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Working with 3rd Parties

Matthew Merzbacher

smiths detection

bringing technology to life

3rd Parties – Friend or Foe?

- OEMs work with 3rd parties (non-principals) all the time
- It's all about blame
- Emphasis on third-party algorithm development
  - Ideas are not the scarce resource
  - Integration is the challenge
  - Do we need an API?
- Need to be open to new ideas
  - I have one!

Working with 3rd Parties

- We use 3rd parties for:
  - Service
  - Supply
  - Development
- Heck, we even have a direct competitor as a supplier!
- Can we learn from these areas?
  - Example from overseas service

Big Issues

- Vetting:
  - How do we ensure that the 3rd party is not…
    - An extremist
    - Stealing IP
    - A Cyber-Risk
    - Otherwise working against our cause
- Integrating:
  - Partners' perspective: it's your fault!
  - Customers' perspective: just fix it!
- Roles: Who is the 3rd party here anyhow?
  - Typically need a lead / responsible party

Challenges to 3rd Party use

- What if your 3rd party algorithm failed testing or did this?

  TSA Agents Say They're Not Discriminating Against Black Women, But Their Body Scanners Might Be

  https://www.propublica.org/article/tsa-not-discriminating-against-black-women-but-their-body-scanners-might-be

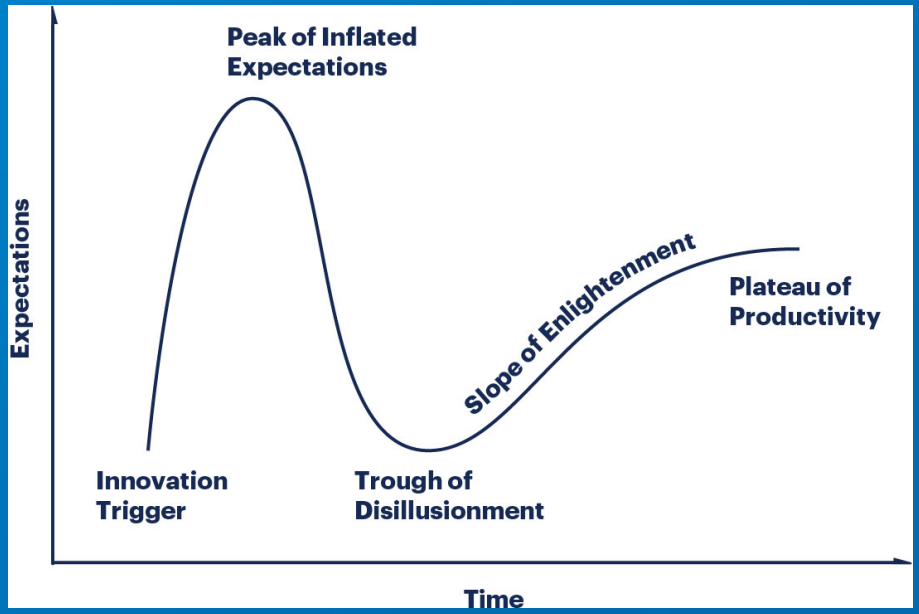
- Cyber-security concerns
- If data is lost, who cares?
- Regulators historically like "one size fits all"
  - Moving away from that
- Isn't it worth it for the ideas?

Viewing the Hype

- Ideas are not the short commodity
  - 55000 new PhDs in US
  - 30000 new products / year (Harvard Business School), 80% fail (or maybe it's 95%)

    https://www.publicity.com/marketsmart-newsletters/percentage-new-products-fail/
- Gartner Hype Cycle

  https://www.gartner.com



Interaction:

- Where is 3rd party on the cycle?
- What about Deep Learning?

Some 3rd Party initiatives

- Algorithms
- Canines
- Testing
  - What's the benefit?

Solution

- Formal / Legal
  - Established Responsibilities
  - Carefully crafted Statement-of-Work
  - Well-designed API
  - Integration Plan
  - High-overhead, low expected-value

- Is there an (easier) alternative?
  - NDA, lightweight collaboration, build trust, integration, MOU
  - Silevitch: only 19 years to build trust

- Carrying that to its logical extension…

Wacky Idea

- Open Source detection code-base!
  - Why not?
  - No really, why not?
  - If it's good enough for Linux…

- Corollary: If we figure out how to stop a threat, and releasing that information isn't going to expose vulnerability, shouldn't we publish it?

Thank You!