

WHO OWNS THIS CODE?

MARCH 23RD 2023



An Association for All IT Architects

Who owns this code?

Code Ownership & Open Collaboration

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**InnerSource
Commons**



OSPO++



**Open
Ireland
Network**



InnerSource
SPECIAL INTEREST GROUP



FINOS

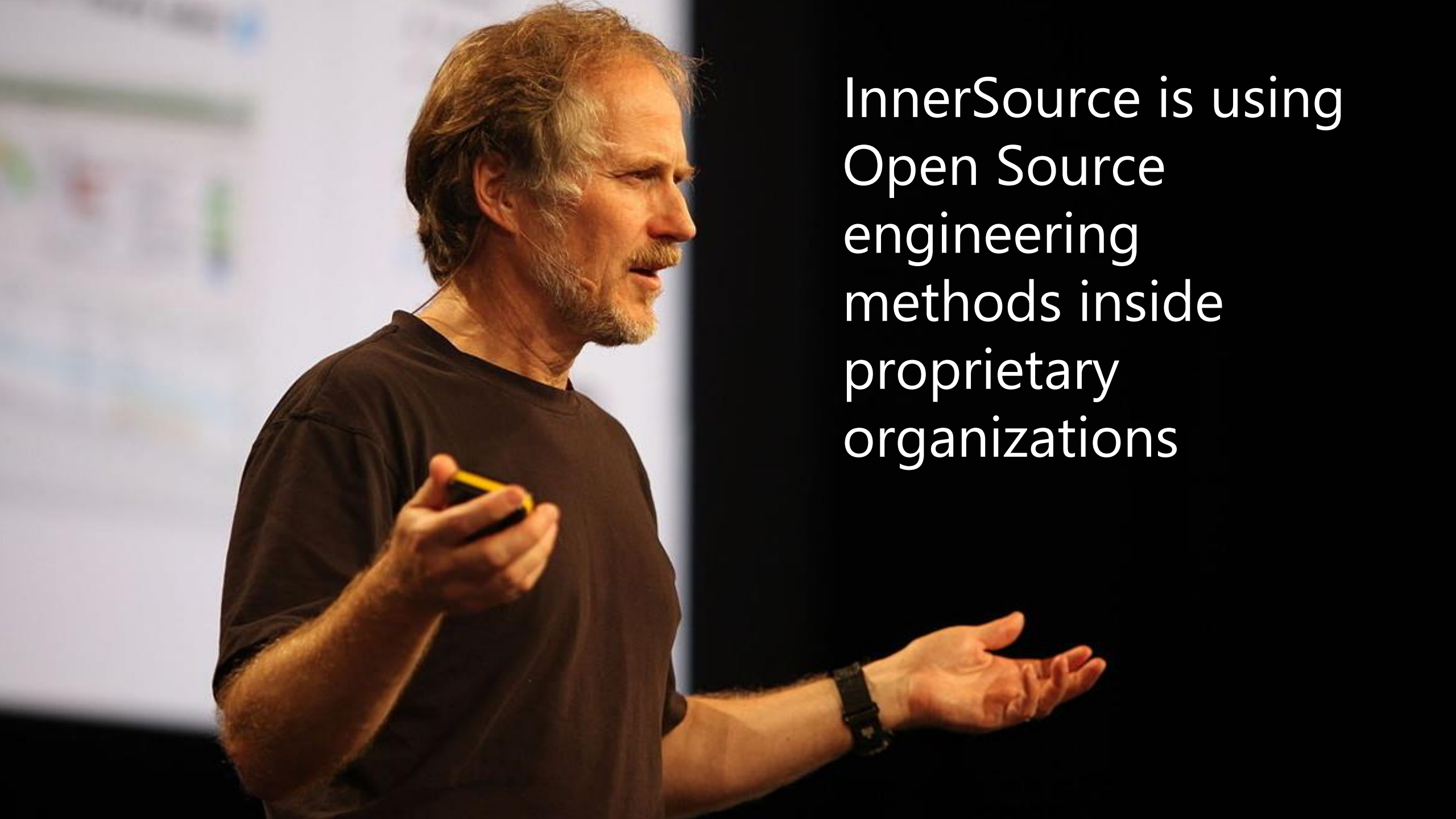
I ♥ Open Collaboration



Image thanks to @juliotiradop on Unsplash

Let's talk about
Open Collaboration...

Let's talk about
InnerSource...



InnerSource is using
Open Source
engineering
methods inside
proprietary
organizations

What is Open Source?

Source code that can be...



VISIBLE



MODIFIED



SHARED

Not Just Code....



TOOLS



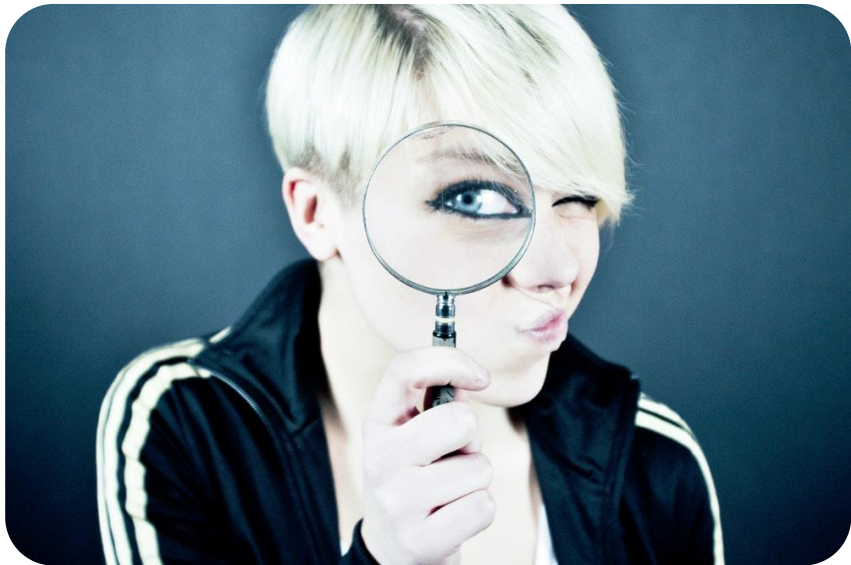
PROCESS



CULTURE

What is InnerSource?

Source code that can be...



