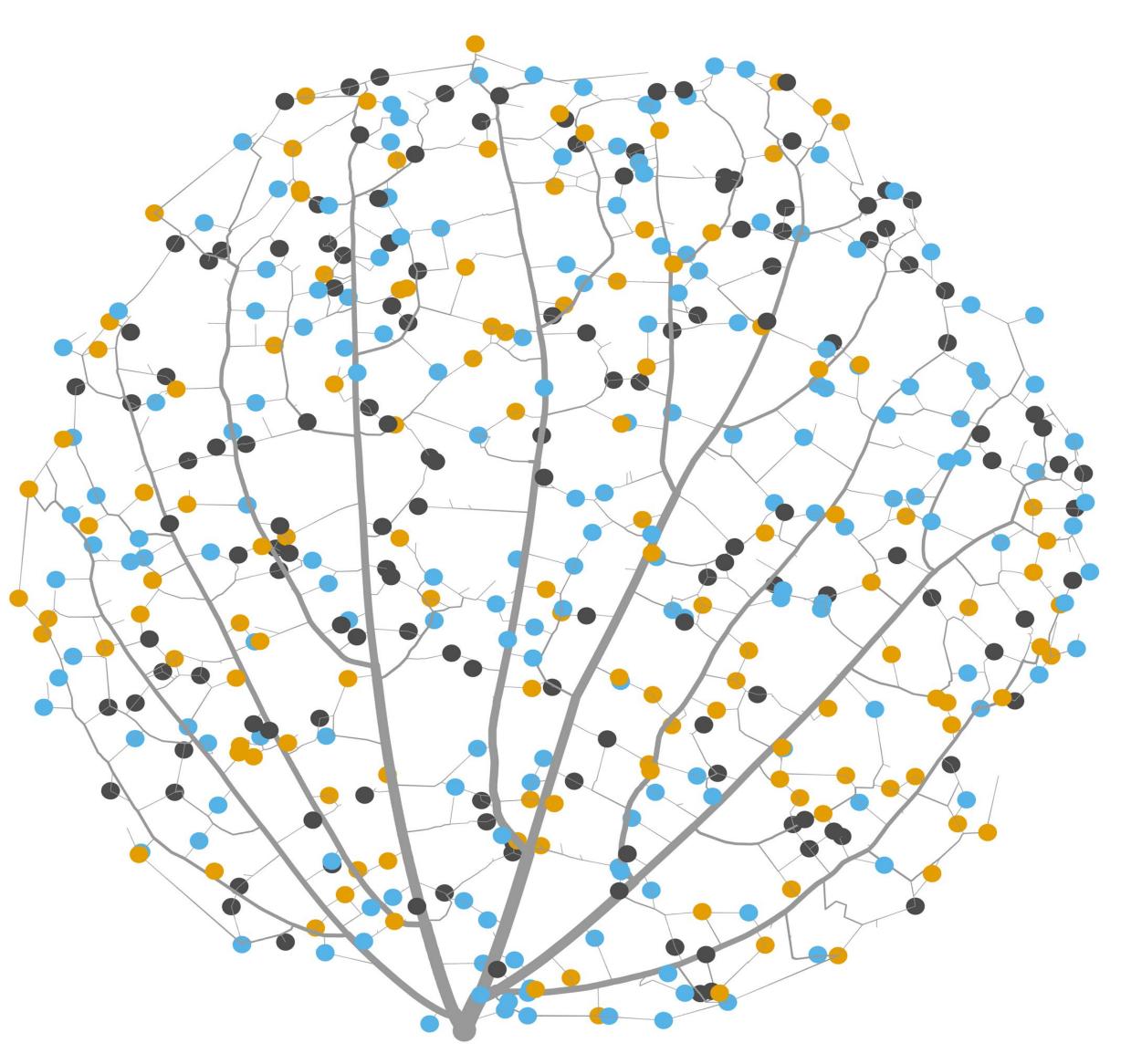
Testing Ideas for Flourishing Communities

CivilServant J. Nathan Matias & Julia Kamin CS natematias Juliakamin(cs)



Goals & Agenda

What can experiments do for Wikipedia?

How to design a simple experiment

How to think about research ethics

Design simple experiments Together



Introduction to **Experiment Design & Ethics**

Develop Experiment Ideas In Groups

Review Ideas, Challenges, and Solutions

Can symbolic rewards increase newcomer retention in German Wikipedia?



WikipediA Die freie Enzyklopädie

at Wikipedia. Management Science, 63(12), 3999-4015.







