

# Have We Penetrated Yet ???

You, me and a pentester

20 November 2015



- ▶ Introductions
  - ▶ Why am I having this talk?
  - ▶ Type of PTs
  - ▶ How do we see it VS. How the client sees it
  - ▶ The Challenge (seeing this with the eyes of the client)
- ▶ Successful interactions (4)



**@mikkohypponen**

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I don't get what all these pentesting companies are doing. Just how much testing does a pen need?

2 hours ago via web

# Why am I having this talk?



- ▶ Hybrid Testing
  - ▶ Social Engineering
  - ▶ Red teaming
  - ▶ Process Controls
- ▶ Focused Testing
  - ▶ Infrastructure
  - ▶ Application
  - ▶ Embedded
- ▶ Compliance Testing
  - ▶ Internal Audit
  - ▶ Regulatory
  - ▶ Compliances (PCI...)

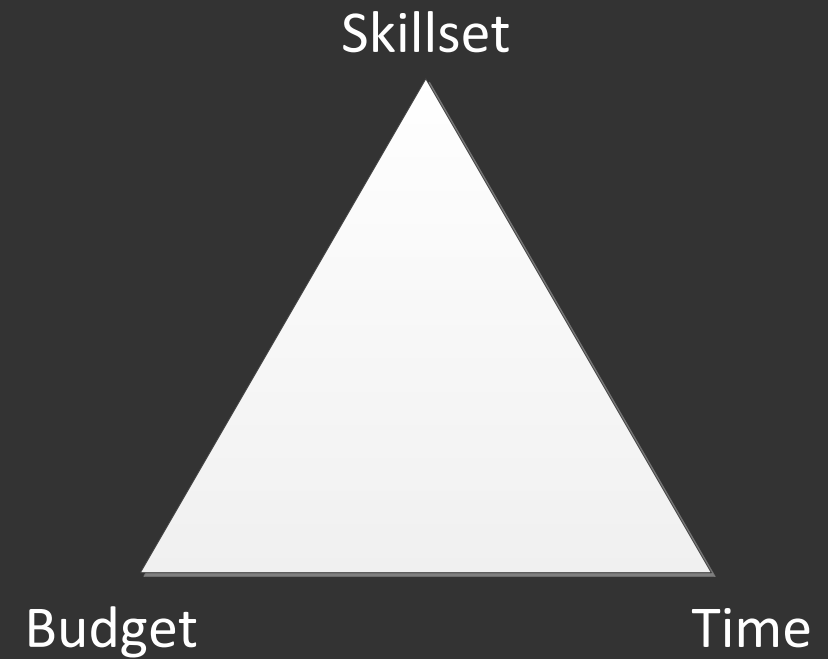
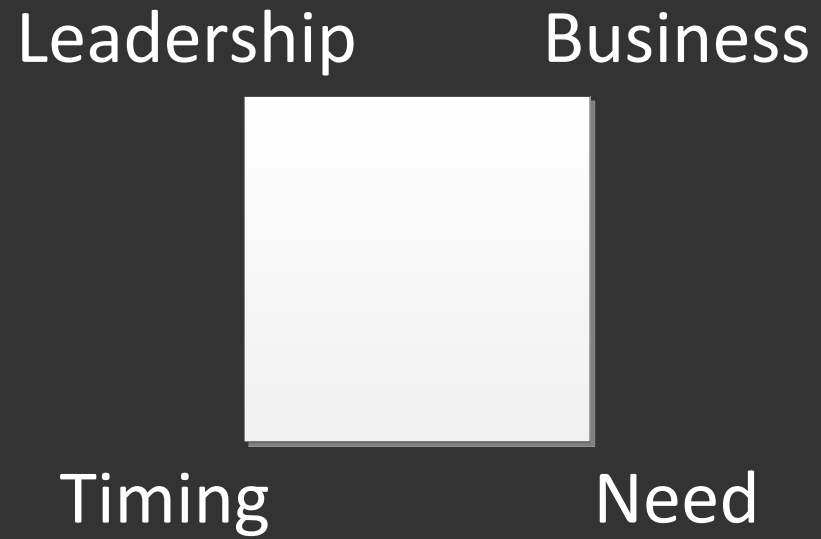
- ▶ Where does the problem lie?
  - ▶ Fixing infra, is somewhat easier...
  - ▶ We most likely have the right resources
  - ▶ We can mask it, kind of okay, if we don't want to fix it right away
- ▶ But on app sec
  - ▶ We need the right people to get it
  - ▶ The right people to fix it
  - ▶ The right process to prevent it from happening again

