



Fab Lab Network

doi: [10.5281/zenodo.5176311](https://doi.org/10.5281/zenodo.5176311)

## CSCCE Community Profile

CREATED IN COLLABORATION WITH: Wilson Center

### COMMUNITY OVERVIEW

The Fab Lab Network, hosted by the Fab Foundation, brings together fabricators, scientists, architects, engineers, educators, students, and professionals via a connected network of approximately 2,000 “Fab Labs” around the world. Fab Labs (Fabrication Laboratories) are spaces for anyone to access technical infrastructure to make creative or applied prototypes, with the ultimate goal of stimulating entrepreneurship. The Fab Lab Network, which started in 2010, offers a variety of educational programs, including Fab Academy, Fabricademy, and Bio Academy. Members also can participate in working groups and connect through the community platform, which started as a platform to support the FABxLive Event, as well as at the annual Fab Lab International Conference and Symposium.

► Website: <https://fablabs.io/>

### KEYWORDS

#### Paradigms

- OPEN INNOVATION
- OPEN SOURCE SOFTWARE
- OPEN HARDWARE
- OPEN ACCESS
- PARTICIPATORY DESIGN
- PRIZES AND CHALLENGES

#### Disciplines / skills

- INTERDISCIPLINARY
- ENGINEERING
- ELECTRONICS
- MANUFACTURING
- EDUCATION
- BIOTECHNOLOGY

#### Programming and goals

- KNOWLEDGE GENERATION
- PROFESSIONAL DEVELOPMENT
- OUTREACH AND COMMUNICATIONS
- DIVERSITY, EQUITY, AND INCLUSION

### COMMUNITY BASICS



400 core members, with a broader reach of 16 000



Equally online and offline\*

\*most activities were online during the COVID-19 pandemic



International



Partly open – anyone can request to join if they work in the field but until they're approved they don't have any access to the community

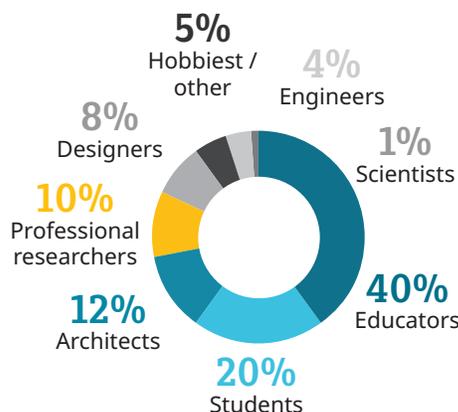
### COMMUNITY STRUCTURE

#### Community Management

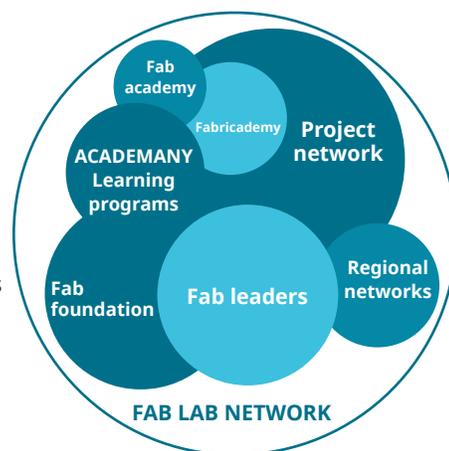
Community management is provided by the full-time **Program Manager, Community Relations and Outreach**. The **Coordination & Operations Lead** (.5 FTE) and **Director of Operations** (.2 FTE) also allocate part of their time for community management. **Community members** provide voluntary support and **7 Network Moderators** provide platform support.



#### Members



#### Community Configuration





Fab Lab Network

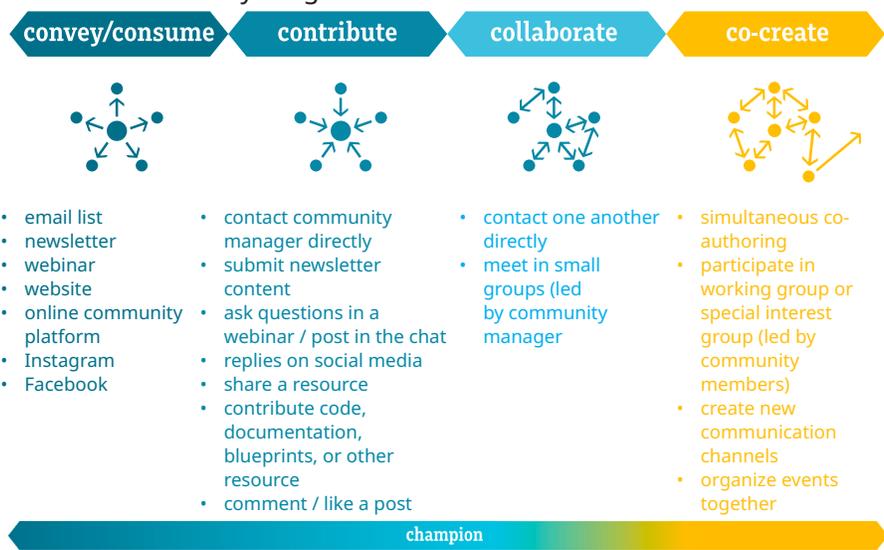
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### PROGRAMMING