VISIBLE



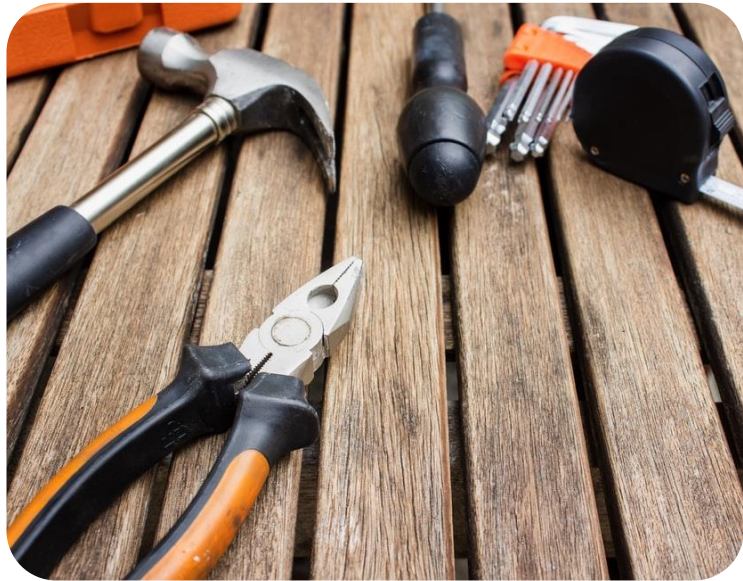
MODIFIED



SHARED

BEHIND A FIREWALL

InnerSource is about Open Source....



TOOLS



PROCESS



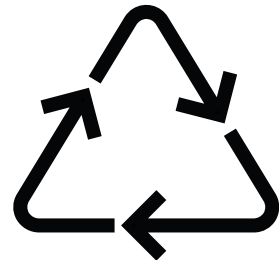
CULTURE

BEHIND A FIREWALL

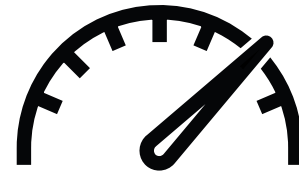
WHY? INNERSOURCE



PATH TO OPEN
SOURCE
READINESS



REDUCE
SILOS &
WASTE

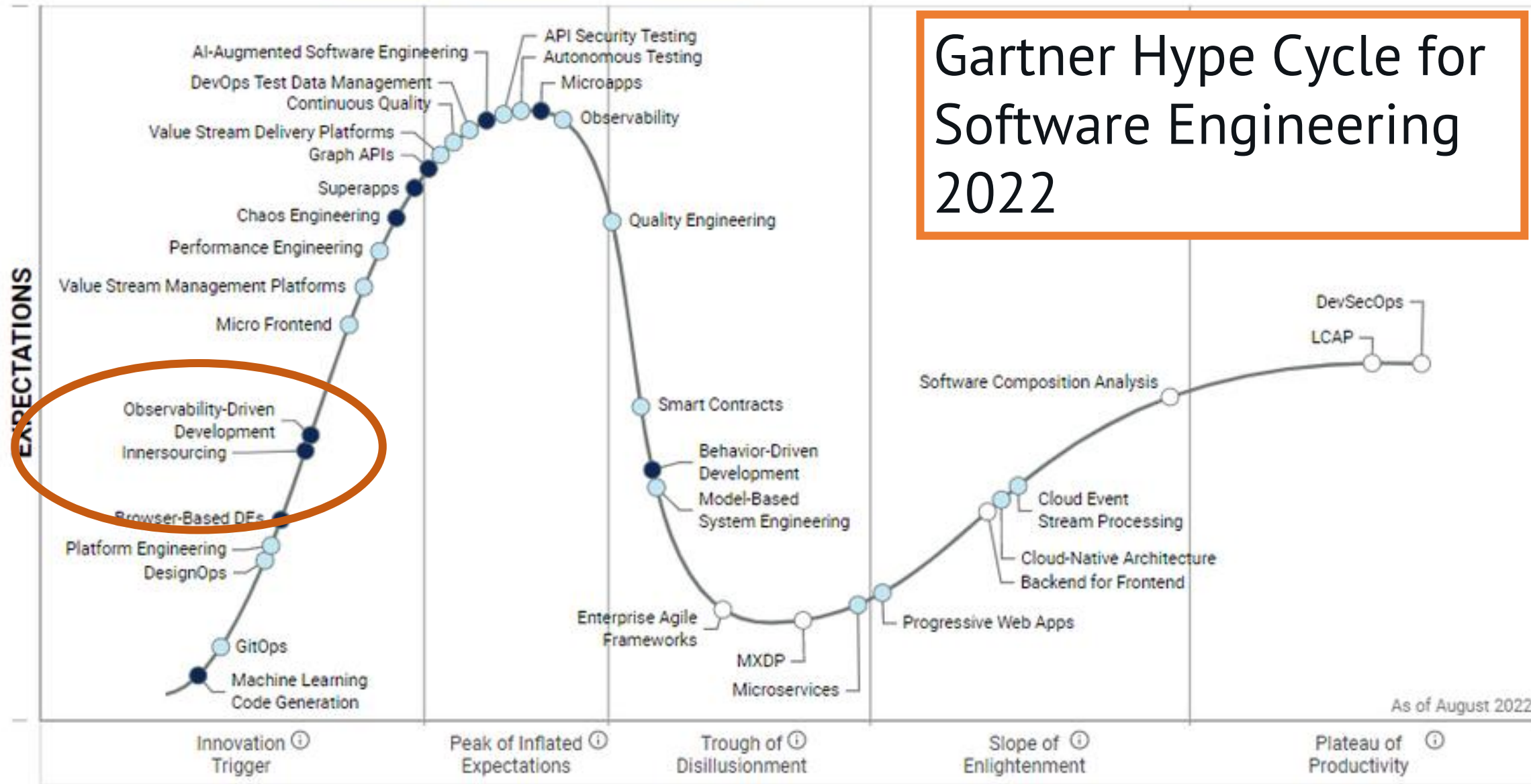


DEVELOPER
PRODUCTIVITY
& CODE QUALITY



HAPPIER
DEVELOPERS
& SKILLS

Time To Plateau Will Be Reached: < 2 yrs. 2-5 yrs. 5-10 yrs.

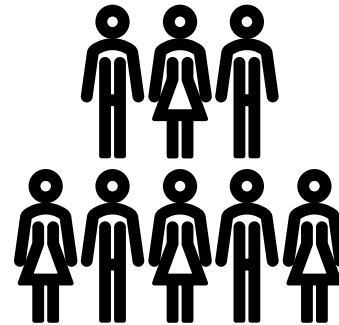


Gartner Hype Cycle for Software Engineering 2022

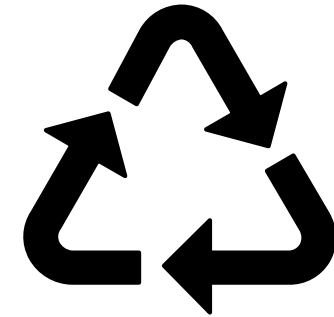
INNERSOURCE – WHY NOW?



