

Innersource in Government

SGTS Learning Event

21st August 2023

Challenges - Our current engineering practices actively reinforce silos across WOG



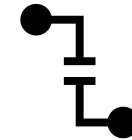
Hidden

No discoverability of technologies, tools and practices



Closed

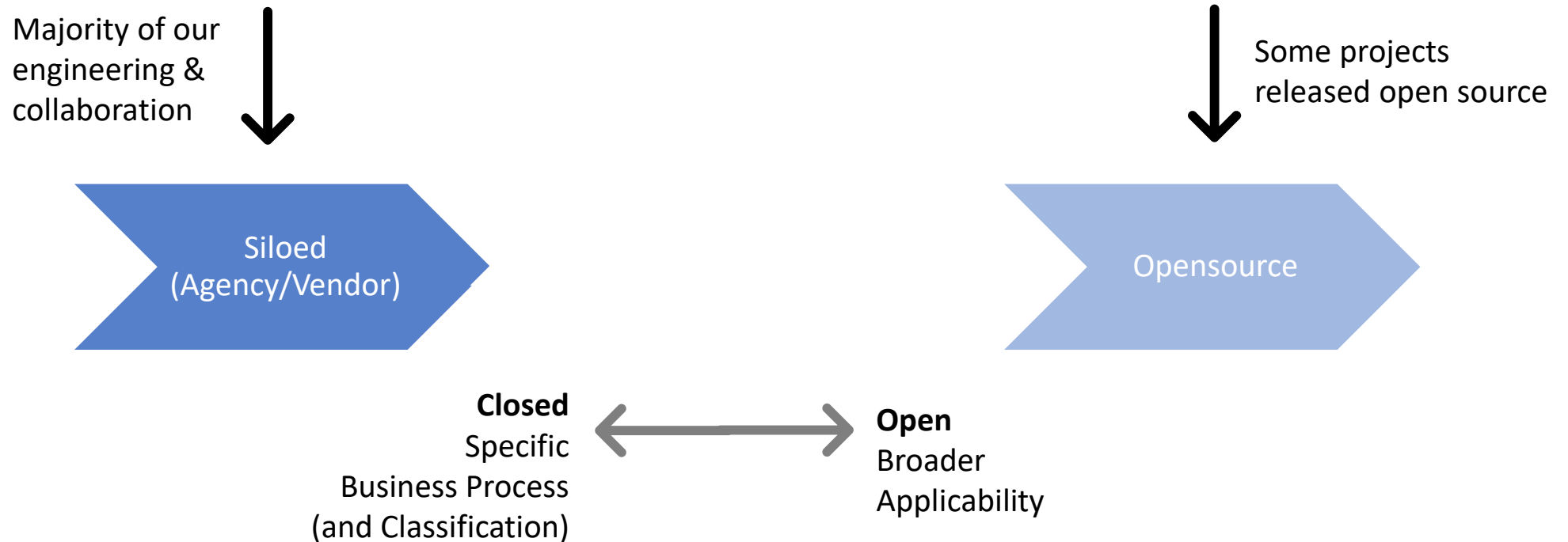
Each project is a code silo without outside collaboration.
Developers 'locked' to a project