Gallus, J. (2016). Fostering public good contributions with symbolic awards: A large-scale natural field experiment





The Award "Edelweiss with Star" honors on a monthly basis a selection of those users who have made their first contributions to the German-language Wikipedia in the previous month. Awardees who continue their engagement can receive two further awards besides the original award: "Edelweiss with two Stars" and "Edelweiss with three Stars". The award recipients shall be considered as representative for all those new users who have constructively contributed to our common project. Welcome!

Idea and Realization

With the Edelweiss-Award, a group of authors of the Portal Switzerland wishes to honor new users and their valuable contributions to the German-language Wikipedia. They deserve our gratitude and our recognition.

The idea for such an award emerged from the Wikipedia roundtable in Zurich. After that, the award "Edelweiss" was for the first time bestowed in July 2012. The suggestions that were made after the first round of bestowals were intensively discussed and carefully integrated into the present award concept on consecutive roundtable meetings.

In case of questions, suggestions or criticism, please feel free to directly contact one of the users present at the roundtable meetings (for instance, [7 user names]). We are eager to preserve the positive spirit of this award and to abstain from dragging new users directly into discussions.

Edelweiss with Star

Out of more than 4,000 candidates who were for the first time active in the German-language Wikipedia in May 2015, we have awarded the following users in early June.

XYZ	XYZ	XYZ
XYZ	XYZ	XYZ
VV7	VV7	VV7

Note. "XYZ" is a placeholder for the pseudonyms of the award winners, which are displayed there.

at Wikipedia. Management Science, 63(12), 3999-4015.



XYZ XYZ XYZ XYZ XYZ XYZ XYZ VV7



Gallus, J. (2016). Fostering public good contributions with symbolic awards: A large-scale natural field experiment

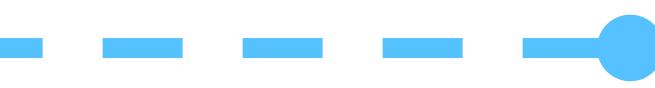
Experiments Provide different interventions to different groups and compare the outcome **Receive the Eidelweiss Award with Star**

