

Empower Your Security: A Beginners Guide to Threat Modeling



Bio

Threat Modeling - 10 years

TMC - Founding Member

James Rabe



[linkedin/in/jrabe3](https://www.linkedin.com/in/jrabe3)



James Rabe

Global Technical Program Manager
| Sr. Solutions Architect | Bridging Inn...



Discussion Topics

What is Threat Modeling?

What are the benefits of Threat Modeling?

Threat Modeling Key Concepts

Threat Modeling Applications

What is Threat Modeling?

*Threat Modeling is a **proactive assessment of risk** which starts with a **well scoped description of change** and results in a **prioritized list of realistic threats** and **prioritized set of cost-effective mitigations** with a **timeline and plan for risk reduction**.*

The background of the slide features a close-up, slightly blurred image of a desk. A silver fountain pen with a blue and gold barrel lies vertically on a light-colored wooden surface. To the left of the pen, a yellow sticky note is partially visible, with the word 'proactive' written in a pink, cursive script. Above the pen, a pair of glasses with thin frames rests on a light blue surface, possibly a clipboard or a piece of paper. The overall lighting is soft and even.

Breaking Down Threat Modeling

Proactive Assessment of Risk

Pre-Change Focused - Finding the problems as early as possible (design) vs finding them post implementation (production)

Problem Seeking - anticipating problems

Risk-Focused - organizational risk appetite

Breaking Down Threat Modeling

Well Scoped Definition of Change

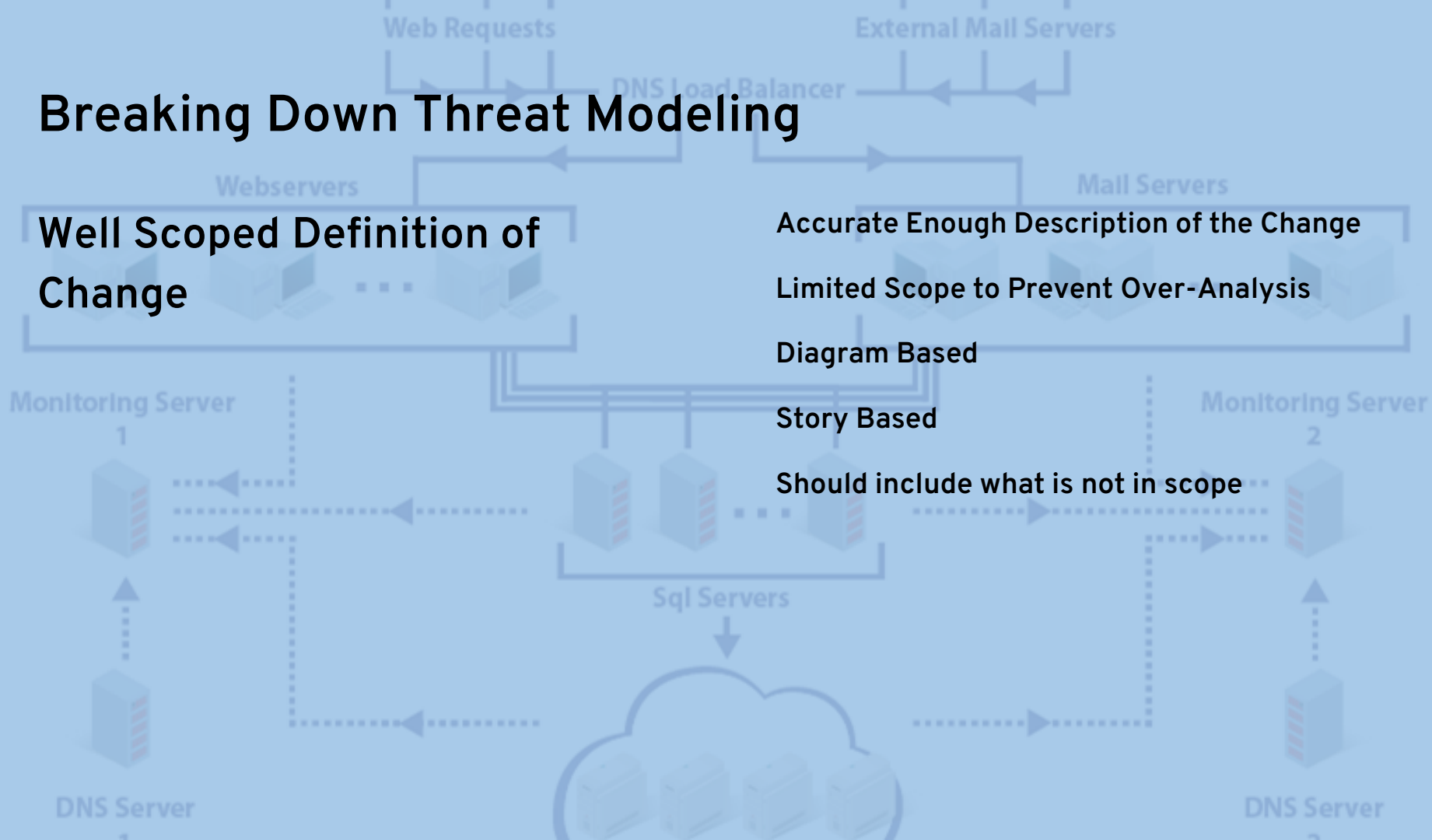
Accurate Enough Description of the Change