## ▶ When do we normally get called?

- ▶ One offs
- ▶ Post breach
- ▶ The board asked us what are we doing around CYBER
- ▶ They are trying something new (cloud, big data, cloud, big data)

## ▶ When do we want to get called?

- ▶ They made a strategic decision
- ▶ The client is fully aware of the business process
- ▶ The client is fully aware of the risks the organization is facing
- ▶ The client knows what they want to test out





# Interactions



- ▶ Black boxing you
  - ▶ “I want to see how real attackers can get in”
  - ▶ “Don’t spend too much time on the scanning bit, I want you to start with the attack”
  - ▶ “I can see you attacking me...”

- ▶ Black boxing you
  - ▶ Red Team is a black box, all else...is not really...
  - ▶ “Real world attackers” VS. Pen-testers
  - ▶ Let’s talk grey boxing this

- ▶ What environment do we test?
  - ▶ “I want to see how a real scenario will play out”
  - ▶ “careful, it’s a prod environment”
  - ▶ “..in the actual environment, they have implemented this a bit differently..”



- ▶ What environment do we test?
  - ▶ There is no real one liner here
  - ▶ This is all up to honestly, does your testing environment really represent the production one?
  - ▶ Do you have a staging environment ?



- ▶ I want you to test this application \ infra for...
  - ▶ “I cant give you an attack scenario, you find it...”
  - ▶ “please be very specific on how you got that finding...”
  - ▶ “How would you recommend we fix this in our environment?”

- ▶ I want you to test this application \ infra for...
  - ▶ Operational risk people...
- ▶ So you don't always know, but there are other people that are working on penetration testing, but they are NOT technical people, at all...

- ▶ I want you to find all of my vulnerabilities...
  - ▶ The client doesn't care about threat actors
  - ▶ The client isn't into automation
  - ▶ The client isn't working this as a process (one offs again...)



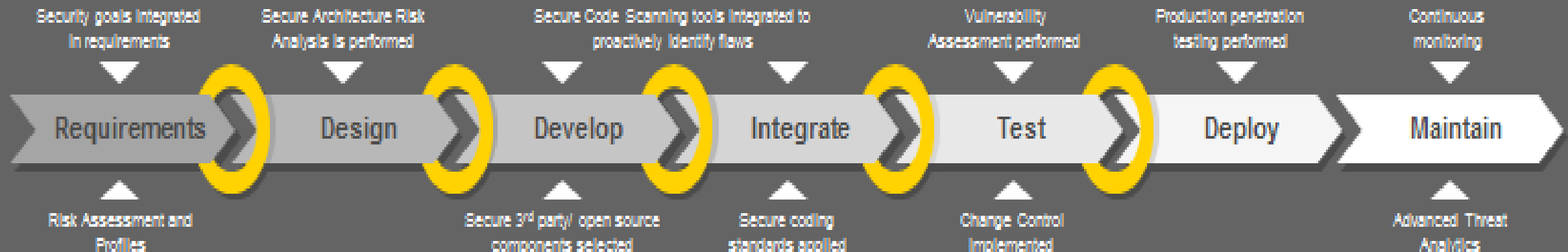
- ▶ Guide the client on the best ways to use you
  - ▶ Separate logical flaws, from just plain old software defects
  - ▶ Real pen testers, aren't afraid of the dynamic and static code scanning tools...so shouldn't you
- ▶ Know what types of threat are out to get you
  - ▶ Perform threat assessments

- ▶ Let's talk SDLC without falling asleep...

## Integrating security in the lifecycle

0 Implemented Security gates with signoff

Integration of security activities throughout the development lifecycle enables timely, risk-based identification and remediation of security vulnerabilities throughout the lifecycle



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ANY  
QUESTIONS  
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