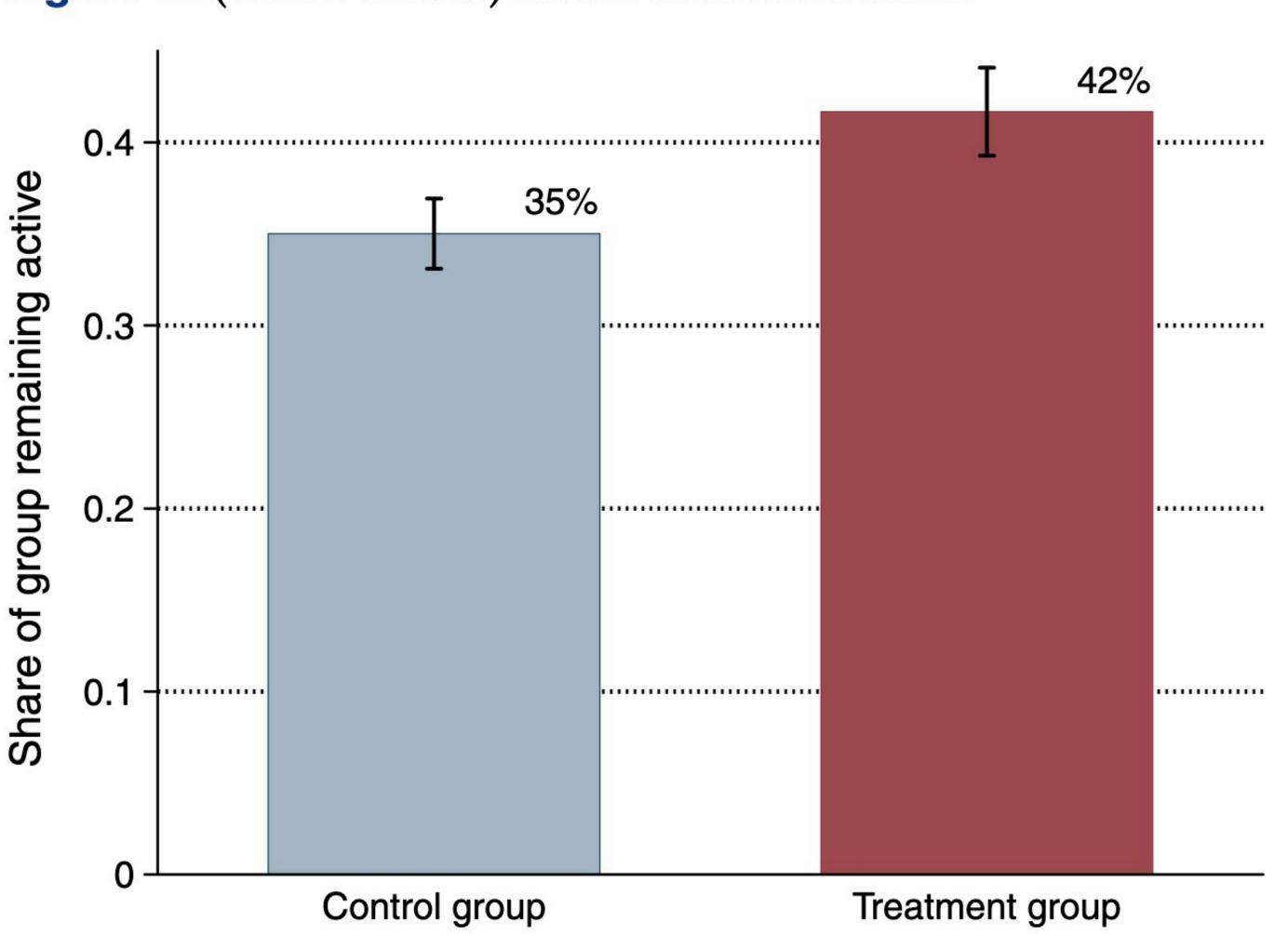
Non-bot newcomers

No Intervention (Group B)

Gallus, J. (2016). Fostering public good contributions with symbolic awards: A large-scale natural field experiment at Wikipedia. Management Science, 63(12), 3999-4015.

Measure the first month retention rate





Notes. Focusing on first month after awarding date. Error bars indicate the 95% confidence intervals.

Gallus, J. (2016). Fostering public good contributions with symbolic awards: A large-scale natural field experiment at Wikipedia. Management Science, 63(12), 3999-4015.

Figure 1. (Color online) Mean Retention Rates

What is an **Experiment?**

How Can Your Community Design an Experiment?



to discover effective ideas for digital technologies in society

M CivilServant

We work together with communities change and to test the impacts of

How can (language) Wikipedia better welcome newcomers?

What is the newcomer experience?

What factors are associated with contribution over time?

What support do newcomers need?

What interventions increase newcomer participation?

Interviews & Ethnography

Surveys

Data Analysis

Community Discussion

Design

What is the newcomer experience?

What factors are associated with contribution over time?

What support do newcomers need?

What interventions increase newcomer participation?

Interviews & Ethnography

Surveys

Data Analysis

Community Discussion

Design

What is the newcomer experience?

What factors are associated with contribution over time?

What support do newcomers need?

What interventions increase newcomer participation?

Interviews & Ethnography

Surveys

Data Analysis

Community Discussion

Design

What is the newcomer experience?

What factors are associated with contribution over time?

What support do newcomers need?

What interventions increase newcomer participation?

Interviews & Ethnography

Surveys

Data Analysis

Community Discussion

Design

What is the newcomer experience?

What factors are associated with contribution over time?

What support do newcomers need?

What interventions increase newcomer participation?

Interviews & Ethnography



Data Analysis

Community Discussion



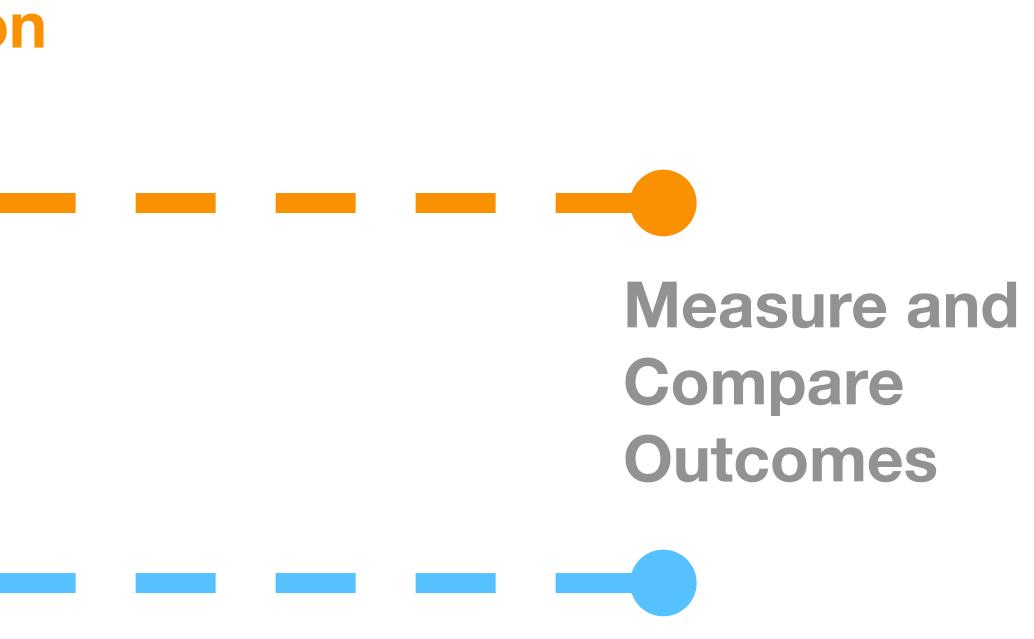
Experiments ask what-if questions and test ideas for change