REMOTE &
HYBRID
TEAMS



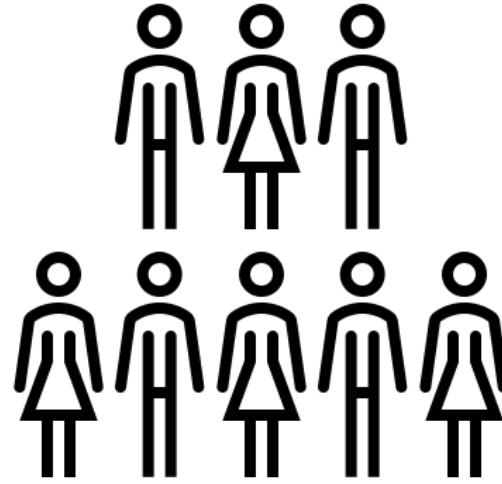
WAR ON
TALENT



CODE REUSE &
DEVELOPER
PRODUCTIVITY

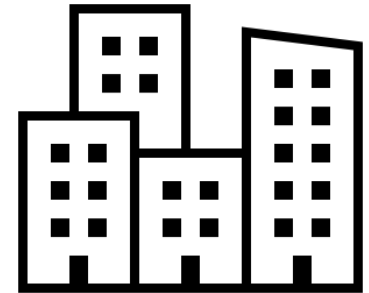
InnerSource Commons At A Glance

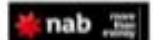
The InnerSource Commons (ISC) is a worldwide growing community of practitioners with the goal of creating and sharing knowledge about InnerSource.



2000+
individuals

750+
organizations





Let's talk about
Ownership...

“**Ownership** is the state or fact of legal possession and control over property, which may be any **asset**, tangible or intangible.”

Wikipedia: <https://en.wikipedia.org/wiki/Ownership>

Code Ownership =>

- Control of Access
- Control of Use
- Control of Gains
- Accountability

Considerations:

- Group vs Individual
- No Owner
- Ownership Changes

So who owns this code?

It depends!

Aspects of Code Ownership

1. **Legal:** who has legal ownership, code copyright?
2. **Organizational:** which departmental budget pays for it?
3. **Authorship:** who wrote most lines of code?
4. **Control:** who decides on the roadmap / priorities?
5. **Maintenance:** who fixes urgent issues or is in charge of support?
6. **Feeling:** This is my code, baby!

Code Ownership is good!

Right?...

Role Clarity

Code Quality

Accountability

Pride

Code Ownership is good!

Maybe!

Code Ownership is good!

Maybe not!

Unknown
Owner(s)

Role
Confusion

No
Owner(s)

Code Ownership can be...

Excessive



- Org Rigidity
- Misguided Management
- Wizard Developers
- Mortgage-driven Development



Excessive Code Ownership?

Can Be Toxic!

"**Toxic Code Ownership** can describe a situation in which an individual or a team exhibits **overly possessive** or **controlling behavior** towards a specific part of a codebase, hindering collaboration, knowledge sharing, and overall project progress."

Source: Clare Dillon ...with the help of ChatGPT

Let's talk about...

InnerSource Patterns!

<https://innersourcecommons.org/learn/patterns/>

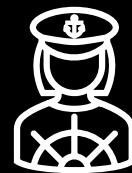
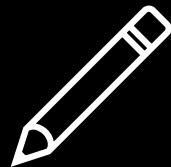
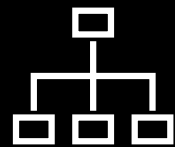
Toxic Code Ownership - Legal

Symptoms:

- *Unnecessary* legal constraints in place to share code across company divisions.

Patterns to Mitigate:

- InnerSource licenses
- Transfer Pricing Patterns



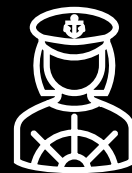
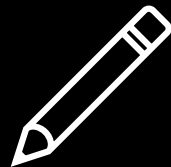
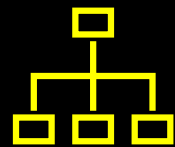
Toxic Code Ownership - Organizational

Symptoms:

- Duplicated effort; reinventing the wheel.
- Continuous escalations for feature requests
- Divergent tools & processes leading to inconsistent code quality

Patterns to Mitigate:

- Leadership Engagement
- Budget innovation
- Formal Comms plans
- Shared code repos & standardized tooling
- Decision making processes
- Advocacy & education
- Metrics & measurement



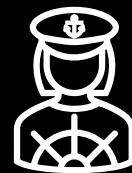
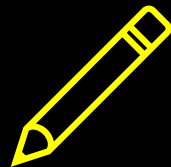
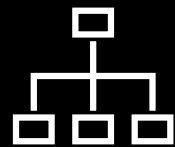
Toxic Code Ownership - Authorship

Symptoms:

- Defensiveness / unwillingness to share code
- "You wouldn't understand my code."
- "Not invented here" syndrome
- Poor documentation
- "Bus factor"

Patterns to Mitigate:

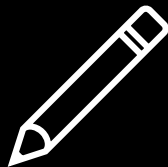
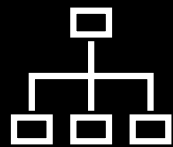
- InnerSource
- Documentation
- Policies (e.g. visible by default)
- Community management
- Mentorship
- Incentives & rewards



Toxic Code Ownership - Control

Symptoms:

- Gatekeeping
- Own work prioritised over other contributions
- Micro management
- InnerSource Theatre (doing as little as possible to enable collaboration)
- No repeat contributions



Patterns to Mitigate:

- InnerSource Documentation (e.g. visible roadmaps)
- Policies
- Decision making processes

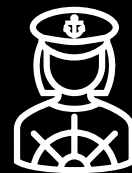
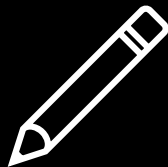
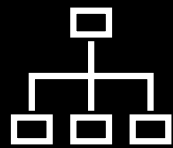
Toxic Code Ownership - Maintenance

Symptoms:

- Orphaned Code
- "You touch it, you own it"

Patterns to Mitigate:

- Ownership guidelines
- Updated Communications.md
- Focus on documentation & archives
- Continuous improvement

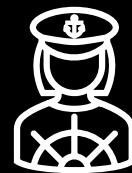
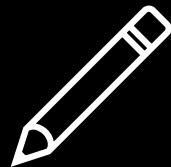
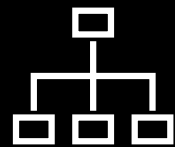
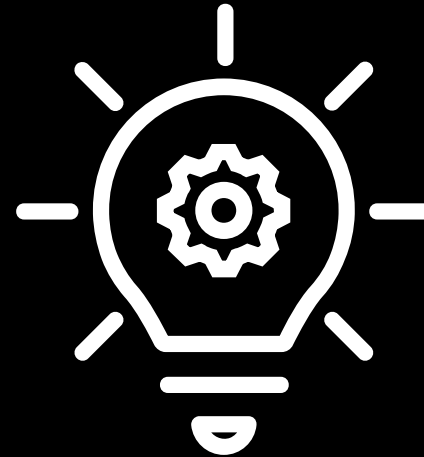