Distributed

Hosted across many different code platforms or vendors limiting transparency

Current practices favour Open or Closed



Innersource - open source practices behind the firewall



Discovery

Internal shared code, documentation and knowledge



Collaboration

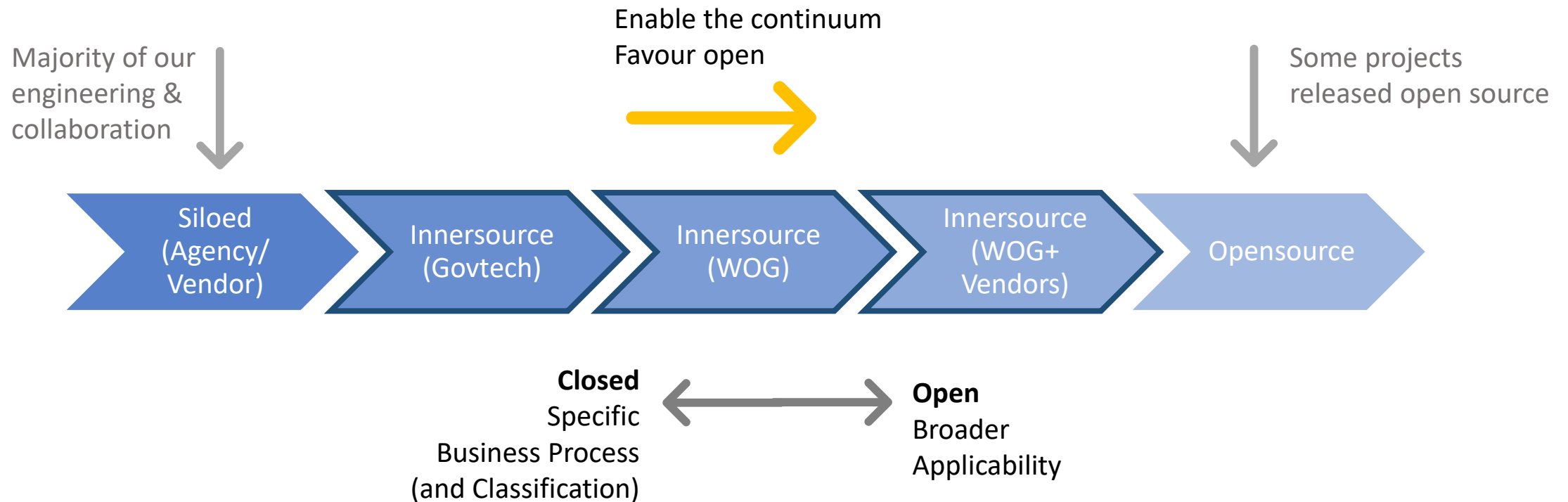
Community collaboration, learning and competency