Experiments Test ideas for change

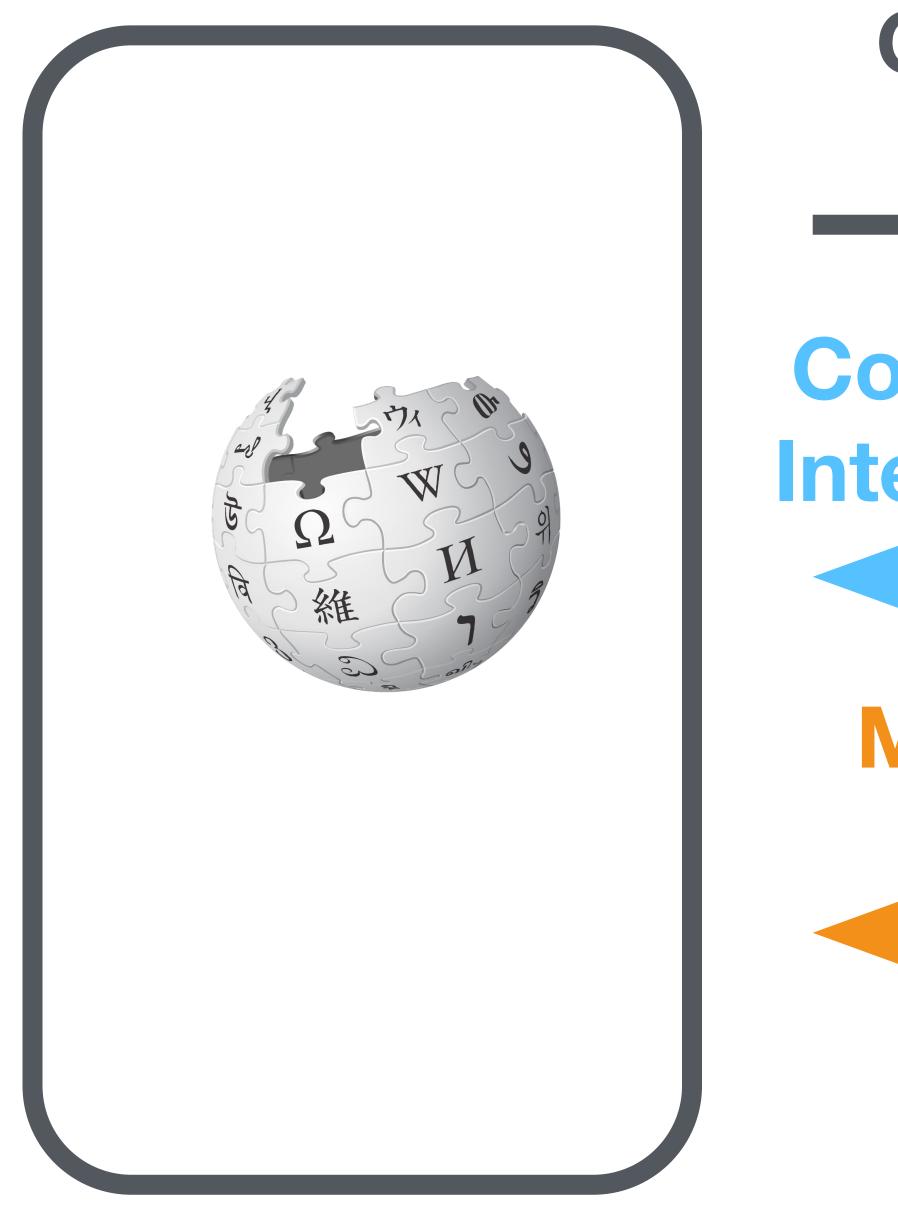
If new Wikipedians are given an award, how will that increase retention?

If more experienced editors thank newcomers for their edits, will that increase retention?