Toxic Code Ownership - Feeling

Symptoms:

- Arrogance
- Possessiveness
- Defensiveness
- Avoidance
- Aggression

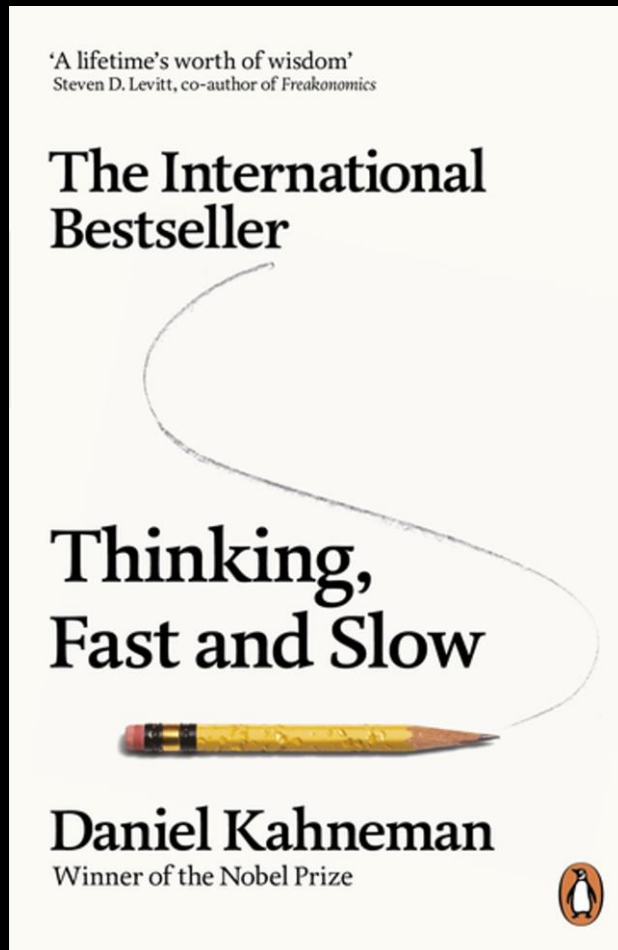
Patterns to Mitigate:



Let's talk about
Feelings...

Culture Change Challenge!

From **toxic ownership**...
...to **open collaboration!**



*Daniel Kahneman
Author: Thinking, Fast & Slow*

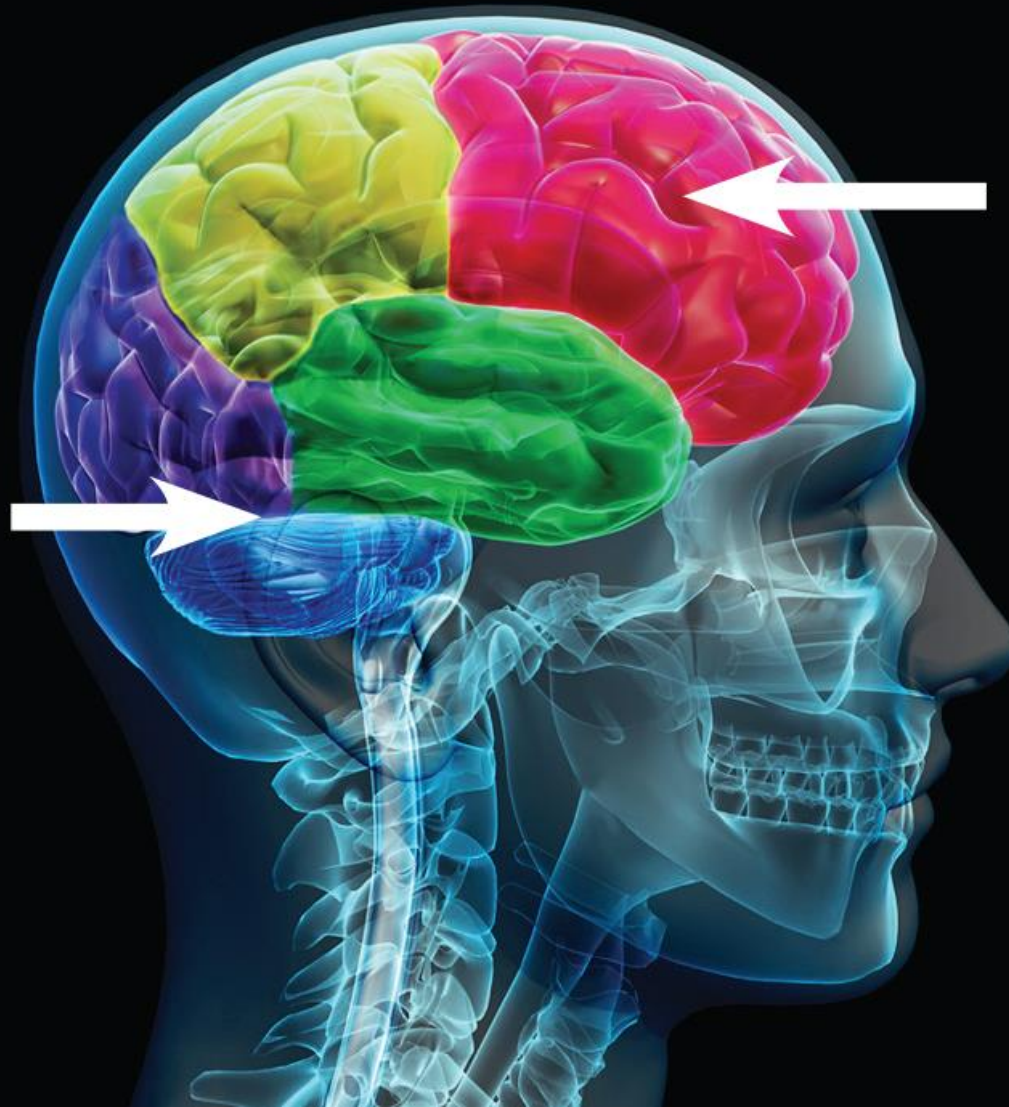
Human Decision Making

Two Decision Making Routes

**Our Lizard
Brain**

Unconscious
Emotion

Very Fast
Involuntary
Associative



System 2

Conscious
Thinking

Slow
Controlled
Rule Following

*Brain Graphic adapted from Deliya
Wesley's Implicit Bias Learning Module
DC Dept of Health bit.ly/biasbrain*

