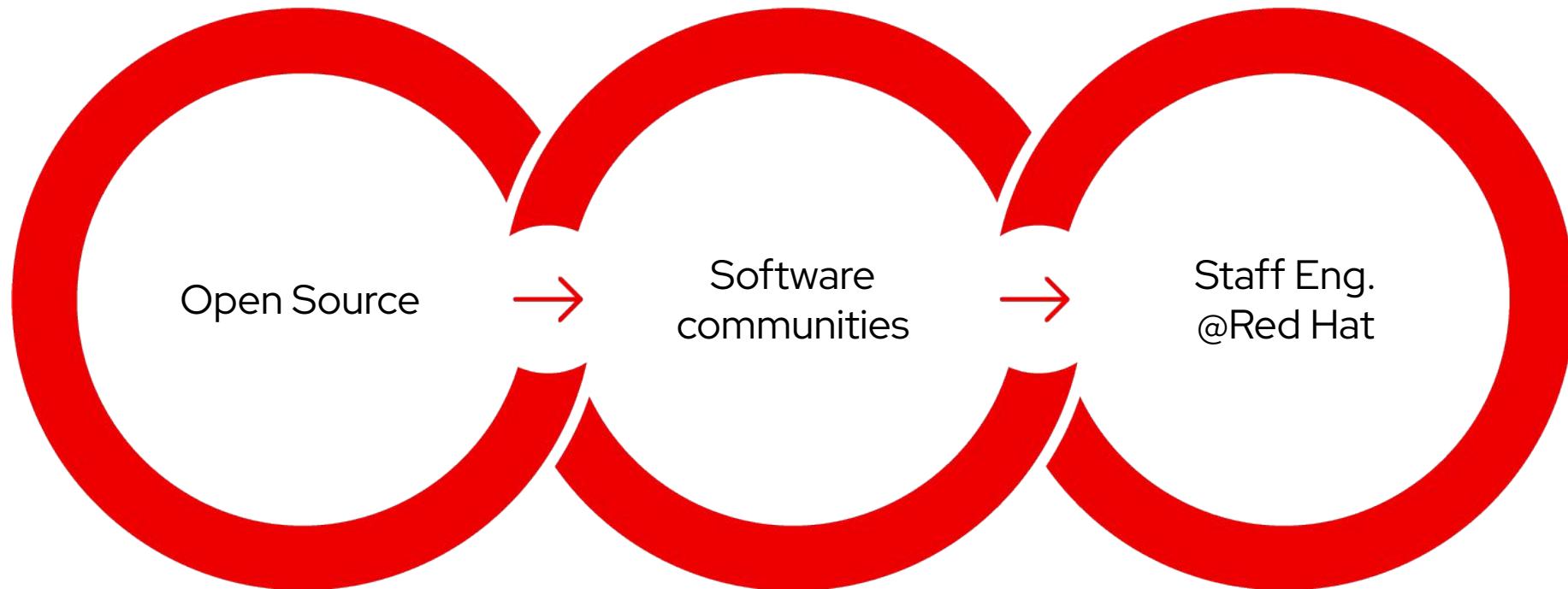


# Unlocking Career Growth Through Open Source

Eder Ignatowicz

Senior Principal Software Engineer

# What I do for living?





# Red Hat OpenShift AI

## Integrated MLOps platform

Create and deliver GenAI and predictive models at scale across hybrid cloud environments.



### Model development

Provides flexibility and composability by supporting multiple AI/ML libraries, frameworks, and runtimes.



### Model serving and monitoring

Deploy models across any OpenShift footprint and centrally monitor their performance.



### Lifecycle management

Expands DevOps practices to MLOps to manage the entire AI/ML lifecycle.

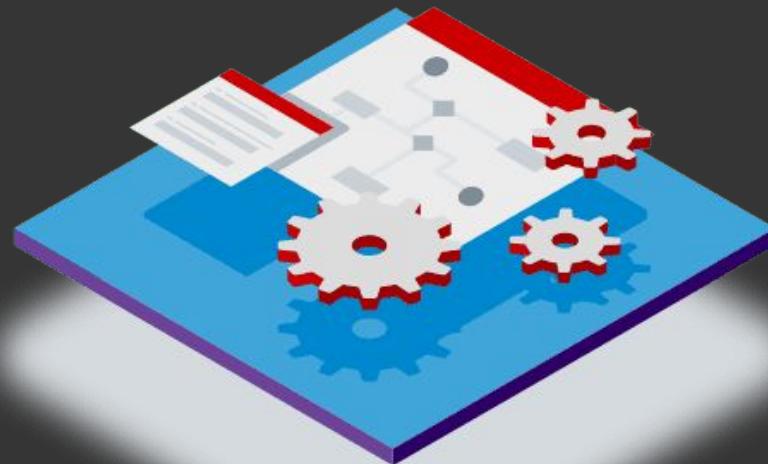


### Increased capabilities / collaboration

Create projects and share them across teams. Combine Red Hat components, open source software, and ISV certified software.



Kogito



jBPM

OptaPlanner The OptaPlanner logo consists of the word "OptaPlanner" in a large, white, sans-serif font, followed by a green circular icon containing a white, abstract geometric shape.



**QCon**  
by InfoQ

  
**SOUJava**  
sociedade de usuários java

**InfoQ** | BY **QCon**  
>\_ DEV SUMMIT



| **Java™**  
Champions

 Red Hat

---

"I wish I had heard this information  
when I was starting out"







---

People get better at whatever  
they spend time on.

# Challenges of aspiring technologists outsiders of a Tech Scene



## Lack of understanding of the career path

No clear path beyond senior.

## Lack of complex challenges

Mostly CRUD work, tech skills are commodities.

## Lack of role models and mentors

Lack of guidance in the right direction as we make career decisions

## Lack of opportunities

Mostly of career growth opportunities requires being on Managers Path

---

# How do I keep growing in my career as an individual contributor?

---

# What is beyond senior level?



# The Maze to keep on Technical Track



**You should figure out your path by yourself**

Frustrating and bias-ridden approach to career development

**Mysticism of the role**

What do seasoned professionals do?