Experiments Provide different interventions to different groups and compare the outcome Receive Intervention (Group A) **Measure and** Compare **Outcomes No Intervention** (Group B)







Collect Data

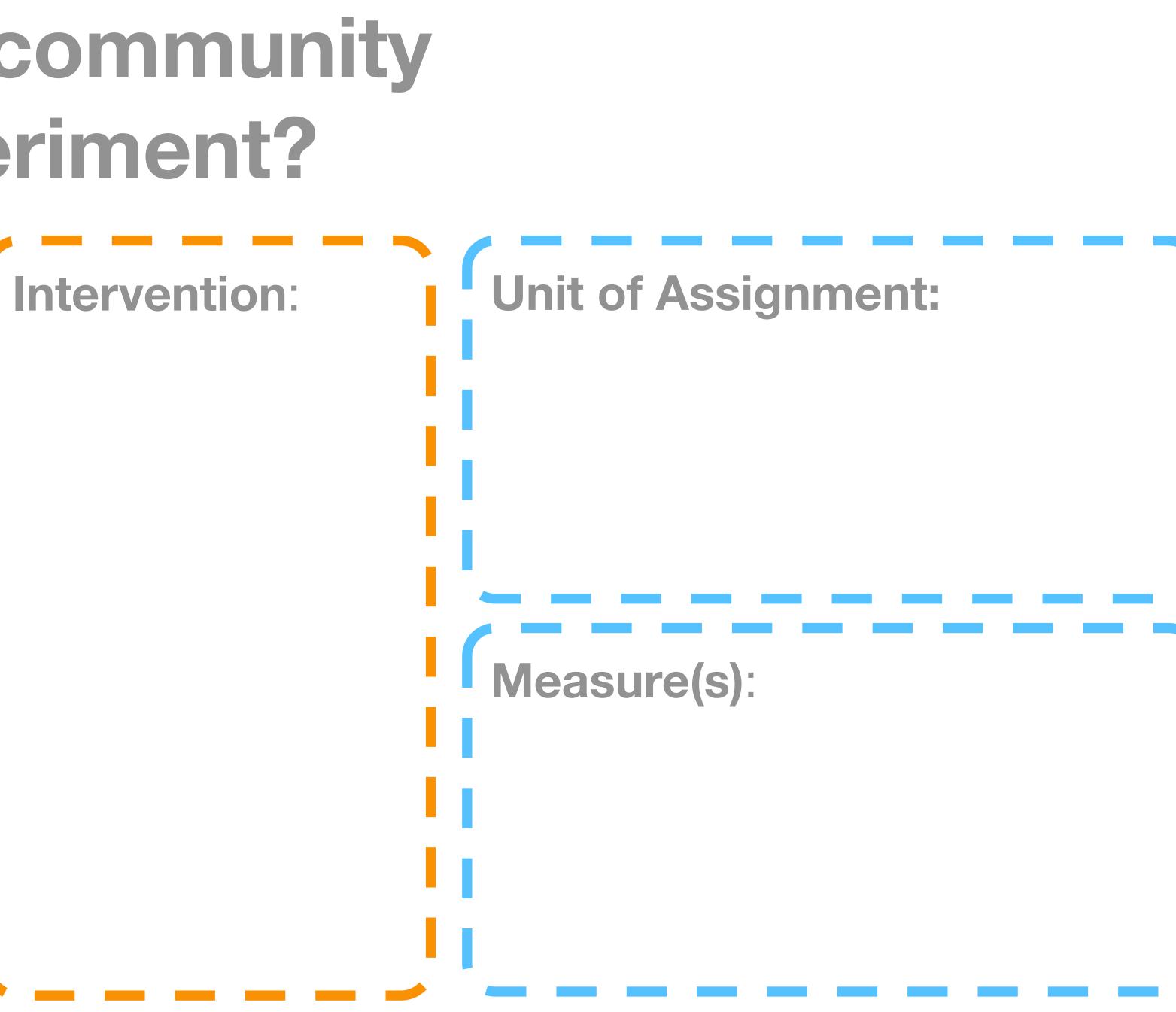
Coordinate Intervention

> Manage Ethics

CivilServant Datastore

CivilServant Software

How can your community design an experiment? Intervention: Goal:





What do you want to see Goal change in your Wikipedia?

Who

We want

people who have just joined a Wikipedia

people who aren't joining a Wikipedia

What

to increase the quality of their contributions

to contribute more to Wikipedia

to keep contributing over time

Experiment Design

Goal: We want people who have just joined a Wikipedia to keep contributing over time

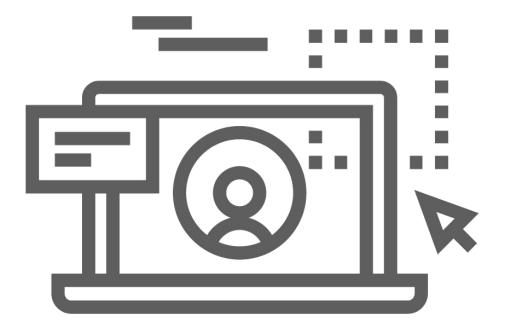
Unit of Intervention: Assignment: Measure(s):



Intervention What could you do to implement your theory of change?