Limited Scope to Prevent Over-Analysis

Diagram Based

Story Based

Should include what is not in scope



Breaking Down Threat Modeling

Prioritized List of Realistic Threats

Realistic Threat - Exploit likely threats

Prioritized

Enumerated and Cataloged

Tracked

Breaking Down Threat Modeling

Prioritized List of Cost-Effective Mitigations

Mitigating Factors - Design Based or Corrective Based

Cost-Effective

Prioritized (not everything is urgent)



Breaking Down Threat Modeling

Timeline and Plan

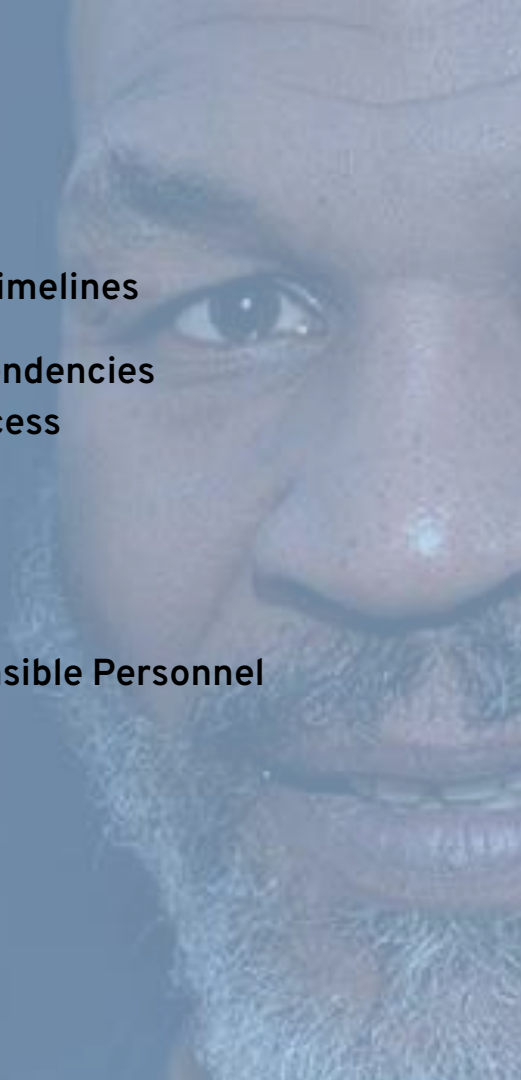
Realistic & Flexible Timelines

- Document dependencies
- Barriers to success

Agile Milestones

Stakeholder Buy-in

Assigned and Responsible Personnel



A photograph of a professional boxing match. A boxer in black trunks with an American flag patch and red gloves stands over his opponent, who is lying on his back on the canvas. The scene is set in a boxing ring with blue and white ropes. The background shows a blurred crowd of spectators under arena lights.