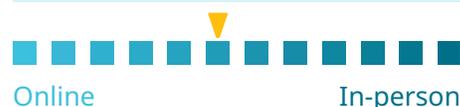
The Fab Lab community platform hosts a regular forum for community engagement, and the Fab Foundation shares news via social media and a monthly newsletter. The yearly Fab Lab International Conference and Symposium serves as a networking space to share knowledge around digital fabrication and is now a permanent hybrid event with an online component and distributed hubs around the world. The Fab Foundation, and programs such as Fab Academy, Fabricademy and Bio Academy, also organize working groups where anyone can learn how to make almost anything.



### THE COMMUNITY PARTICIPATION MODEL

The CSCCE Community Participation Model describes four modes of member engagement that can occur within a community – CONVEY/CONSUME, CONTRIBUTE, COLLABORATE, and CO-CREATE – and one that can occur both inside and outside of it: CHAMPION. All modes may be present at once, with some members interacting in multiple modes – or a community may have member engagement that falls into only some of the modes described. The model enables the mapping of community member behaviors to programming and other infrastructural support that the community manager, convening organization, or funder may provide to the community.

► For more information, see the [CSCCE community participation model](#).



### COMMUNITY CHAMPIONS

This community does not have a formal champions program. Informally, Regional Leaders have a long time commitment to develop programs and activities in local regions and serve as representatives of the community around the world.

**i** CHAMPIONS take on additional activities to support or advance the community. They are sometimes described as emergent leaders.

**MAINTAIN**

- code review / pair programming / maintainer roles
- serve on welcome committee
- serve on code of conduct committee

**GROW**

- recruit new members
- represent the community at external events

**EVOLVE**

- N/A

### COMMUNITY TOOLBOX

**Communications**

Email	Instagram
MailChimp	Zoom
Facebook	GitHub

**Productivity**

Google Drive	GitHub
Google Analytics	

**Community platform**

GitHub	Home-grown platform
Slack	



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### OUTPUTS & EVALUATION

Success looks like an international community of experts in cutting-edge topics around Industry 4.0 wanting to empower local communities to produce and consume locally.

#### ✓ Successes over the last year

Labs around the world are still being created and new people are wanting to engage with this community since technology/innovation is now part of the overall agenda worldwide.

- **Growth** - launched new program or project
- **Growth** - added new members
- **Engagement** - more members acted as champions

#### 📈 Evaluation and Reporting

- Community member interviews
- Community member surveys
- Reports for leadership

#### 💡 Opportunities

The Fab Lab Network is focusing on member engagement in the next 12 months, including new tools and activities on their community platform, so that they shift from a focus on physical spaces to an increased emphasis on people.

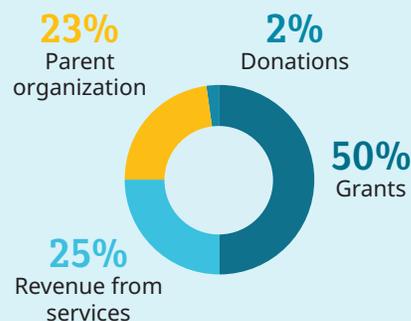
- **Growth** - new working groups
- **Engagement** - increase member activity
- **Activities** - create community outputs together
- **Funding** - secure new funding stream
- **Value** - external recognition

#### ⚠️ Challenges

Financial sustainability affects this community's ability to develop and support new tools for community engagement.

- Financial sustainability
- Low activity from community members
- Too few staff or volunteers

### FUNDING



#### Funding Streams

- 50% from foundations
- 25% from revenue from services (e.g., training)
- 23% from the Fab Foundation
- 2% from donations

Members can apply for **travel stipends** to attend Fab Lab events and funding for **professional development and training** through the Fab Lab Network.

### ABOUT THIS PROFILE

This profile is part of a research project conducted by the Center for Scientific Collaboration and Community Engagement (CSCCE) in collaboration with the [Science and Technology Innovation Program at the Wilson Center](#). You can find out more about the project, and view more community profiles, [on the CSCCE website](#).

Information for this profile was submitted by Norella Coronell, Program Manager, Community Relations and Outreach.

**Last updated:** 10 August 2021

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