Software & Design

Intervention What contribution

Offer support after conflict or harassment

Provide branding & identity they can show their friends

Send thanks to tell newcomers how you value their contributions

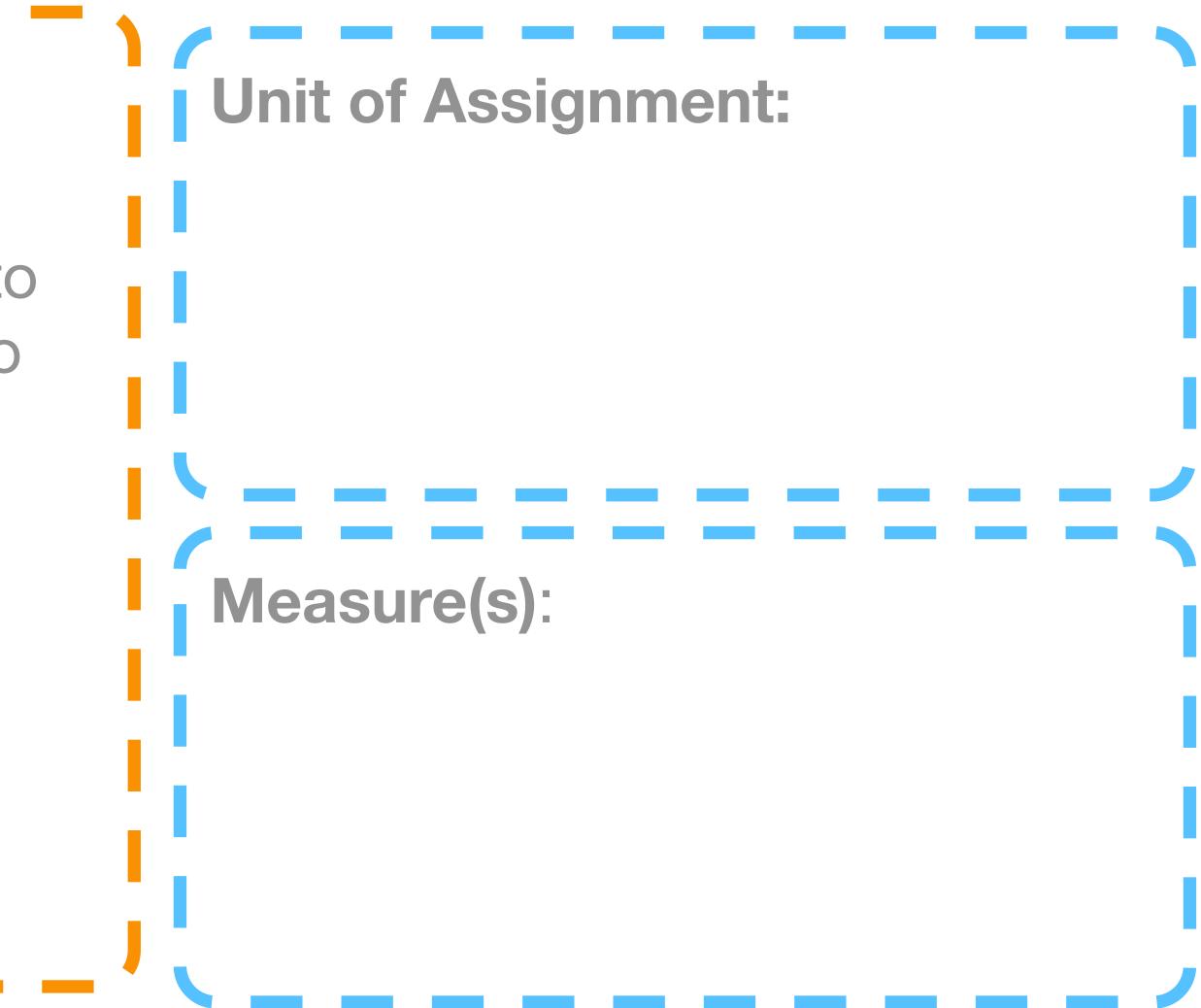
What causes some people to contribute to Wikipedia longer?

Experiment Design

Goal: We want people who have just joined a Wikipedia to keep contributing over time

Intervention:

Wikipedians send thanks to newcomers to inform them about how Wikipedians value their contributions



Unit of Assignment Where can you vary an intervention for comparison? Receive Intervention (Group A) **Measure and** Compare **Outcomes No Intervention**





(Group B)



Unit of Assignment Where can you vary an intervention for comparison?

