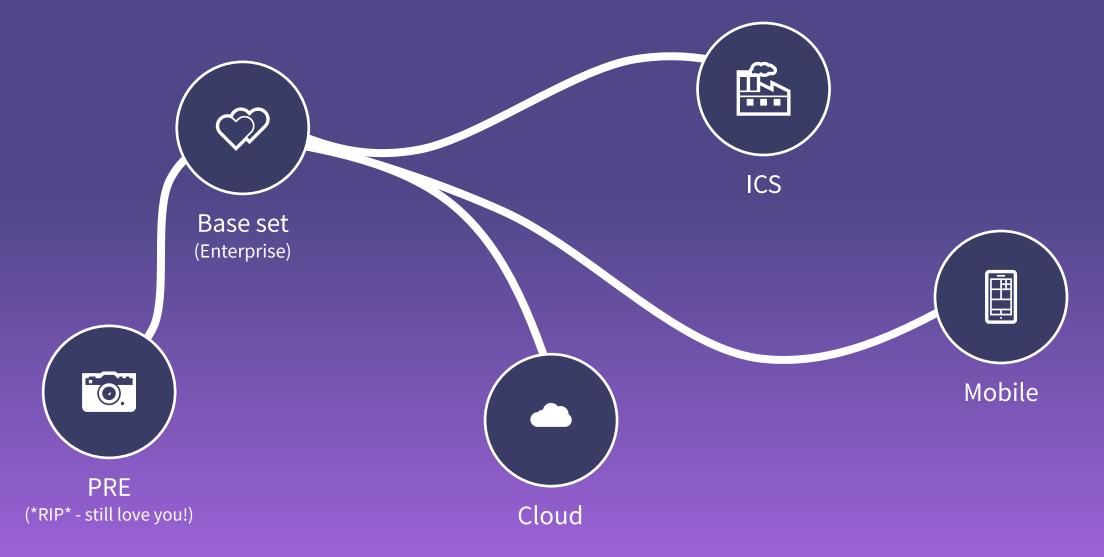
#### Y

# The terrifying 'first look' at ATT&CK





# Constant expansion and structuring





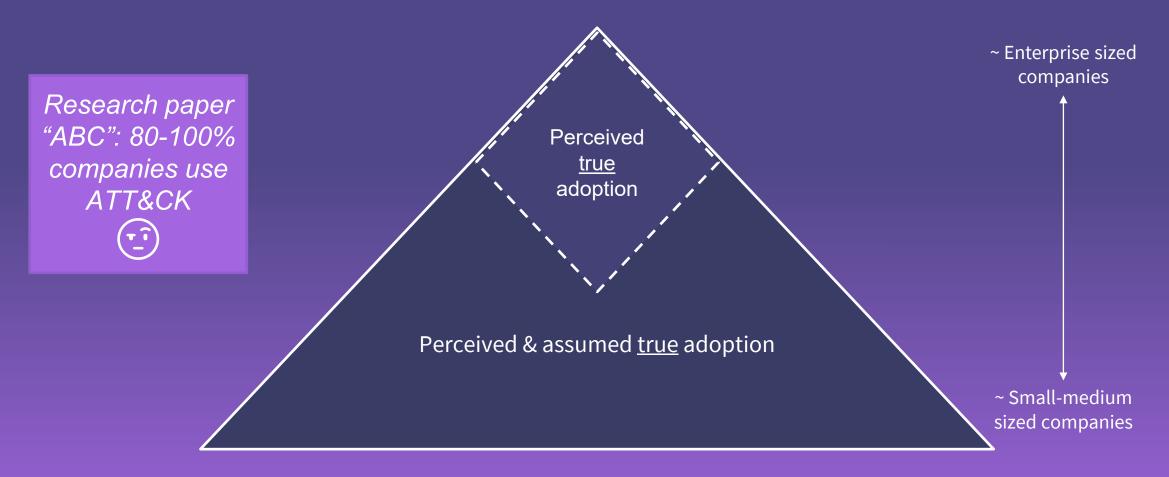
# Storytelling using ATT&CK





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# 'how-many-teams-actually-use-ATT&CK' bias