**Lack of clear role definition**

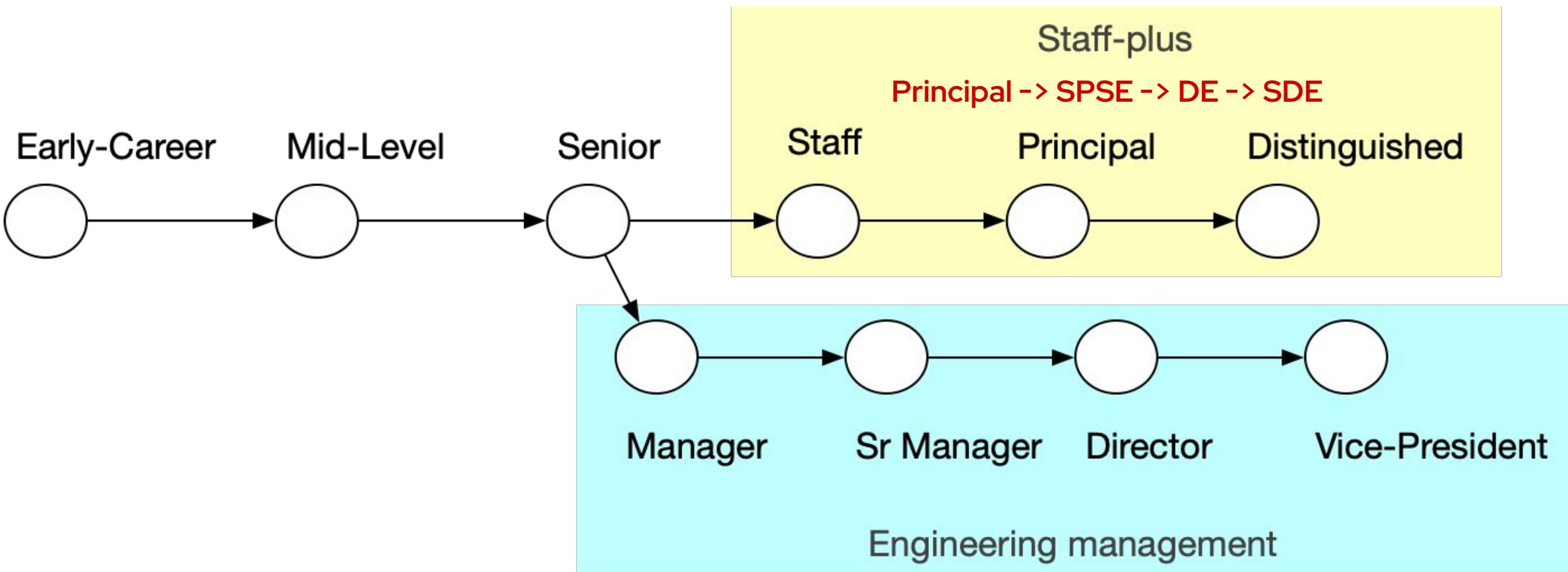
Each company has a different view of the role

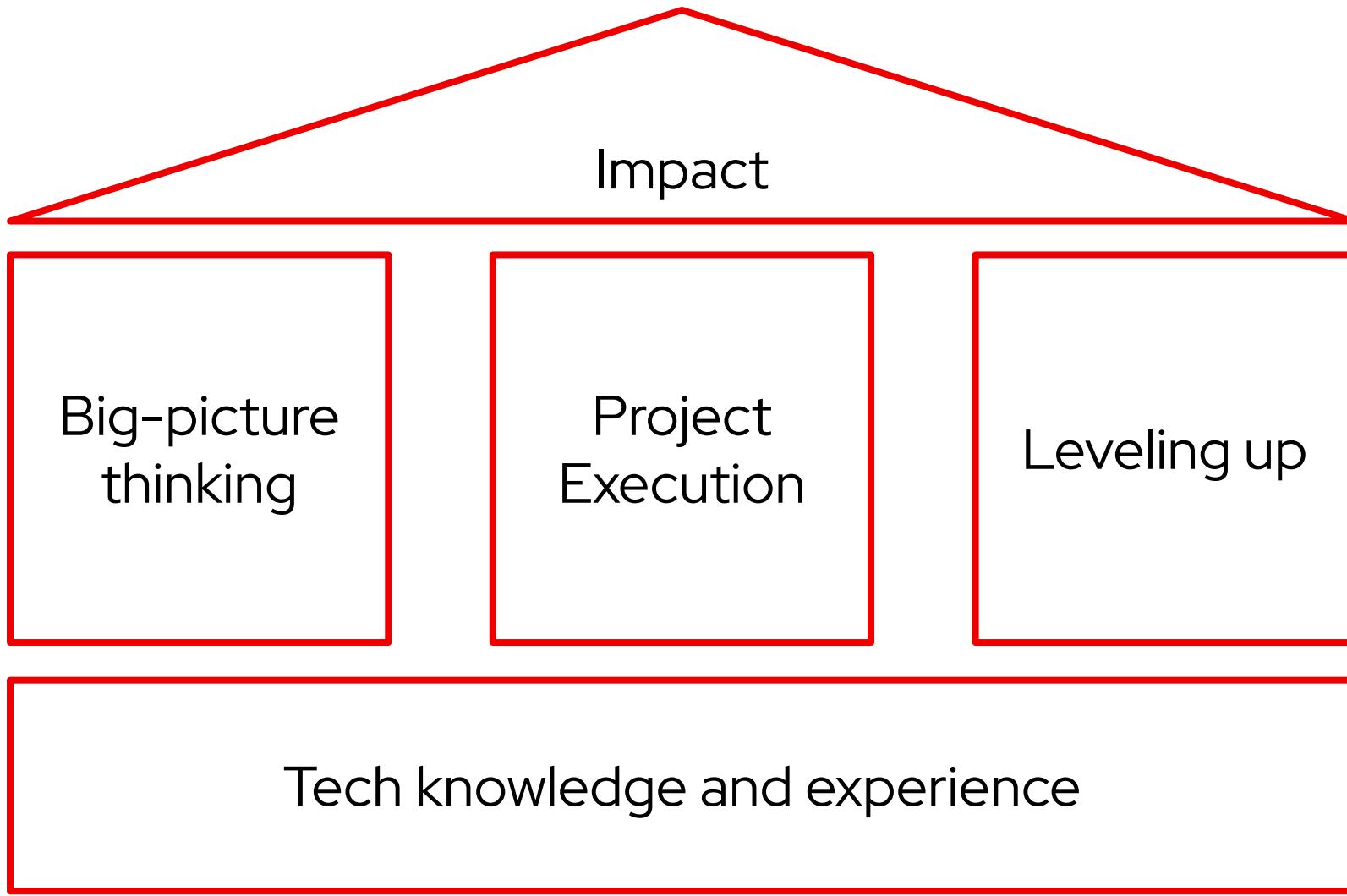
**Lack of required skills**

How do you acquire skills to become a lead to successful technical leader?

---

# What is a Staff-Plus Engineer?



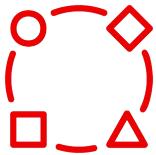


# Staff engineer archetypes



## The Team Lead

Guides the approach and execution of a particular team or group of teams within a focused area.



## Architect

Responsible for the direction, quality and approach within a critical area, both today and stretching into the multi-year future horizon



## Solver

Digs deep into arbitrarily complex problems and finds an appropriate path forward.



## Right Hand

Partner and an extension of an executive-level manager, borrowing their scope and authority to operate particularly complex organizations.