Threat Response & Our Lizard Brain

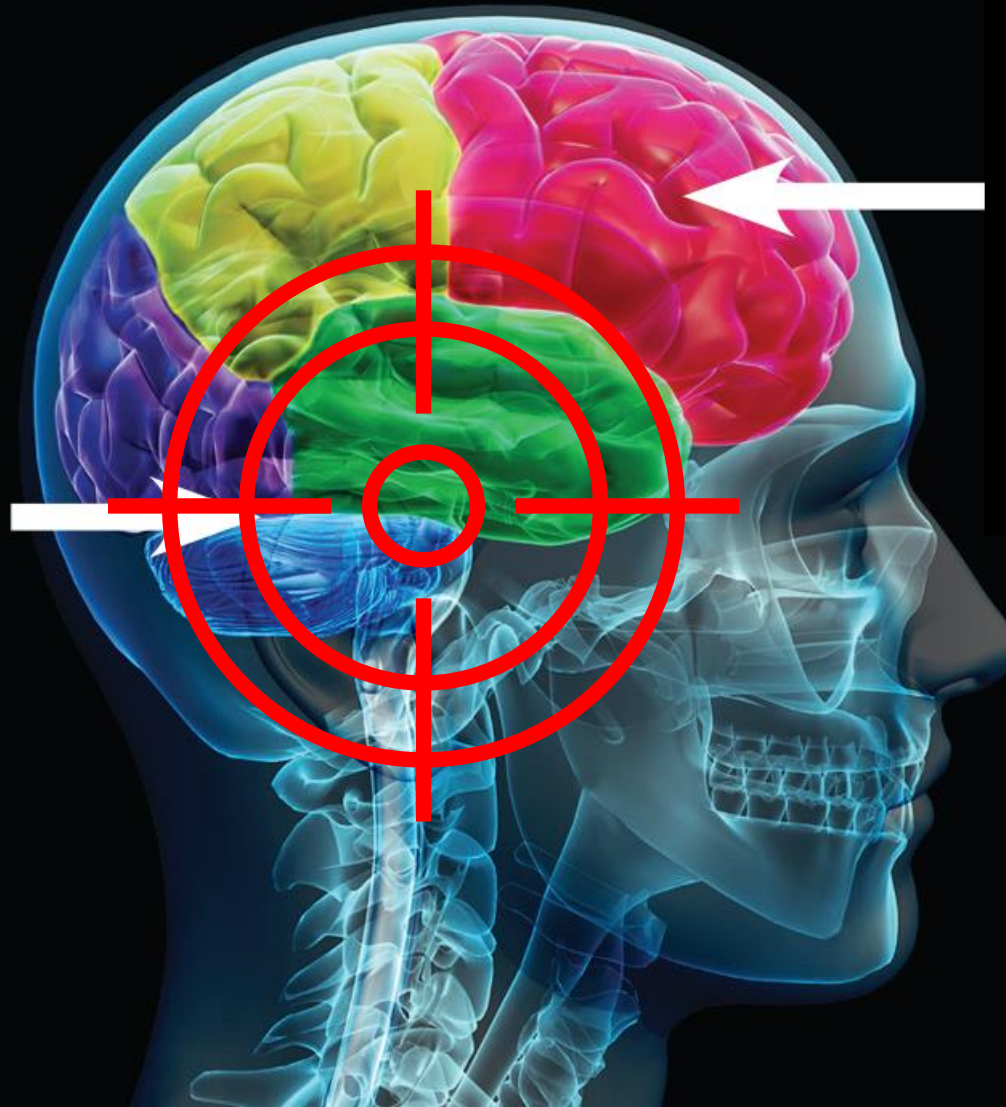
Causes us to...
**Fight – Flight
– Freeze**

**Rational
Thought
Impaired!**

**Threat
Response**



Adrenaline
Cortisol



Also known as...
Amygdala Hijack

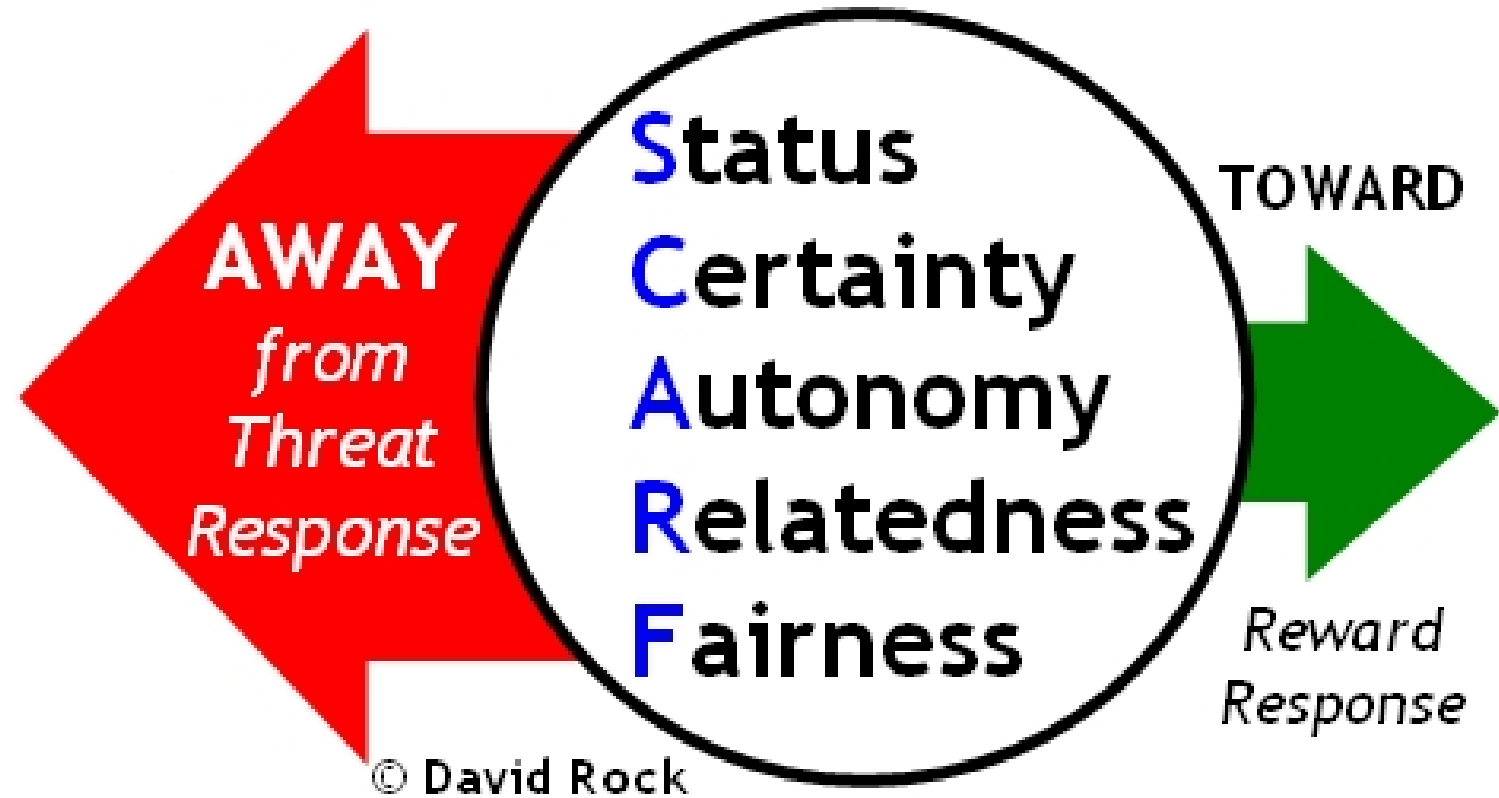
*Brain Graphic adapted from Deliya
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Introducing...