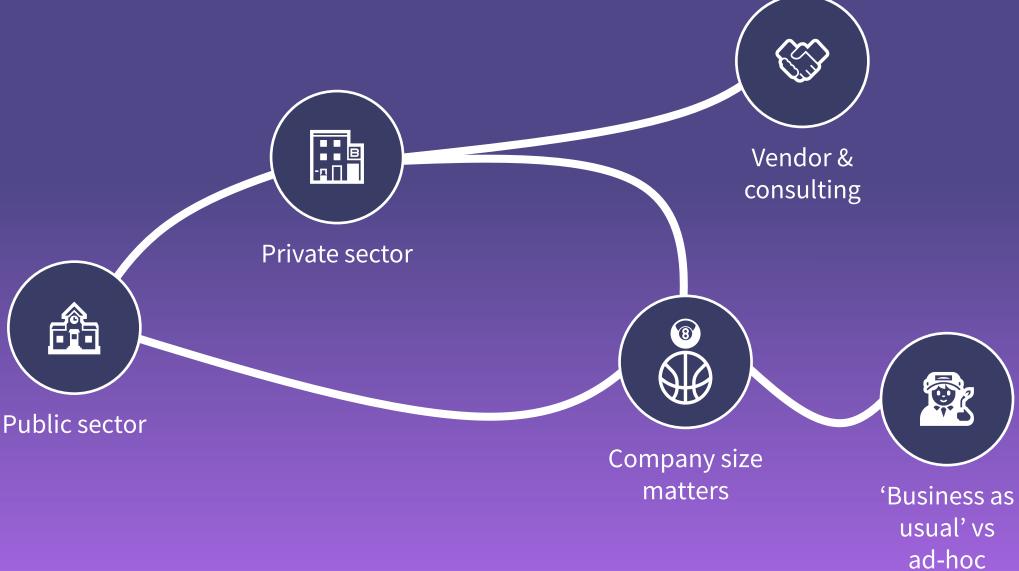


Do not assume everyone is using the framework - or uses it in the intended way





# Where is the adoption (more-or-less)



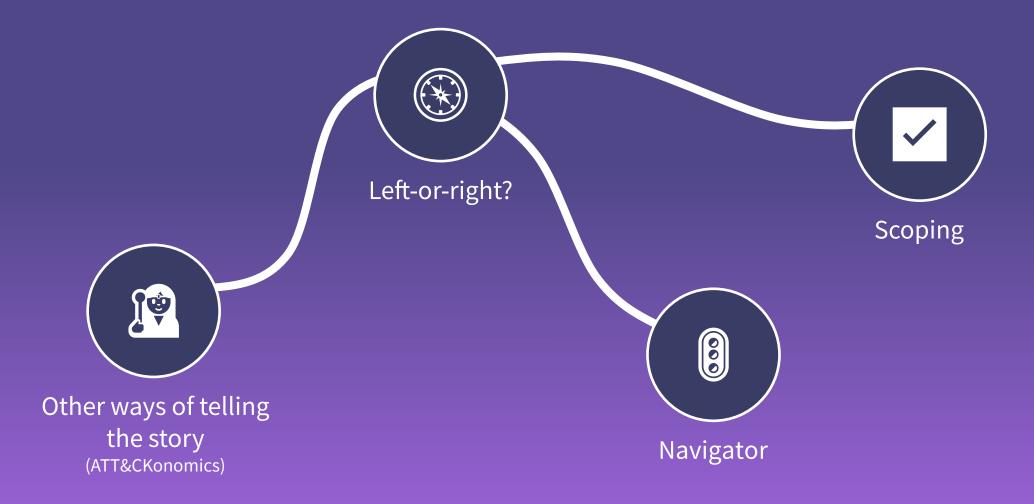


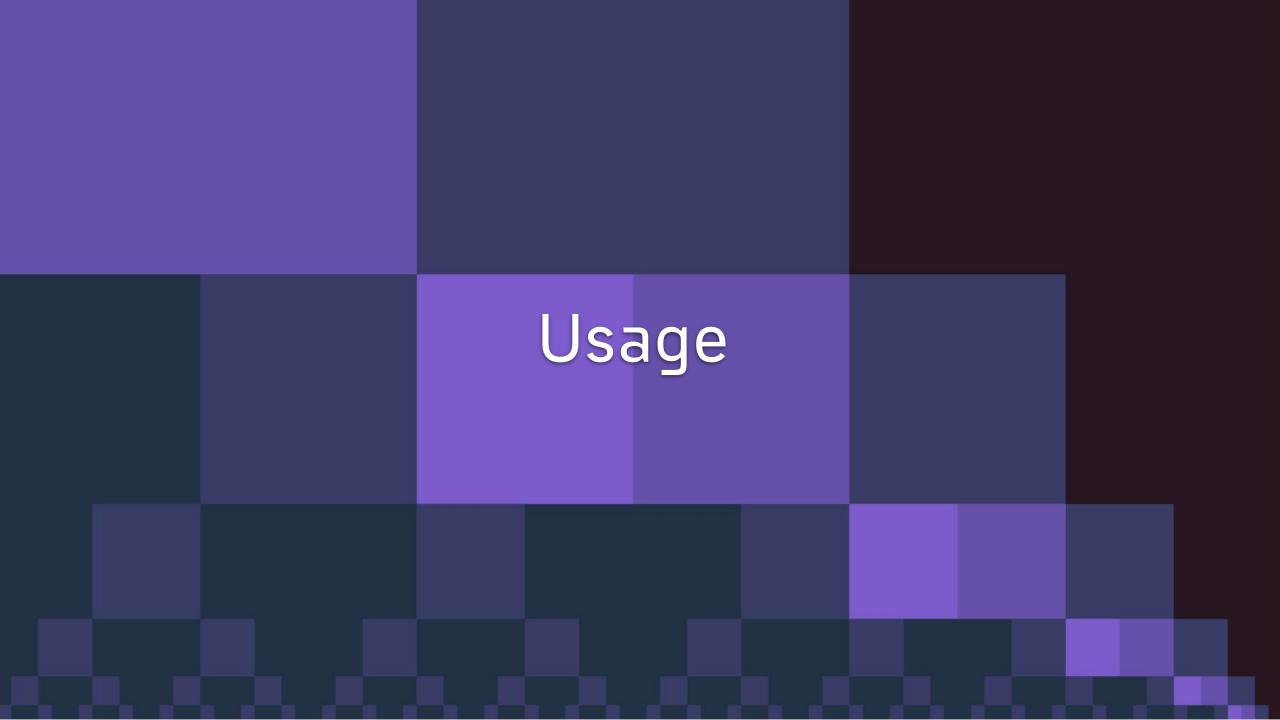
# Applications outside of operations





# Main motivation usecase: prioritization







# Setting the scene: example starting points

#### **Teams new to ATT&CK**

- How does the framework help me tell a better story to my leadership?
- Can we use the framework to help us do basics better?
- Will using it save us costs along the way?

#### **Teams seasoned in using ATT&CK**

- Where will the framework give better context/nuance in attacks against similar companies?
- What test scenarios should be prioritized when validation controls with our capabilities (e.g. hunting, red teaming)?
- Can you prepare a cost-effectiveness assessment of our controls, compared to adversaries (and techniques) targeting our vertical?