Source:  
<https://lethain.com/staff-engineer-archetypes/>

---

# How does someone thrive on the technical path?

---

# How does someone become a successful Staff-Plus Engineer?

---

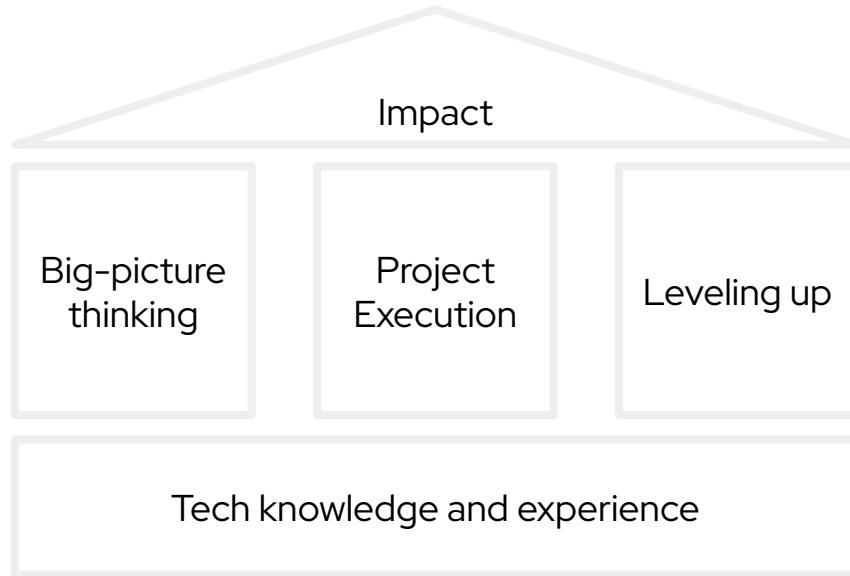
How can you learn from the best engineers and access the latest technologies even if your current job or situation doesn't give you this kind of opportunity?

# How did I end up as Staff+ ?

---

# Open-Source engagement

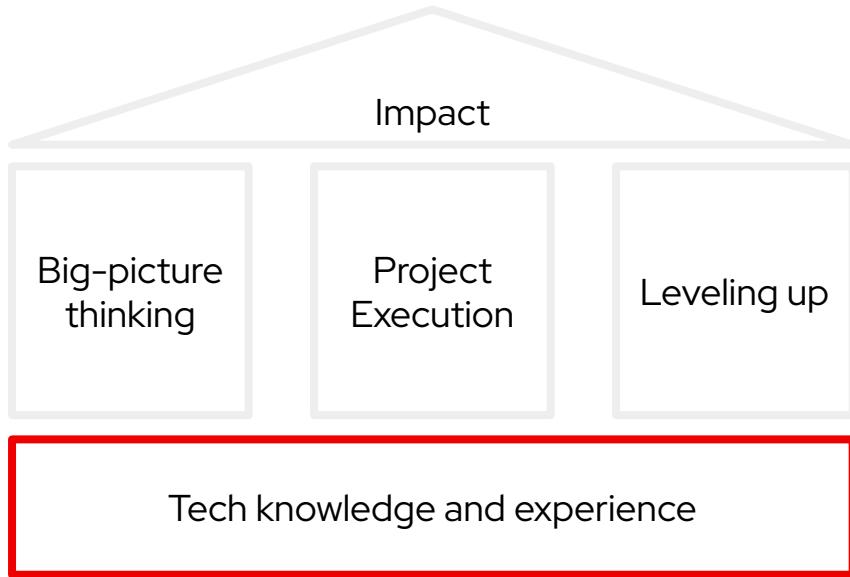
# Open Source Engagement



What do I mean by engagement?

- ▶ Presence
- ▶ Contribution
- ▶ Feedback

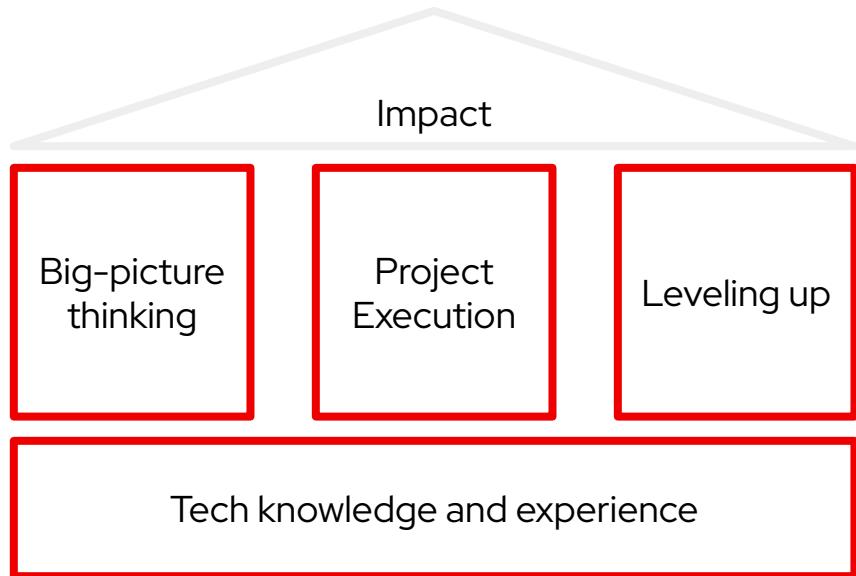
# Open Source Engagement



Contributing and engaging with open source can help you sharpen tech skills.

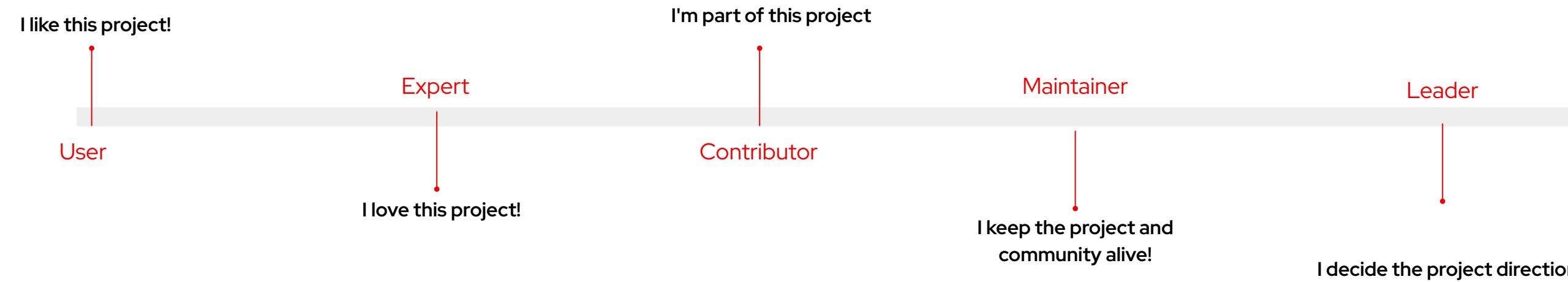
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# Open Source Engagement