SCARF

David Rock's SCARF Model

SCARF Model of Social Threats and Rewards



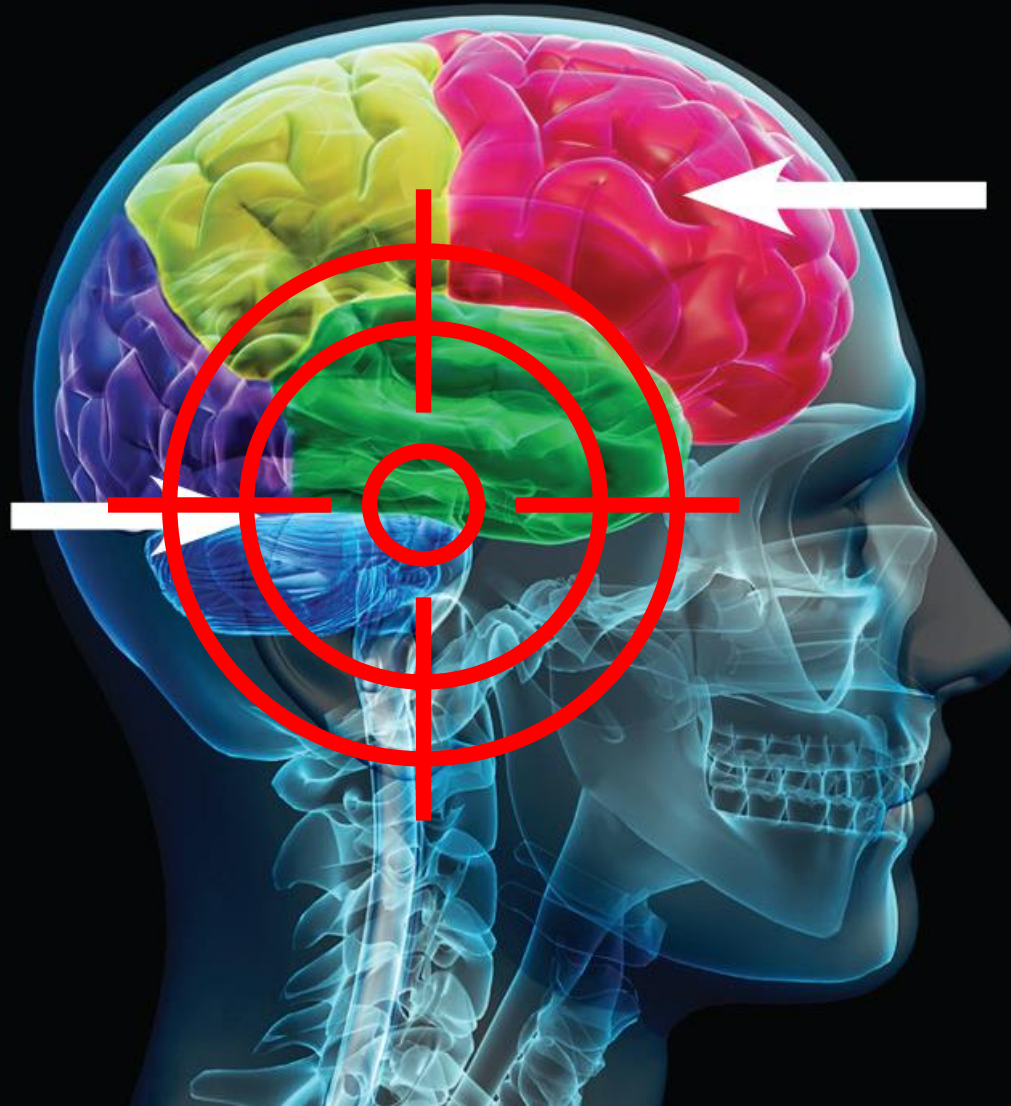
Social Threat Response & Our Lizard Brain

Causes us to...
Fight – Flight
– Freeze

Social Threat
Response



Adrenaline
Cortisol



Rational
Thought
Impaired!

*Brain Graphic adapted from Deliya
Wesley's Implicit Bias Learning Module
DC Dept of Health bit.ly/biasbrain*

David Rock's SCARF - Social Threats

1. Status: perceived loss of power, respect, or social standing.
2. Certainty: ambiguity, unpredictability, or a lack of information.
3. Autonomy: loss of control or a sense of being forced to do something against one's will.
4. Relatedness: social rejection, exclusion, or criticism.
5. Fairness: perceived unfair treatment, bias, or injustice

What we say....

Let's openly
collaborate with
InnerSource



What we say vs. what they may think & feel....

Let's openly
collaborate with
InnerSource



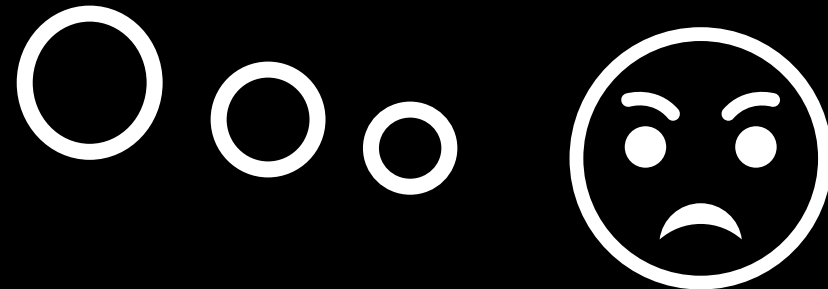
Status: This is my code. I create it. Are others going to take credit for it now?

Certainty: How will this all work? How will I know who will contribute? How will things get prioritised?

Autonomy: How am I going to control things? Why am I being forced to change how I work?