Individuals

Cohorts

Articles

Wikipedias

Send some people Thanks but not others

Send some groups of Wikipedians Thanks but not other groups

Make the Thanks feature available for some articles but not others

Turn on the Thanks feature for some Wikipedias but not others

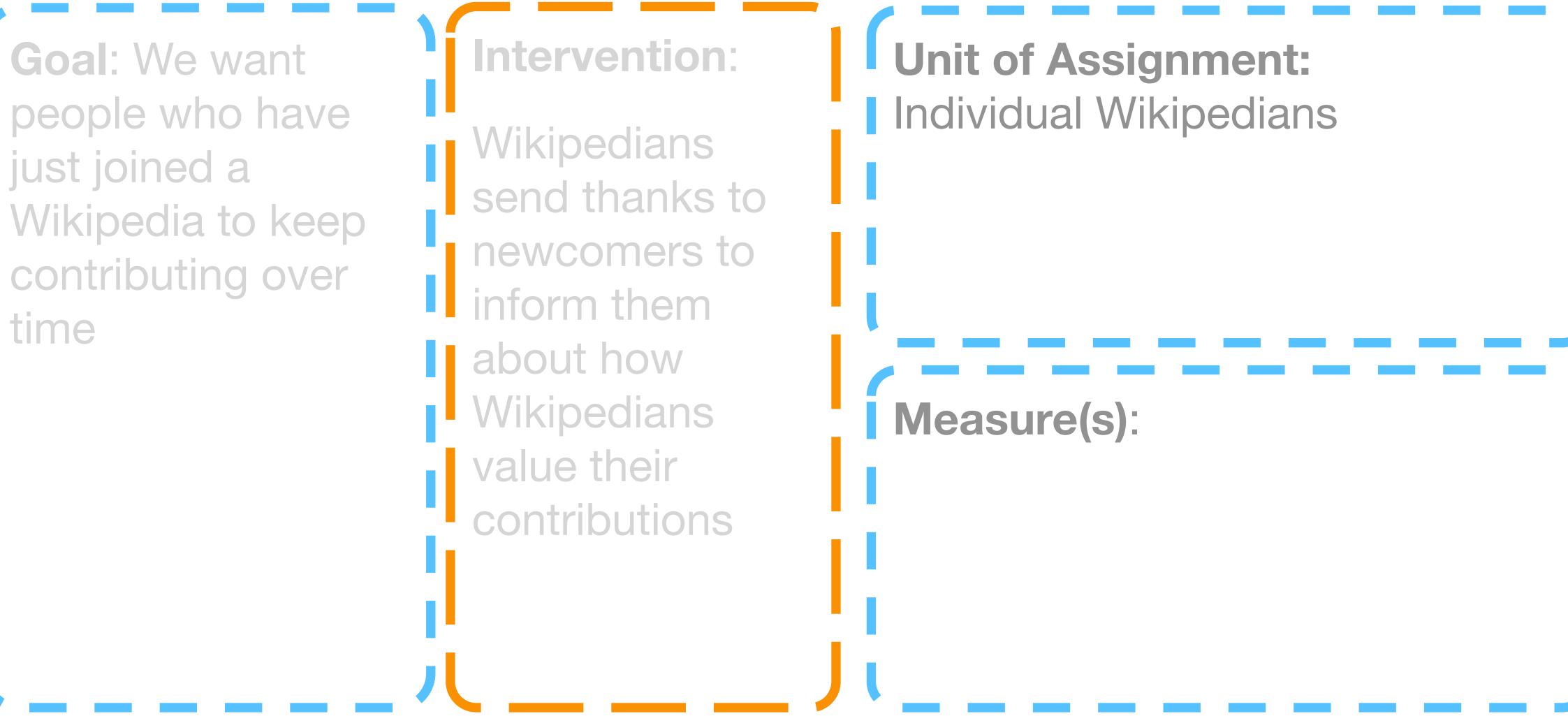
Important: good experiments need a large enough sample of units, usually in the hundreds or thousands



Experiment Design

Goal: We want people who have just joined a Wikipedia to keep contributing over time

Intervention: Wikipedians send thanks to newcomers to inform them about how Wikipedians value their contributions





Measurement

Observe Behavior

Ask People

Wikipedia (survival/retention)

value their contributions?

How will you measure the outcome that matters?

- Wikipedia Data: how long someone contributes to
- **Survey:** How much do they believe that other people

How will you measure Experiment Design the outcome that matters?

Goal: We want people who have just joined a Wikipedia to keep contributing over time

Intervention:

Wikipedians send thanks to newcomers to inform them about how Wikipedians value their contributions

Unit of Assignment: Individual Wikipedians

- Measure(s):
 - Survival/Retention
 - Belief that others value their work



Questions

Research Ethics, Collaborative Design & Community Consent

Research Ethics Protecting individual participants

Collaborative Design

Supporting and protecting the community

Community Consent

Ensuring that community

Ensuring that research is accountable to the

Principles of Research Ethics: Protecting Participants Benefits: will this study benefit participants & society? **Risk:** are the risks from this study: o routine duration: reversible / long-term Do benefits outweigh the risks? Procedures to protect subjects Consent and Debriefing

Collaborative design: supporting & protecting the community

Maximize *benefit*

Ensure experiment is valuable..