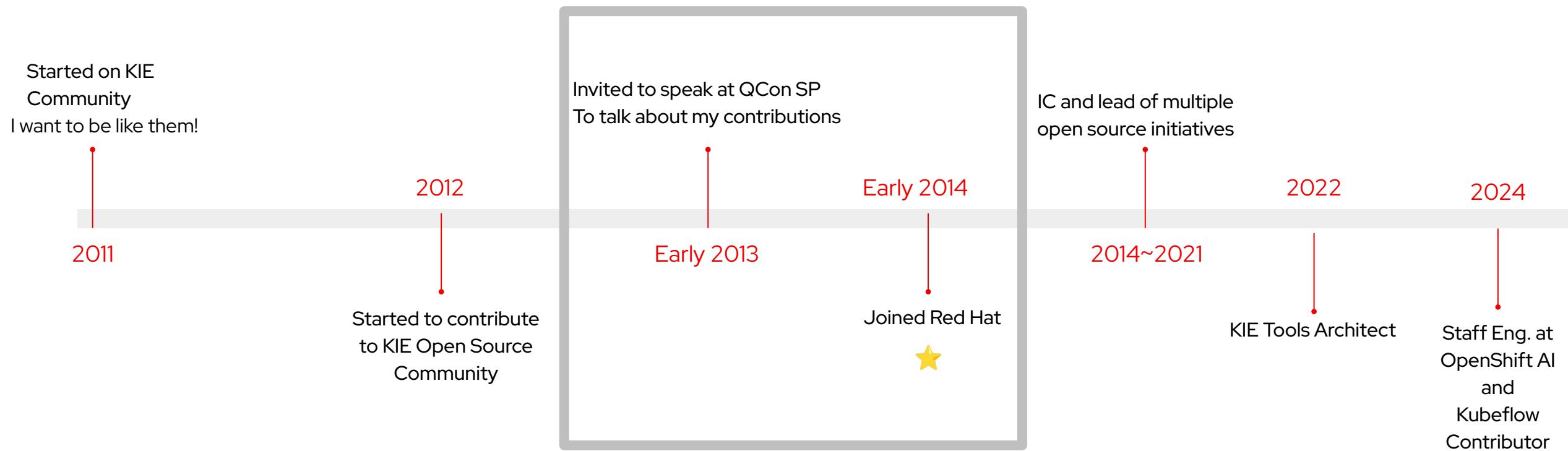


But it can also help you level up towards Staff+.

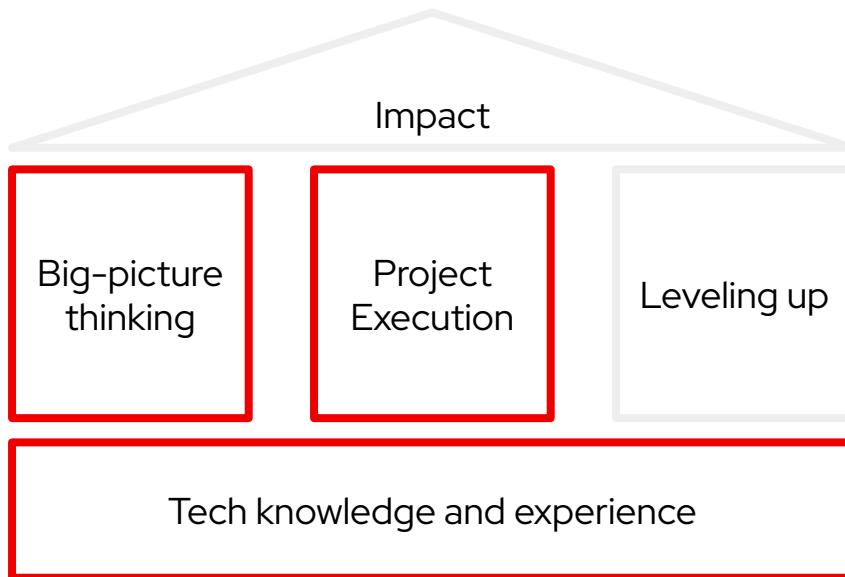
# Open Source Community Members Growth



# Open Source Engagement - My timeline



# Written Communication



- ▶ Open Source is built async and remote
- ▶ Writing is the best format for async communication
- ▶ A critical skill for developers
  - Emails, Issues, Design Docs, etc.
- ▶ Opportunities:
  - Blog posts, Mailing list, Feature Requests, Bugs, Pull Requests

kubeflow / notebooks

Type ⌘ to search

Code Issues 25 Pull requests 6 Actions Projects 1 Security Insights

Notebooks 2.0 // Backend // List Workspaces API #60

**Open** ederign wants to merge 2 commits into kubeflow:notebooks-v2 from ederign:issue48

Conversation 2 Commits 2 Checks 2 Files changed 13 +663 -15

edergin commented 2 days ago • edited

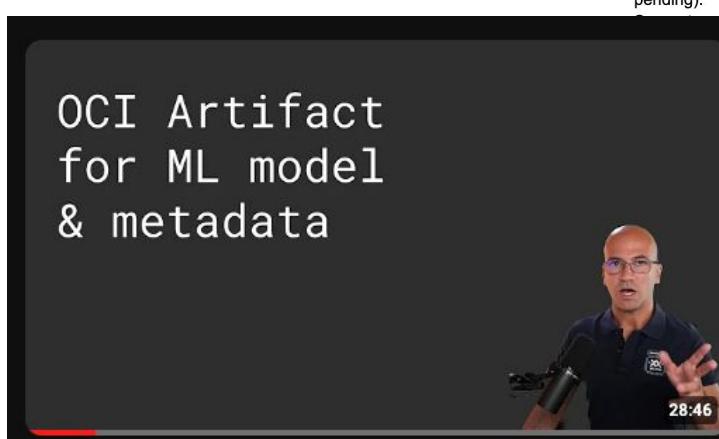
```
curl -i localhost:4000/api/v1/spawner/workspace-test/workspaces
```

```
{
  "workspaces": [
    {
      "name": "jupyterlab-workspace-1",
      "kind": "jupyterlab",
      "image": "jupyterlab_scipy_190",
      "config": "tiny_cpu",
      "status": "Running",
      "home_volume": "workspace-home-pvc",
      "data_volume": "/data/my-data",
      "last_activity": "1969-12-31 19:00:00 EST"
    },
    {
      "name": "jupyterlab-workspace-2",
      "kind": "jupyterlab",
      "image": "jupyterlab_scipy_190",
      "config": "tiny_cpu",
      "status": "Running",
      "home_volume": "workspace-home-pvc",
      "data_volume": "/data/my-data",
      "last_activity": "1969-12-31 19:00:00 EST"
    }
  ]
}
```

Other than that, this PR makes the following changes on top of the referenced PR:

1. Create workspace\_handler and it's tests
2. Add go mock for testing
3. Create WorkspaceModel Backend type
4. Create Workspace model and GetWorkspaces method
5. Mocks were generated with `-/go/bin/mockgen -destination=test/mock_client.go -package sigs.k8s.io/controller-runtime/pkg/client Client`

Notes 2.0 // Backend // List Workspaces API



## Kubeflow Notebooks 2.0 - Design Document

**TIP:** to make comments on the document, please join [kubeflow-discuss](#) on the Google account you are using.

### Goals / Motivation

- The main idea is to change the Notebook CRD so that it is no longer just a wrapper around a Kubernetes PodSpec.
- Instead, we are making Notebooks into two separate CRDs:
  - [Workspace](#)
  - [WorkspaceKind](#)
- This foundational change enables us to:
  - Update existing notebooks after spawning, to change their "pod config" (CPU/GPU/RAM), "volumes" (storage), and "image" (what packages are installed) from options that are defined by their admin.
  - Make spawning notebooks less confusing for end-users. Pod configs stop being about specific parts of the PodSpec (e.g. tolerations, requests, limits), and become a drop-down list of user-friendly names (e.g. "Big GPU Notebook - A100 - 128GB" "instance types").
  - Give admins more control over how workspaces are spawned, and the "options" which are available to users. For example, admins can now image/pod configs to new ones, but delay the application of these up-to pod restart (during which, the interface will display a warning to users pending).