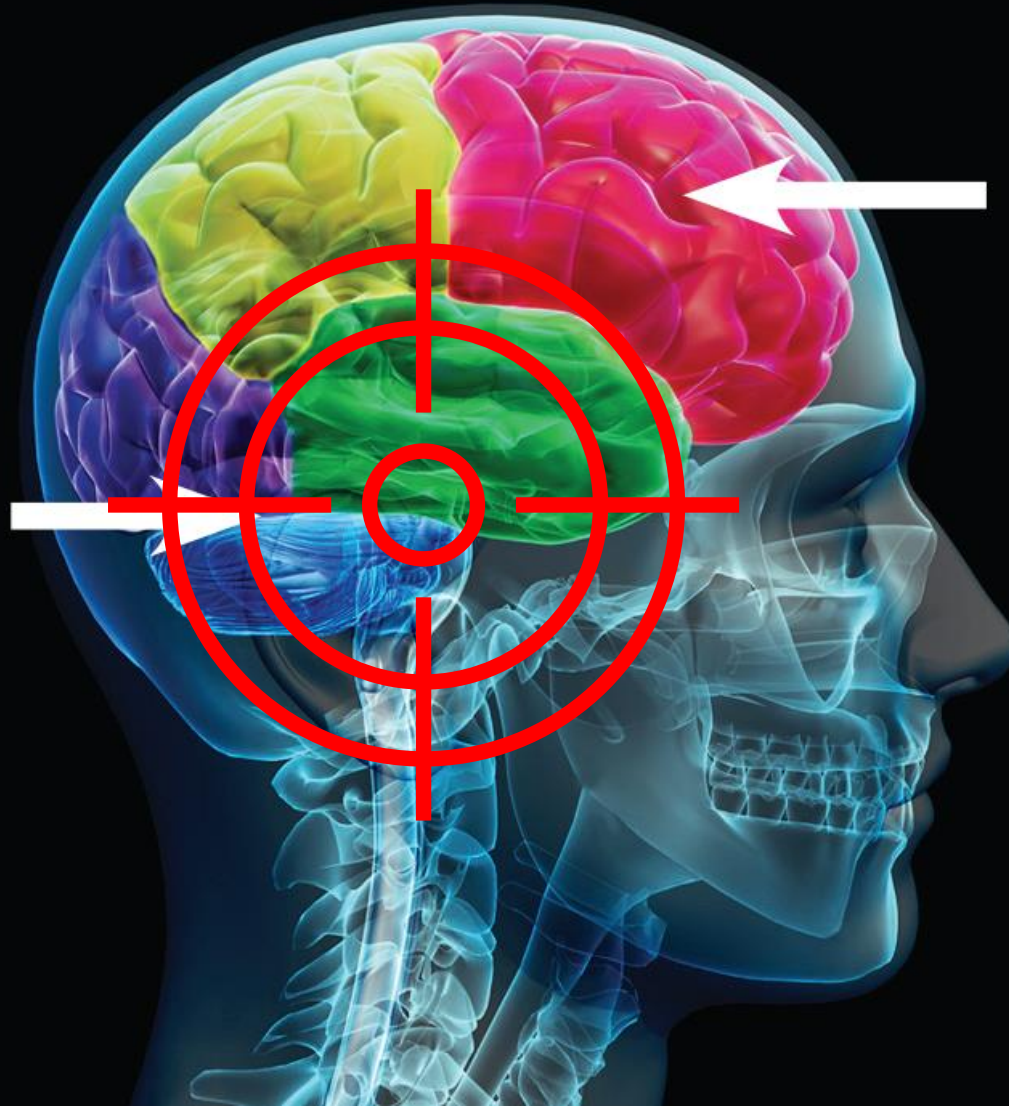
Relatedness: What if people think I am bad at this? Or what if they criticise my code?

Fairness: Who's going to take credit for my code now? How will I prove my worth in promo conversations?



⚠️ Lizard Brain Trigger Alert!!!

Threat
Response



Rational
Thought
Impaired!

*Brain Graphic adapted from Deliya
Wesley's Implicit Bias Learning Module
DC Dept of Health bit.ly/biasbrain*

Fight

- Pushback
- Resistance
- Aggression
- Passive Aggression
- Defensiveness

Flight

- Avoidance
- Disinterest
- Expressions of uncertainty
- Blocking Actions

Freeze

- Procrastination
- Inaction
- Delays in decisions
- Analysis paralysis

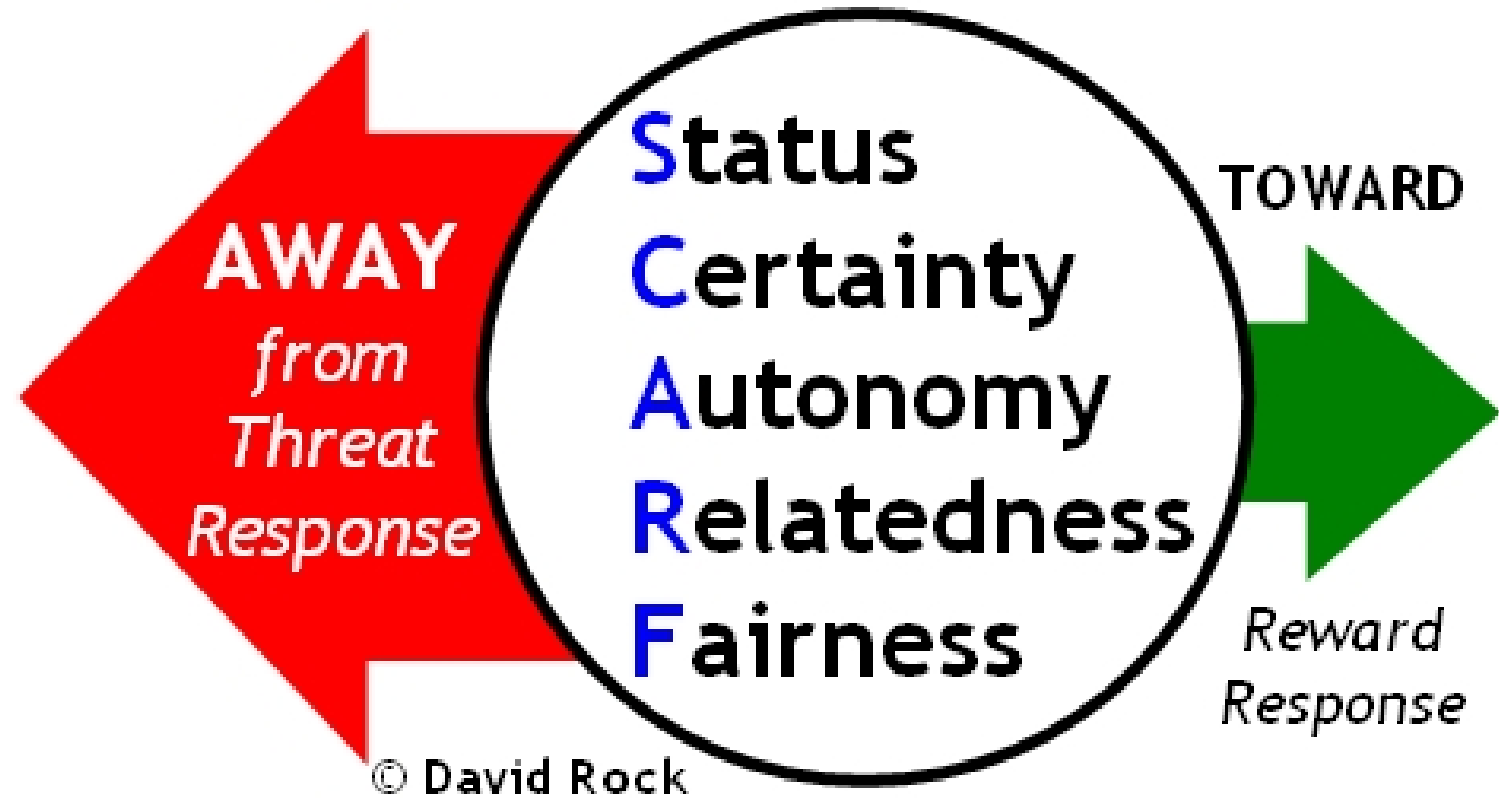
REMEMBER...