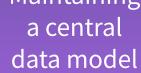
# The dreaded 'bingo card' visuals





# Consolidation...



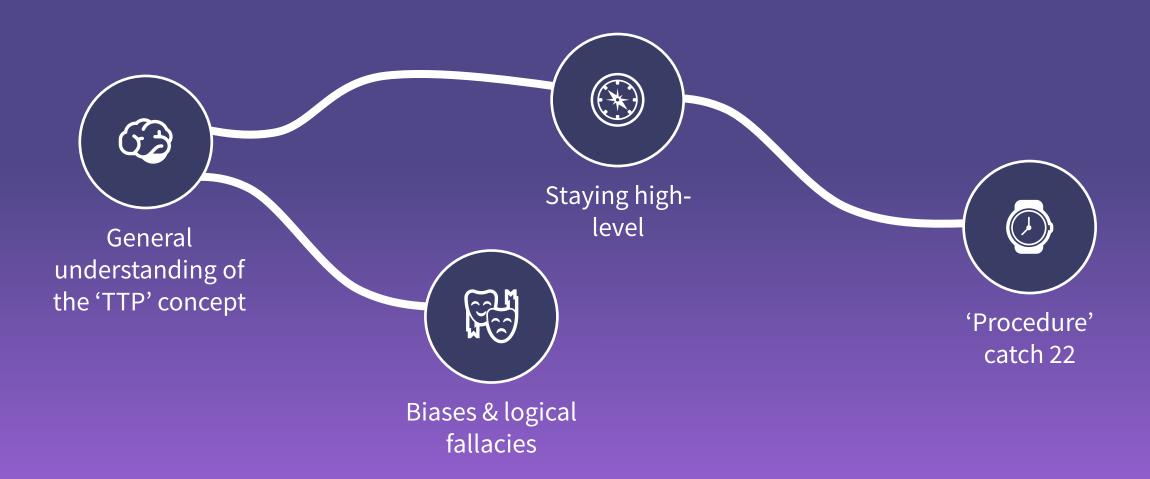


Relationship to other frameworks



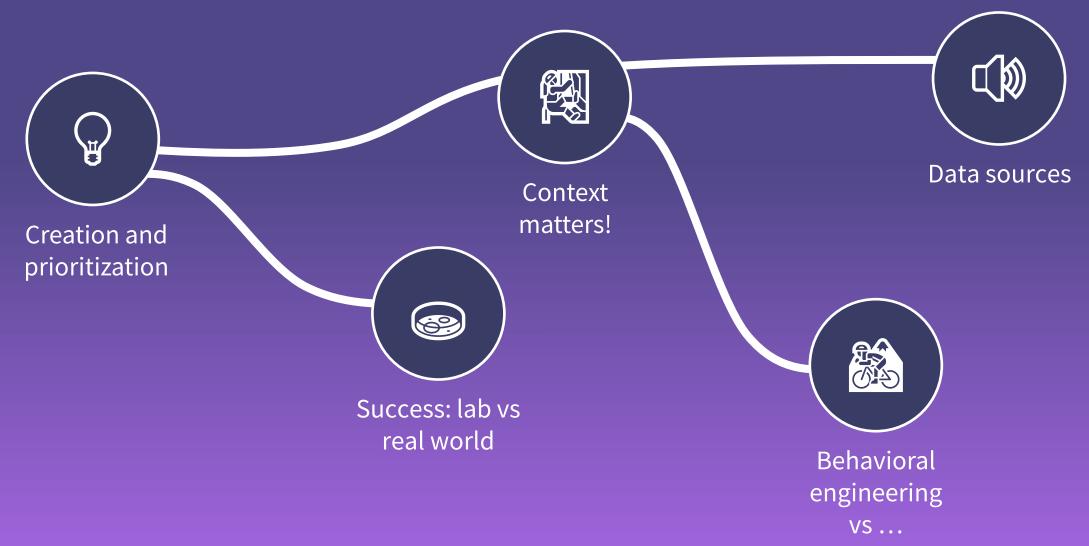


# The 'TTP'\* discussion



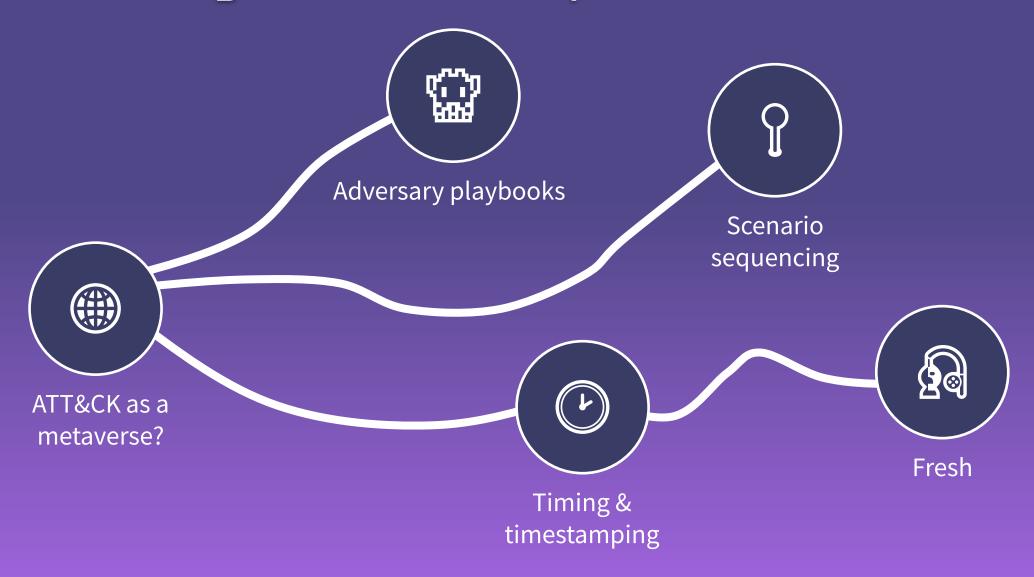


# Engineering your hypotheses



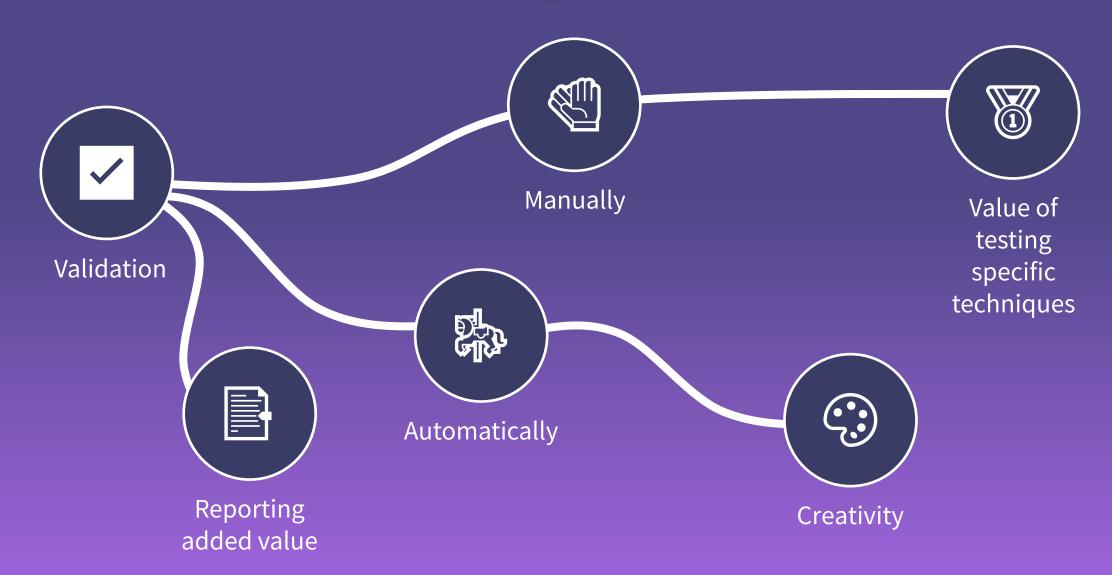


# Building scenarios to provide context



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# Validating scenarios





# The future of ATT&CK remains the community



People

(e.g. continue expanding the education the 'adopting' community)



**Process** 

(e.g. sharing feedback)



Technology

(e.g. vendor ecosystem)



# Recap & course of action



- Don't complain, just provide feedback.
- Contribute == getting creds
- The community decides ATT&CK direction: this is widely underestimated.

If you would revisit our ATT&CK usage today:

- ✓ What is our level of (true) adoption of the framework?
- ✓ How are we telling the right, nuanced, story from procedure- to board room?



### Let's continue expanding the ATT&CK 'metaverse'!

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