WHO OWNS THIS CODE?

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An Association for All IT Architects
Who owns this code?

Code Ownership & Open Collaboration

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I ❤️ Open Collaboration
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
Gartner Hype Cycle for Software Engineering 2022

Source: bit.ly/InnerSourceGartnerHype
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.”


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
- Accountability
- Code Quality
- 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

System 2
Conscious
Thinking

Slow
Controlled
Rule Following

Our Lizard Brain
Unconscious Emotion
Very Fast Involuntary Associative

Brain Graphic adapted from Deliya Wesley’s Implicit Bias Learning Module
DC Dept of Health bit.ly/biasbrain
Threat Response & Our Lizard Brain

Threat Response

Causes us to...
Fight – Flight – Freeze

Adrenaline
Cortisol

Rational Thought Impaired!

Also known as...
Amygdala Hijack

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

SCARF
David Rock’s SCARF Model

SCARF Model of Social Threats and Rewards

AWAY from Threat Response

TOWARD

Status

Certainty

Autonomy

Relatedness

Fairness

© David Rock

From: David Rock’s “SCARF: A Brain-Based Model for Collaborating With and Influencing Others.”
Social Threat Response & Our Lizard Brain

Causes us to...
Fight – Flight – Freeze

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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
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!!!

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
• **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

From: David Rock’s “SCARF: A Brain-Based Model for Collaborating With and Influencing Others.”
Reward Response & Our Lizard Brain

Dopamine
Serotonin
Oxytocin
Endorphins

Reward Response

Rational Thought Impaired!

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Causes ...
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
For further information, please contact us@iasaglobal.org