Transparency

Visible development across WOG following DevSecOps and Open source practices

Granular collaboration and controls to enable an open development continuum



Foundations for successful Innersourcing



Platform

SHIP-HATS as the
Innersource platform
for WOG



Practices

Patterns & guidelines
to encourage discovery
and collaboration



People

Community outreach to
raise awareness,
increase knowledge and
grow adoption

Innersource Working Group

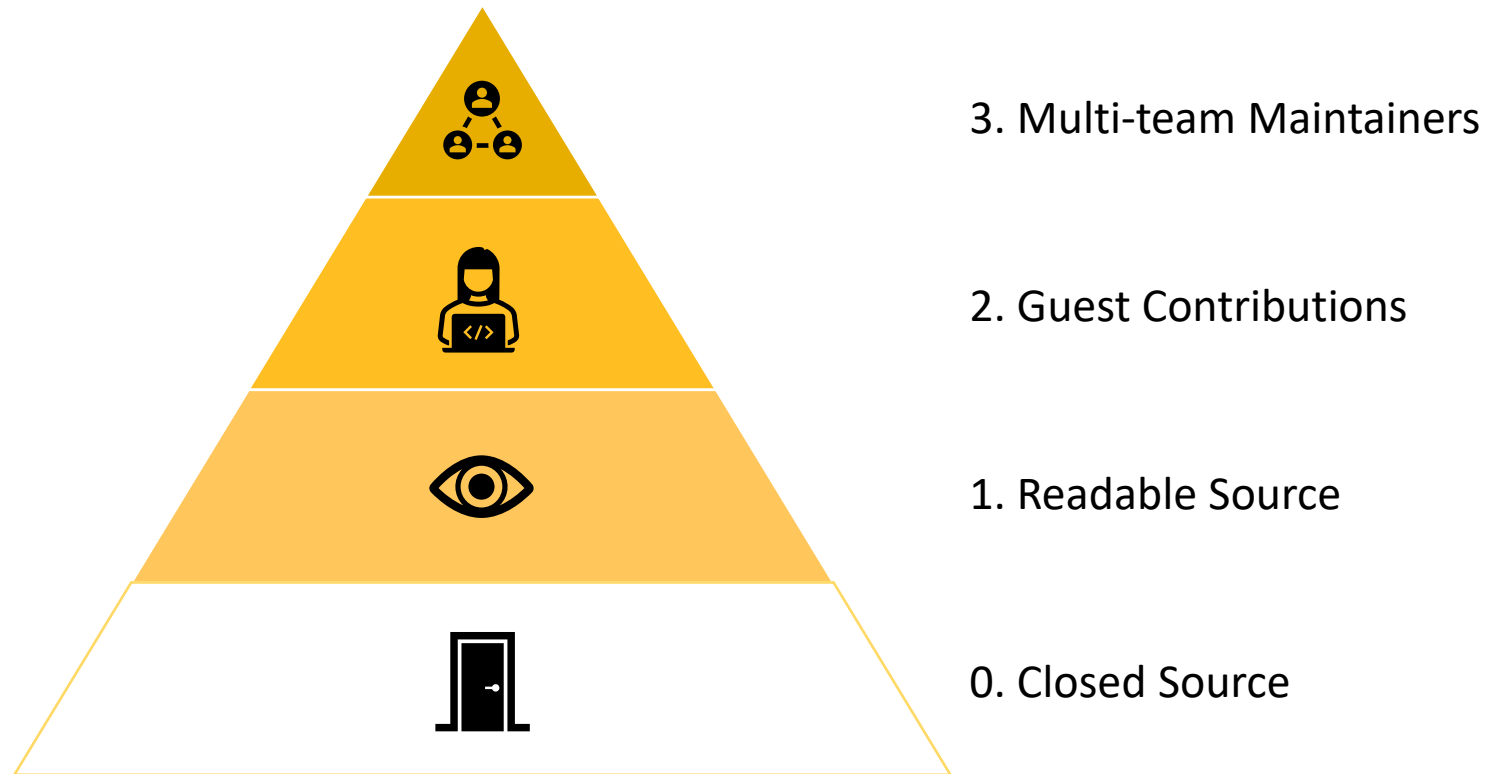
Adopting Innersource

People – Innersource Community of Practice

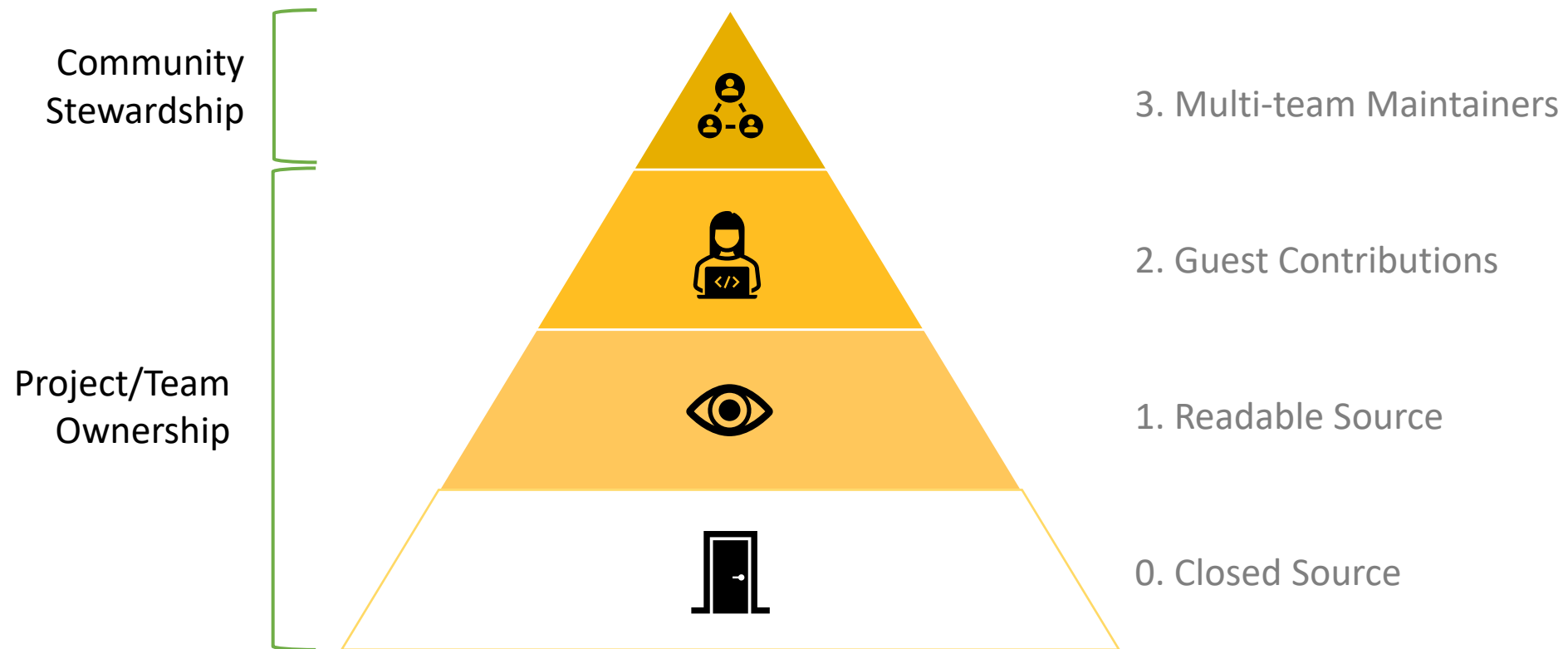


- The Innersource Working Group was established in late 2021 with now over **45 members** from **GDS, CODEX, TMO** and **CSG**.
- The team has started developing practices, patterns and templates to establish Innersource in the organization.
- An open community on GDS Slack (#innersource) and Telegram, monthly sync up calls and accessible code repos....
come join us!