- **Reactions are involuntary:** Rational arguments don't work.
- **It can last:** Brain hijack can last minutes or hours.
- **Minimize threats:** Acknowledge & work to address concerns.

The SCARF Opportunity!

David Rock's SCARF Model

SCARF Model of Social Threats and Rewards

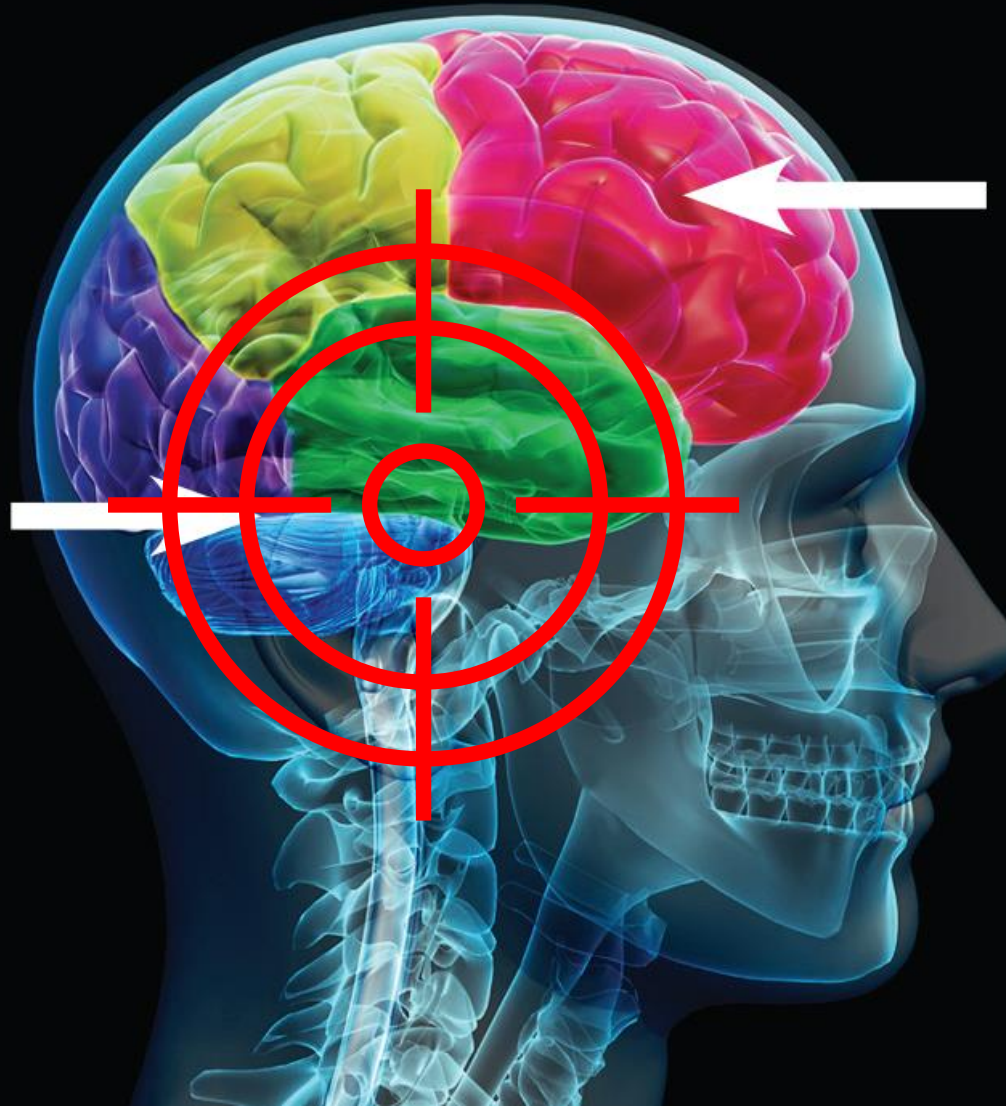


Reward Response & Our Lizard Brain



Dopamine
Serotonin
Oxytocin
Endorphins

Reward
Response



Rational
Thought
Impaired!

Causes ...



*Brain Graphic adapted from Deliya
Wesley's Implicit Bias Learning Module
DC Dept of Health bit.ly/biasbrain*

INNERSOURCE PATTERNS & SCARF

Let's openly
collaborate with
InnerSource



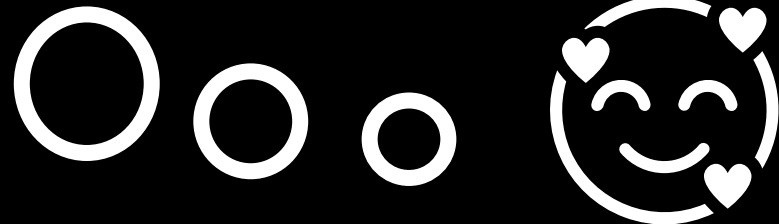
Status: Public recognition & praise, highlight contributions & expertise. On social media, in company newsletters, or at team meetings; outside-in.

Certainty: Leadership buy-in; clear guidelines & support; training and mentoring; resources, templates or legal guidance.

Autonomy: Give opportunities to make decisions about the process; co-create process docs. Clarify decision making frameworks. Watch out for blanket enforcements!

Relatedness: Connect with others who share their interests & expertise; in online forums, hackathons and physical events.

Fairness: Provide fair compensation & recognition, including opportunities for promotion, performance bonuses etc. Shift what is rewarded. Watch out for metric gaming!



TAKEAWAYS....

1. **Code Ownership can mean many things!** Clarity necessary.
2. **Excessive Code Ownership can be toxic!** Can inhibit collaboration.
3. **Feelings can overwhelm!** Our Lizard brains are powerful.
4. **Use SCARF!** Minimize threats! Maximize rewards!



Join us at InnerSource Commons!

www.innersourcecommons.org

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Clare Dillon

SG - Harish Pillay

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Daniel

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Willem Jiang

Jerry Yan

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Ana Jimenez

Minchene Tang

Jasruan

Russ Rutledge

podlemen

Zachery Koppert

<epam>



Thank
you



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