... web-based IDEs without needing to specifically integrate them, define a custom "kind" for their internal app, or even make them (IntelliJ and VSCode) with the packages and pod sizes required for organization.

... admins to manage all these configs with GitOps, based on a single resource.

... first "alpha" version of Notebook 2.0 to be available within the next few weeks, dependent on people's resources and time availability.

kubeflow / model-registry

Type ⌘ to search

Code Issues 19 Pull requests 10 Actions Projects Security Insights

[Proposal] Make Openapi(REST) client the only entrypoint #398

**Open** AI-Pragliola opened this issue 3 hours ago • 0 comments

AI-Pragliola commented 3 hours ago • edited

At the moment Model Registry has two client entrypoints in the codebase:

1. `pkg/openapi` : the auto generated client from the openapi schema
2. `pkg/core` : a grpc client that talks directly with the MLMD service

Comparing Choices in DMN Modeling

Tuesday, October 4, 2022

Eder Ignatowicz @ederign

TAGS KIE DMN

PREVIOUS ARTICLE KIE Sandbox and DMN 'runner'

NEXT ARTICLE KIE Tools Highlights - Q3

External application 1 (expected behavior)

rest (/pkg/openapi)

Model Registry proxy

grpc (/pkg/core)

Metadata store server (MLMD)

Diagram illustrating the architecture of the Model Registry. It shows an external application interacting with a Model Registry proxy via REST (pkg/openapi). The proxy then communicates with a Metadata store server (MLMD) via GRPC (pkg/core). The diagram also shows a dashed line connecting the proxy and the MLMD server, indicating they share the same database.

Recently in a [blog post](#), Keith Swenson, VP of R&D Fujitsu America and former leader of the DMN "Technical Compatibility Kit," did a comparative analysis between free DMN modeling alternatives. The author compared Trisotech DMN Modeler, Camunda, Red Hat Drools Workbench, and our beloved KIE Sandbox. As the results are interesting, I've decided to share them in a blog post.

**Little Background: KIE Sandbox and DMN 'runner'**

Started with a prototype in late 2020, aiming to explore ways to augment the developer authoring experience for BPMN and DMN assets; [KIE Sandbox](#) gradually got traction and became an integrated part of our Tooling experience. Check out this [blog post](#) for a walkthrough of the top features of KIE Sandbox.

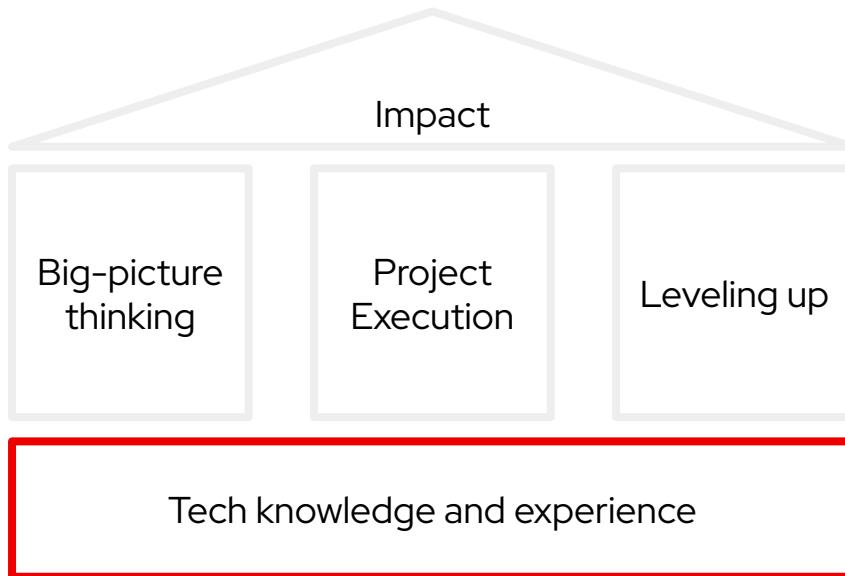
**KIE Sandbox UI Screenshot**

The screenshot shows the KIE Sandbox interface with sections for 'Create' (Workflow, Decision, Kennard), 'Import' (From URL, Upload), and 'Recent models' (Sample, United, Untitled).

Encouraging a seamless authoring experience and an instantaneous feedback loop for DMN

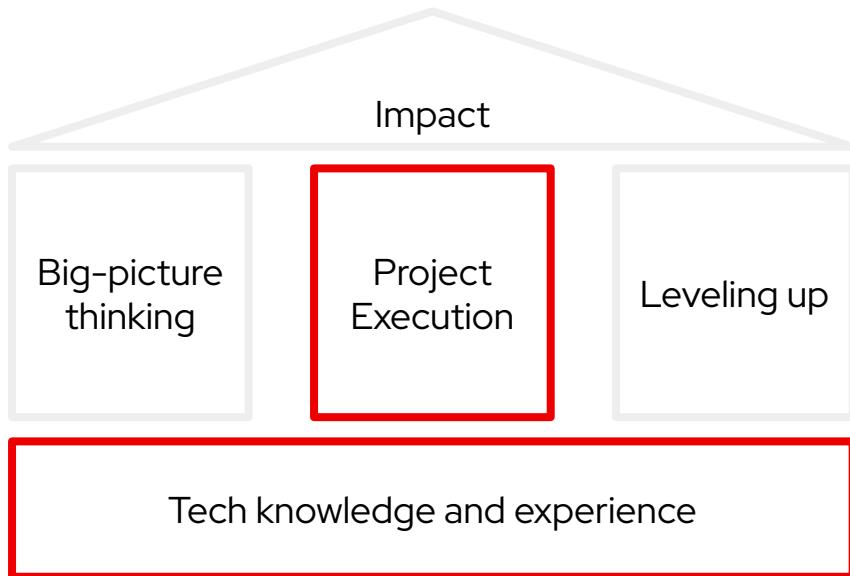
Red Hat logo

# Improve your Technical Quality



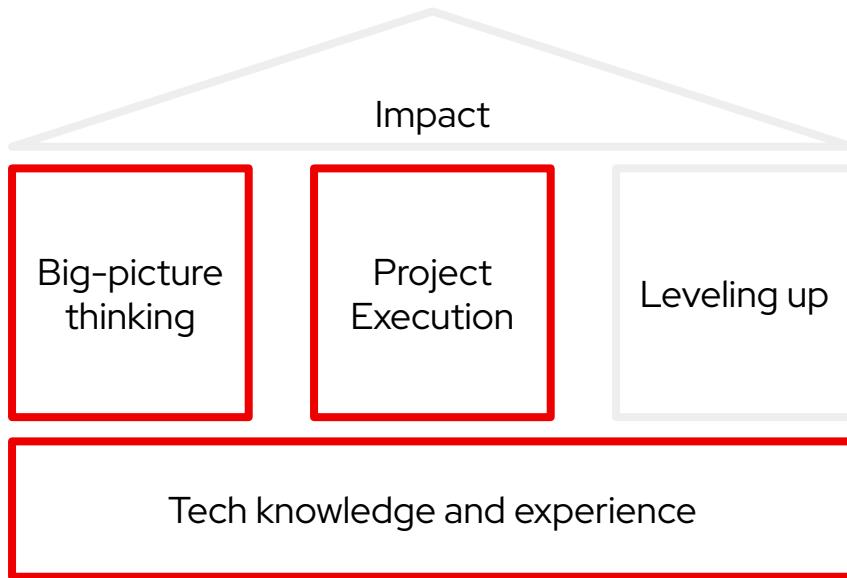
- ▶ Exposed to code from people around the world
- ▶ Code reviewers by different people from different backgrounds
- ▶ Opportunity to collaborate and learn at the industry level