**Everyone has a plan,
until they get
punched in the mouth**

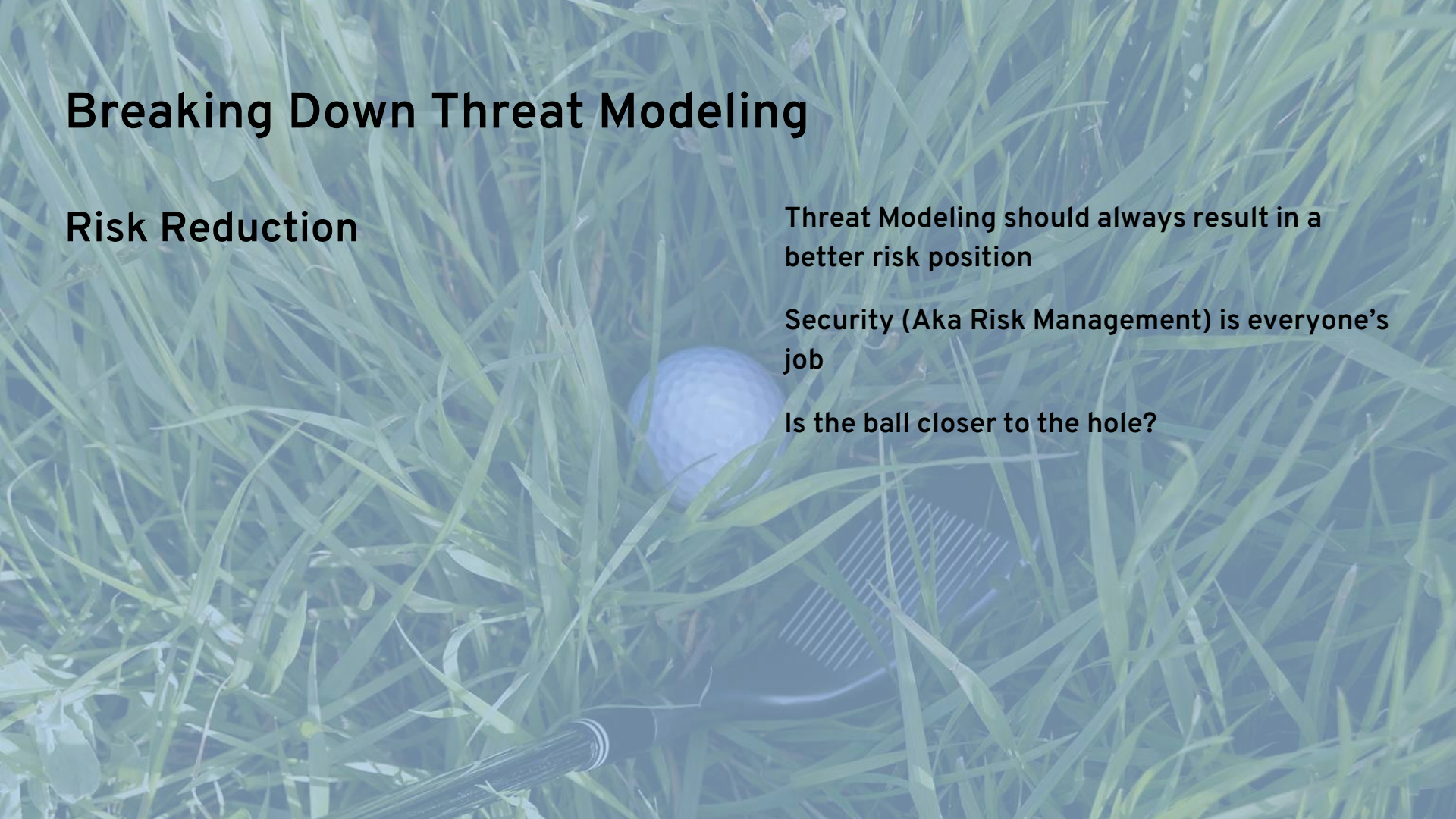
Breaking Down Threat Modeling

Risk Reduction


Threat Modeling should always result in a better risk position

Security (Aka Risk Management) is everyone's job

Is the ball closer to the hole?



Threat Modeling Process



A horizontal flow diagram with four dark gray circular nodes on a light blue background. Each node contains a question in white text. Below each node is a label in bold black text. The nodes are connected by a faint, light blue line.

What are we
working on?

Scoping

What can go
wrong?

