#### RI. SE

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#### What to Share, When, and Where

- Creating a Distributed and Efficient Contribution Process While Balancing Value and Risk

#### Why need a contribution strategy?

- Answers if, why, when, and how something should be open sourced
- Help to execute the overarching open source strategy
- Promotes and support contributions in line with business objectives
- Highlights potential costs and risks upfront
- Enables the balancing between objectives and complexities



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#### Enable critical assessments

- Support individuals posting contribution request to make their case
- Support decision makers to make informed decisions
- Reduce doubts and make contribution process more efficient
- Enable a proactive planning on contributions



#### Provide clarity on process

- Lower barrier and remove uncertainties
- Decision options
  - Reject, conditional accept, or accept
- Contribution options
  - Existing community, new community in specific external entity, or new community "in the wild"
- Needs to be weighed against potential objectives and complexities



### Systematic approach needed in the design

- Lay out a plan and involve all stakeholders early on
- Do not take objectives or complexities for granted
- Consider different types of projects, contexts, and scope



# Contribution Objectives and Complexities

- Contribution objectives explicate different types of benefits that may be gained because of a contribution
- Contribution complexities exemplify aspects that may complicate the contribution, or in other ways imply cost or risk for the organization
- Basis for designing Contribution Strategy guidelines and related contribution process
- Paper: https://doi.org/10.1007/s10664-020-09855-2







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## **Contribution Objectives**

- Reputation-centric objectives
  - Prove skill and influence
  - Be a good open source citizen
  - Improve employer branding
  - Increase transparency
- Supplier-centric objectives
  - Create price pressure
  - Outsource infrastructure operation





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## **Contribution Objectives**

- Strategy-centric objectives
  - Collect data
  - Standardize a solution
  - Build a software ecosystem
  - Improve partner collaboration
- Engineering-centric objectives
  - Open up innovation process
  - Extend development resources





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### **Contribution Complexities**

- Control-centric complexities
  - Impact on value proposition
  - Impact on internal operations
- IPR-centric complexities
  - Differentiating functionality
  - Commoditization
  - Sensitive IPRs
  - Substitutes
  - License compliance





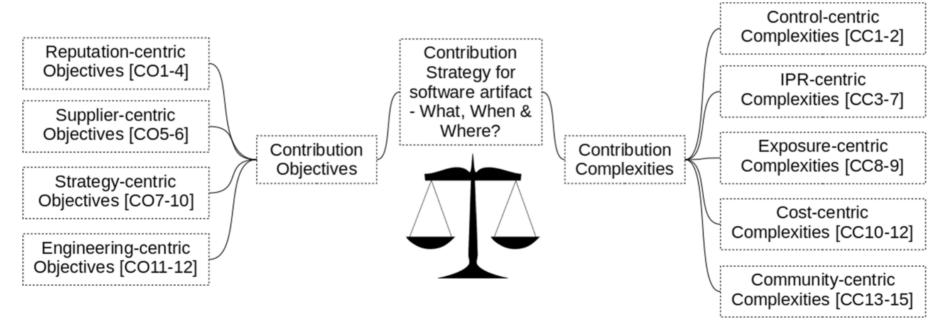
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### **Contribution Complexities**

- Exposure-centric complexities
  - Ethical use
  - Security threats
- Cost-centric complexities
  - Budget and resource constraints
  - Modularity and architecture
  - Code alignment
- Community-centric complexities
  - External interest
  - Influence in community
  - Community health



# Balancing objectives and complexities





## An (example) contribution process

- · Pass basic open source training
- Submit contribution request form
  - Example questions:
  - https://doi.org/10.6084/ m9.figshare.21104167



- Basic review by nearest Contribution officer
  - E.g., architect, senior engineer, or engineering manager



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#### **Basic review**

- Initial check if contribution is motivated
- Potential complexities and how they are proposed to be addressed
- Complexity and size of contribution
  - Trival
  - Medium
  - Major
- Trivial approved by contribution officer
- Technical review for cleared contributions



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#### **OSS Review board**

- Cross functional board with relevant stakeholders
- Medium and major contributions managed by open source review board
- Major with explicit OK from senior mgmt. and patent review
- Can be broken down into a "fast-track" and "standard track"



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#### **General notes**

- Ensure basic OSS training
- Educate on business goals and perceived risks and costs
- · Decentralize decision making
- Support and empower teams directly
- Fast-track trivial and white-list contributions
- Identify bottlenecks and remove friction
- Automate process (where possible) and enable follow-up of the contributions



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