# To lead, you have to learn how to follow



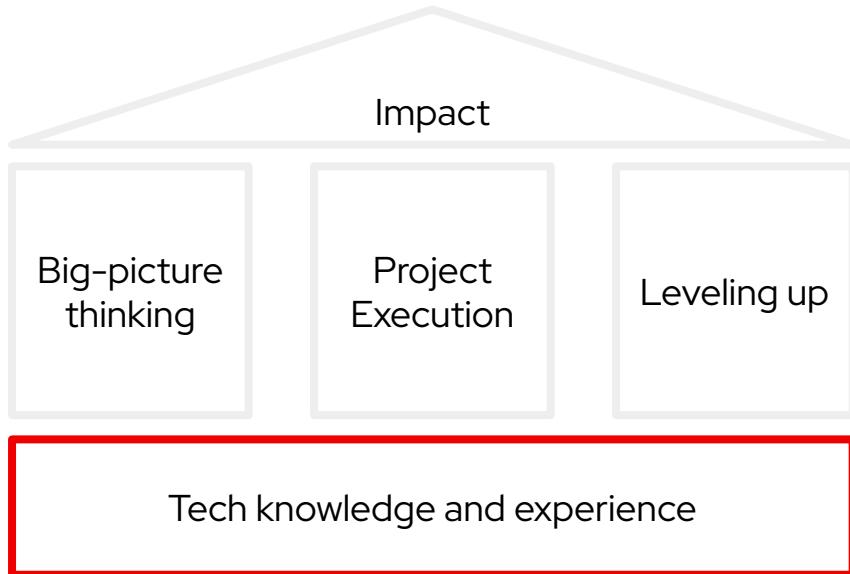
- ▶ Align your contributions with the community direction
- ▶ Effective leaders spend more time following than leading
- ▶ Contribute to the ought to be of the community

# Learn how to lead without authority

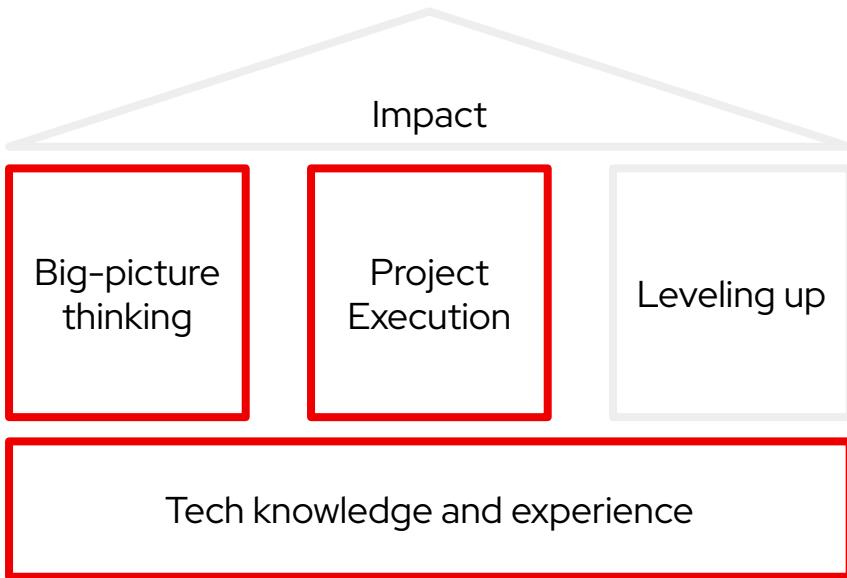


- ▶ Learn to lead people with multiple backgrounds
- ▶ Learn to conciliate the interests of multiple stakeholders
  - 'Read the room'
- ▶ Learn how to preserve the best interests of a community/project
- ▶ Learn how to influence without authority