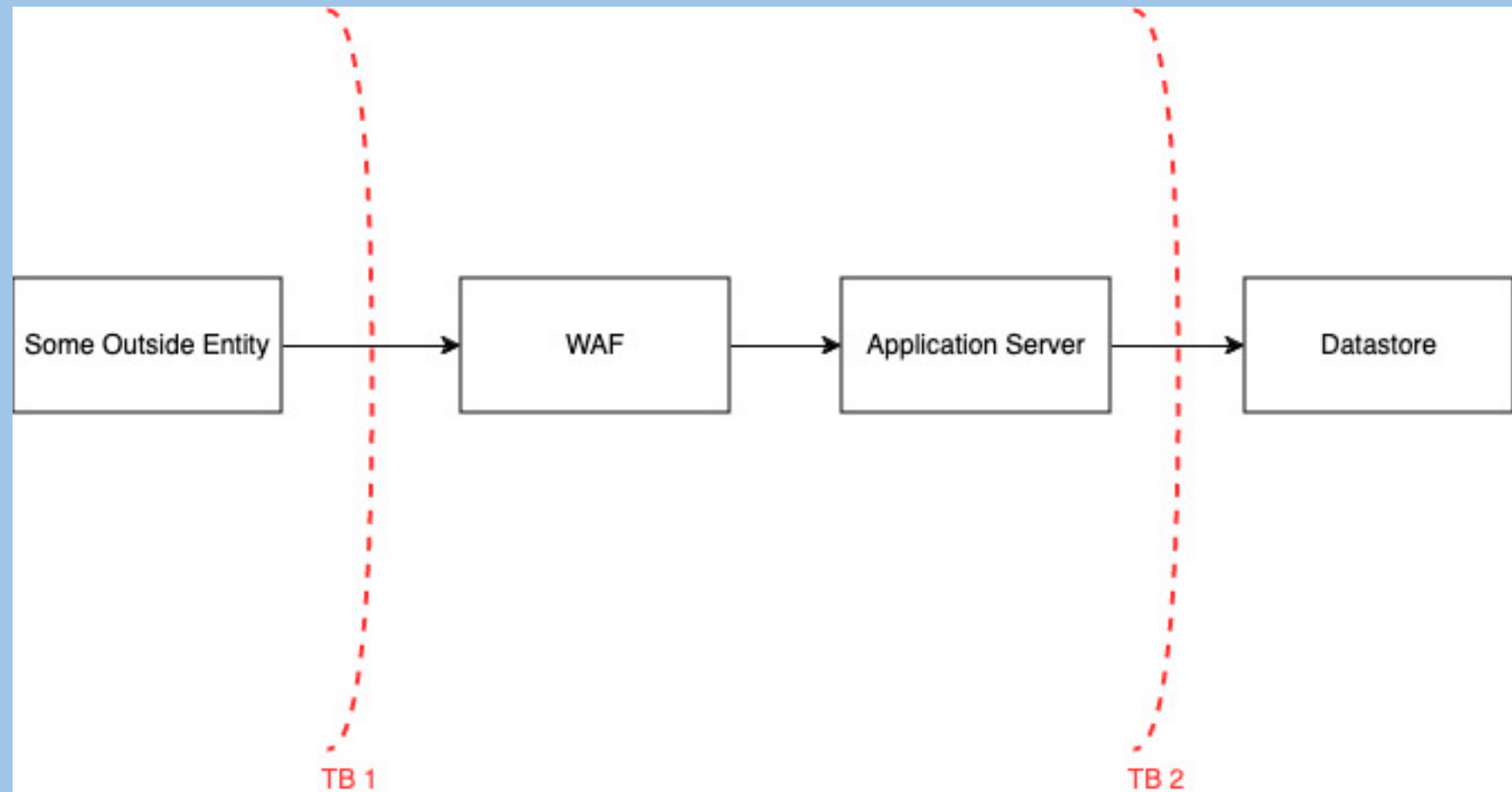
Threats

What are we
going to do
about it?

Mitigations

Did we do a
good job?

**Business
Alignment**



Threats						
STRIDE	Component	Threat	Threat ID	Weakness	Weakness ID	Impact
Spoofing						
Tampering						
Repudiation						
Information Disclosure						
Denial of Service						
Elevation of Privilege						

Freesources (Free + Resources)

Free Platform for Threat Modeling - <https://community.iriusrisk.com>

OWASP Threat Modeling Cheat Sheet -

[https://cheatsheetseries.owasp.org/cheatsheets/Threat Modeling Cheat Sheet.html](https://cheatsheetseries.owasp.org/cheatsheets/Threat%20Modeling%20Cheat%20Sheet.html)

World's Shortest Threat Modeling Course -

<https://www.youtube.com/watch?v=2pvprvsr1lo>

Threat Modeling Connect - <https://threatmodelingconnect.com>

Connect with me

James Rabe



[linkedin/in/jrabe3](https://www.linkedin.com/in/jrabe3)



James Rabe

Global Technical Program Manager
| Sr. Solutions Architect | Bridging Inn...