Practices – 3 Stages of Innersource Adoption



Practices – Project and Community Innersource



Practices – Project and Community Innersource



Project-initiated

Each project team can innersource their code (without permission).

Suits projects in Stages 1 & 2.

Remains controlled/owned by the project team.



Community

Centrally hosted Innersource code

Suits projects in Stage 3 with general utility (libraries, IaC, etc)

Favours multi-team ownership.

Practices – Innersource Guidance

Openness

- ☐ Project repo visibility is set to "**internal**" and tagged "Innersource"
- ☐ Project contains **standard documentation** (e.g. README.md CONTRIBUTING.md)
- ☐ **Project license** includes Innersource or permissive opensource license.

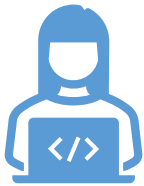
Transparency

- ☐ Project accepts **Merge/Pull Requests**.
- ☐ Accessible **Issue tracker** with labels to help newbies (e.g. 'good first issue' or 'help wanted')
- ☐ **Transparent decision-making** through docs-as-code, issues, etc

Collaboration

- ☐ Project establishes a team structure and governance to encourage co-ownership (e.g. Maintainers, **Trusted Committer** roles)

People – Innersource Roles



Contributor

External or internal collaborators who contribute code, bug reports, documentation, etc



Code Reviewer

Checks contributions for quality/bugs. Typically comprises of group of peers reviewing.



Maintainer

A Trusted Committer who makes the final decision and merges contribution based on code reviews and automated checks.

Practices - Innersource Licensing



- Important to ensure that code can be shared between legal entities across Government.
- **Govtech Public Sector Licence (GPSL)** is a permissive license developed for sharing code with agencies in Government.
- Covering both usage of code by licensees (agencies and their vendors) as well as contributions back to Govtech.
- Following opensource practices, the GPSL *LICENSE* file is included in each Innersourced repository.

Community Highlights!

- **SGTS Community Scripts** – Helper tools and docs for developing in Gov
- **Terraform** – Secure IaC, Opensearch Cognito, Gitlab OIDC and Elastic Serverless Forwarder
- **Pulumi** – AWS Component
- **PipelineCOE** – SHIP-HATS CI/CD Pipeline templates
- **GITSIR Blocklists** – Official lists in machine readable formats
- **Scorecard** – Check your repo for Innersource recommended practices
- **Renovatebot** – Automated dependency checks and MR patches
- **IM8-Reform** – New IM8-lite policies developed in the open

How to innersource your project...

1. Community or Project Innersource
2. Project visibility is set to "**internal**"
3. Project is labelled with "**innersource**" and other useful tags
4. Project has protected main branch and Merge Requests enabled
5. Project contains a **README.md** and a **CONTRIBUTING.md** (with other optional documents recommended)*
6. Project licensed with **GPSL** or permissive opensource license

** The Innersource group contains repo document templates to get started quickly*

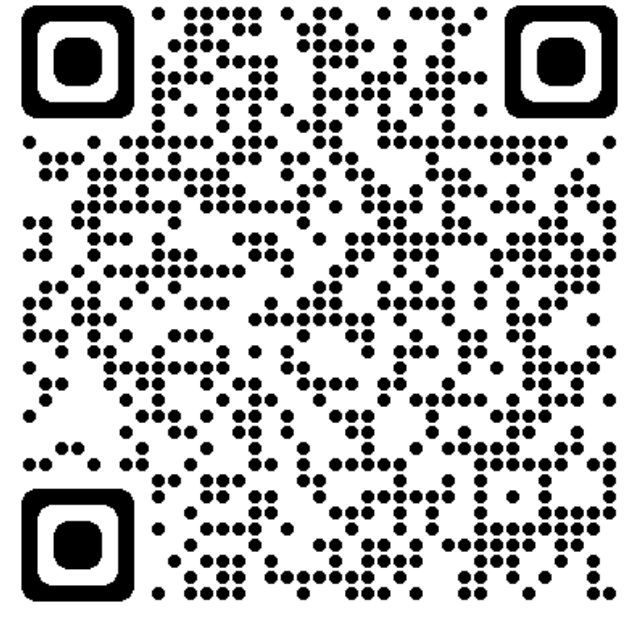
Get involved!



SHIP-HATS Gitlab Innersource Group



How to Innersource Docs



SHIP-HATS Innersource Docs