# Expand your network

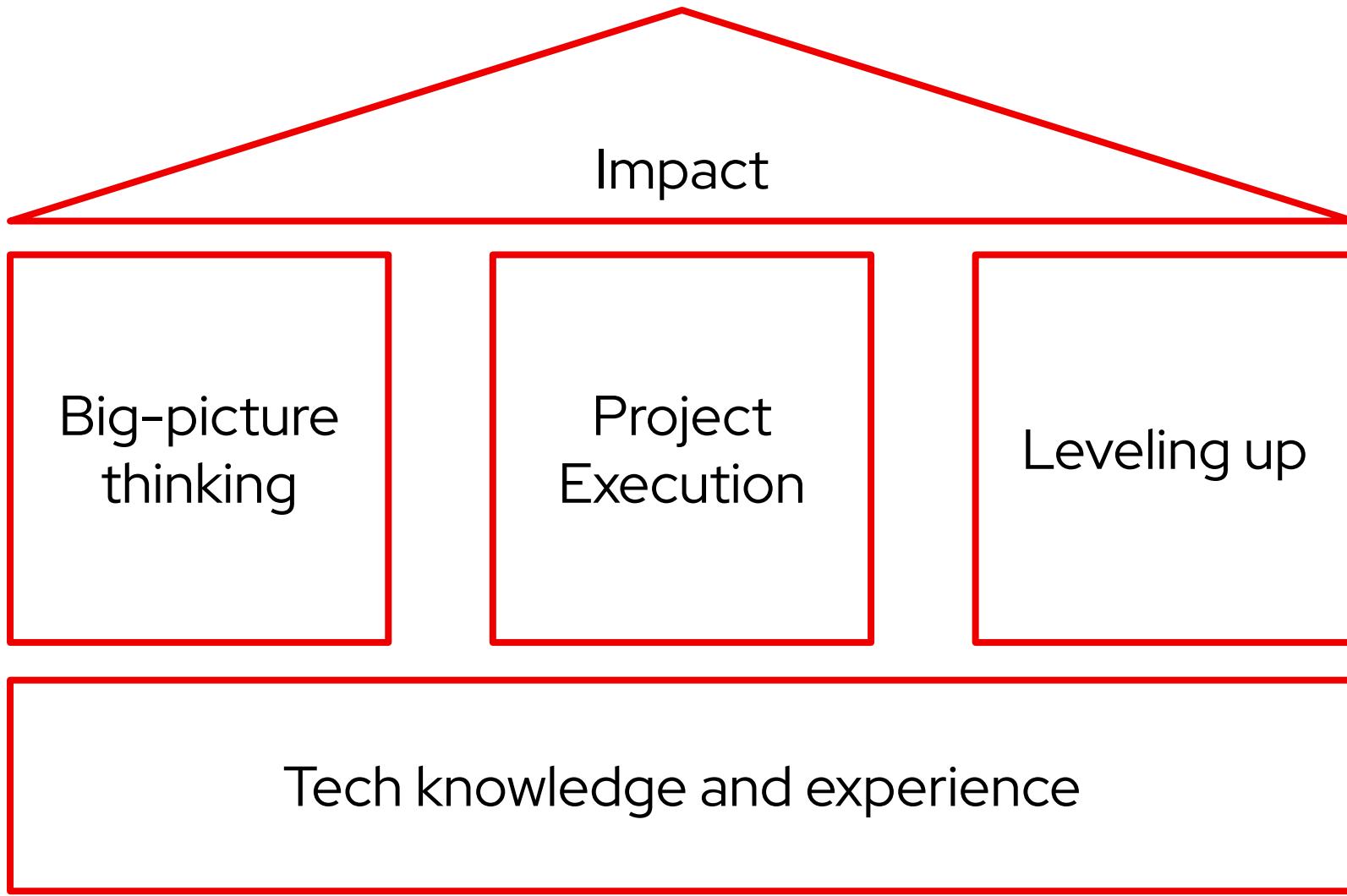


- ▶ Open-source software is distributed across the globe
- ▶ Build multicultural network, increase your diversity exposure
- ▶ Network across industry



## Create visibility

- ▶ Visibility based on public contribution
- ▶ Increase visibility with contributions aligned with your company's needs
- ▶ Access new sponsors



# Open Source Engagement - Takeaways for...

## Aspiring IC

- ▶ Learn a lot from a diverse group of people;
- ▶ Build your personal brand;
- ▶ Become a reference in your community;
- ▶ **Become a reference in your company;**
- ▶ **Learn to lead without authority**

## Staff+

- ▶ Good for the industry;
- ▶ Become a reference in the field;
- ▶ **Practice leading without authority**

# Open Source Engagement - Suggested Action items

## Aspiring Staff

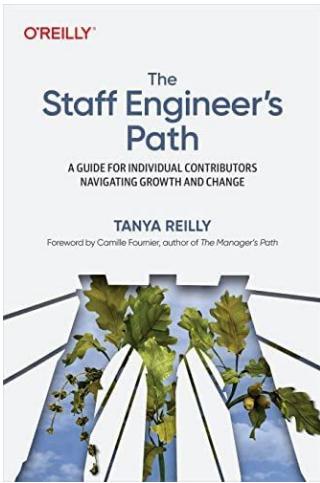
- ▶ Find an open source community project that your current project consumes;
- ▶ Join the communication channels;
- ▶ Build it!
- ▶ Narrow your scope
- ▶ Make your first contribution to this project;
- ▶ Career Impact!

## Staff+

- ▶ If possible, become a core contributor of a open-source community project that your current initiative consumes;
- ▶ Mentor/pair with someone from your team on their first contribution on open-source
- ▶ Career Impact!



# We are evolving as community



Books

The Staff Engineer's Path

Staff Engineer: Leadership beyond the  
management track

Talking with Tech Leads

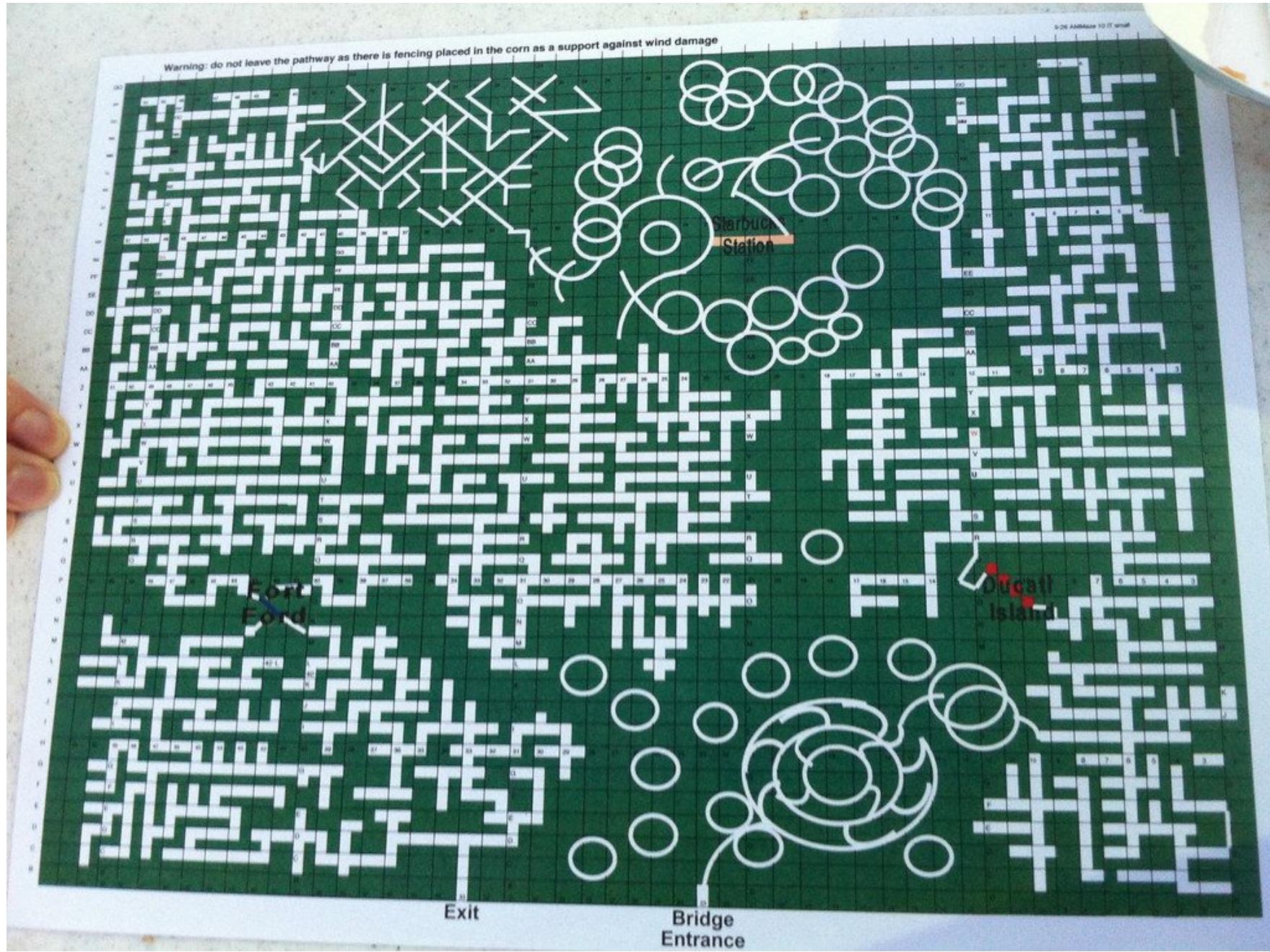


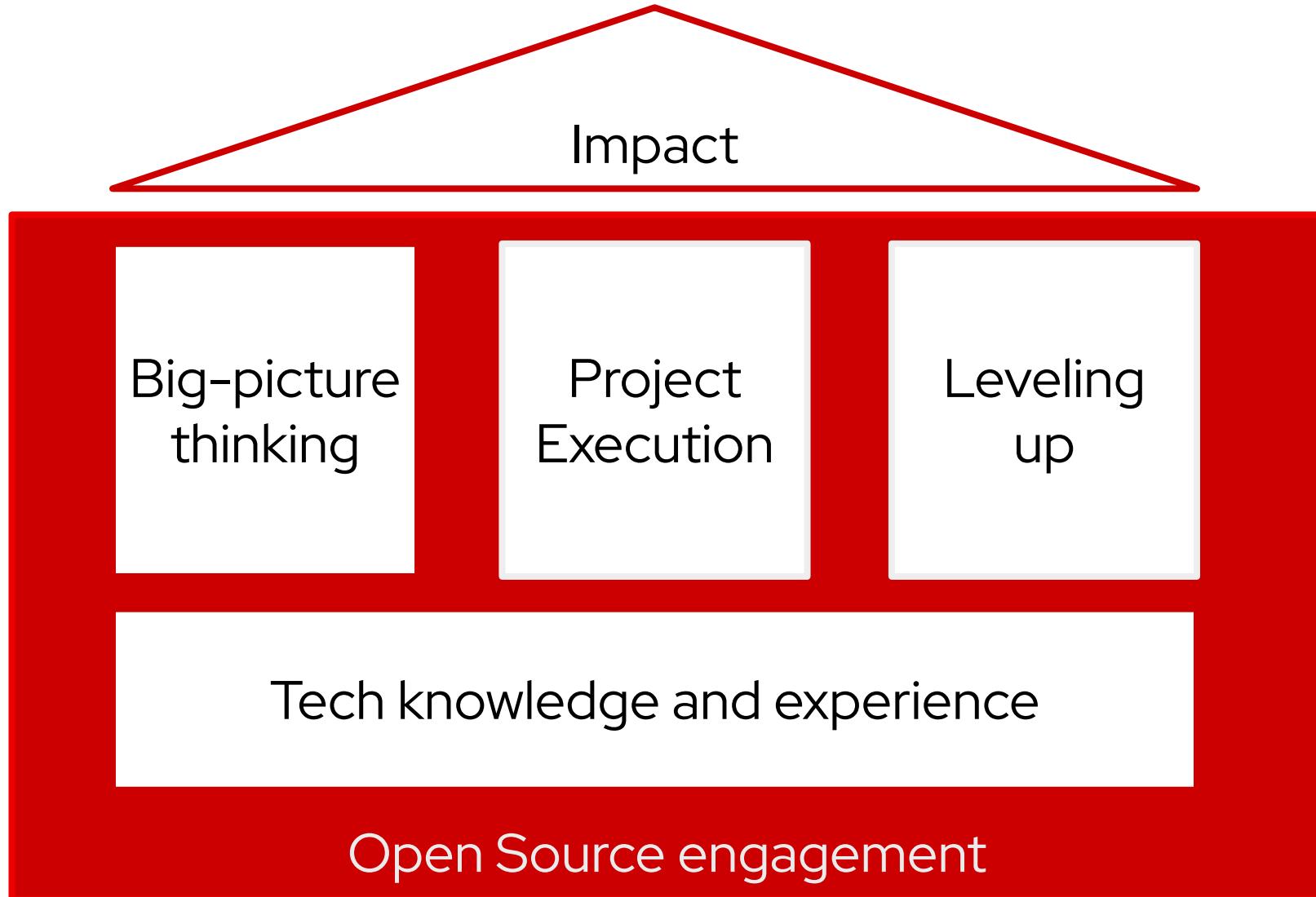
Conferences

QCons, Lead dev etc.



Communities

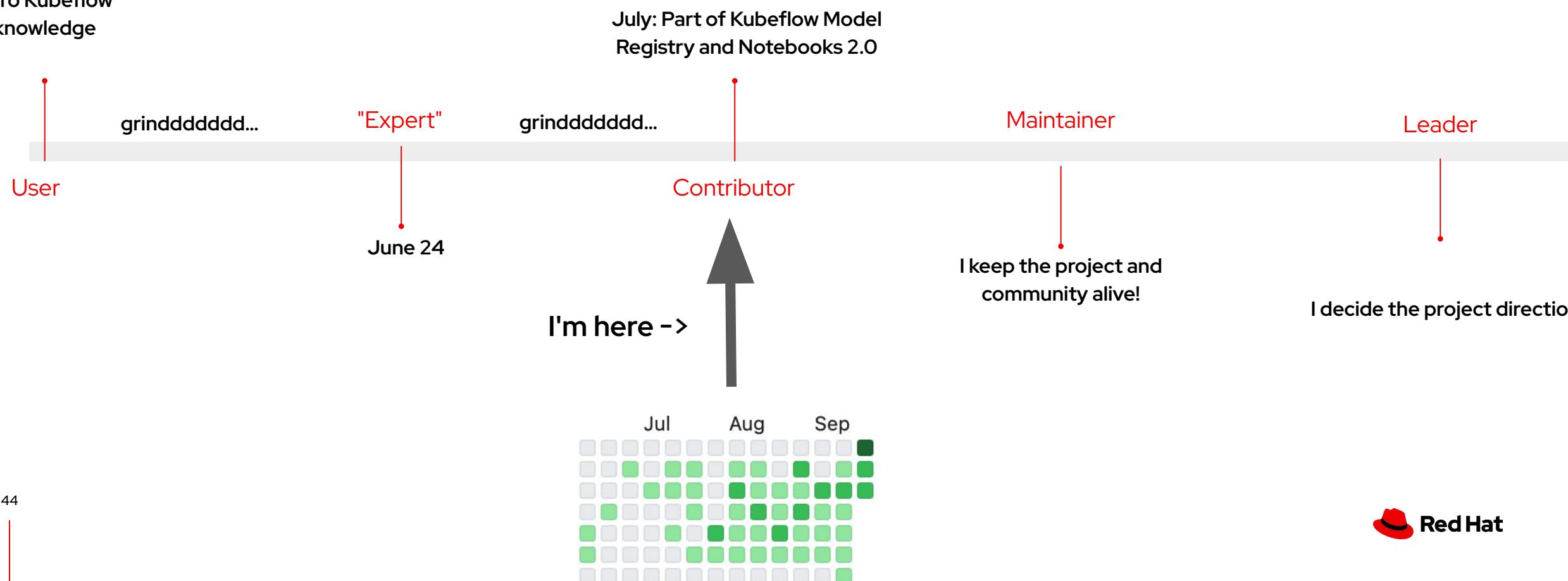




# Walk the talk - Kubeflow community

Mar 24: Joined  
OpenShift AI  
Zero Kubeflow  
knowledge

July: Part of Kubeflow Model  
Registry and Notebooks 2.0



# Thank you!



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



[twitter.com/ederign](https://twitter.com/ederign)