- Goals that matter to the community
- $\circ\,$ Interventions that are practicable

Ensure experiment is good...

Understand how the community works (avoid "gotchas")

Minimize *risk*

Minimize short-term harm

Ensure experiment respects the integrity of the community...

unity le

Community Consent

How? Depends on community...

- Village Pump
- Project / chapter with trust of community

Community can agree

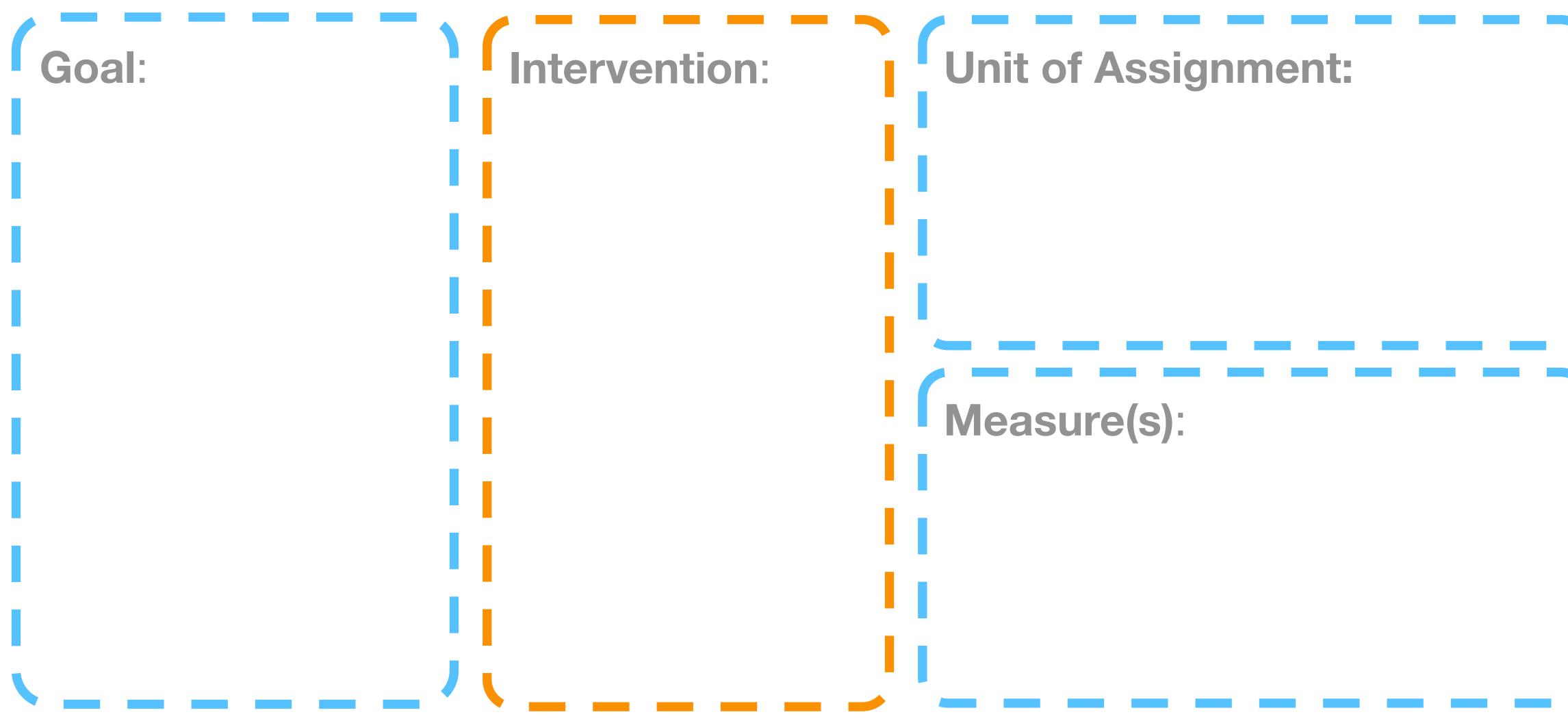
- Benefit outweighs risk for community
- Benefit outweighs risk for individuals

Form groups of 3-4 with people next to you

1. Pick an experiment to design 3. If time, work on 2nd experiment

2. Complete front & back of experiment card

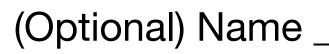
Describe Your Experiment Idea

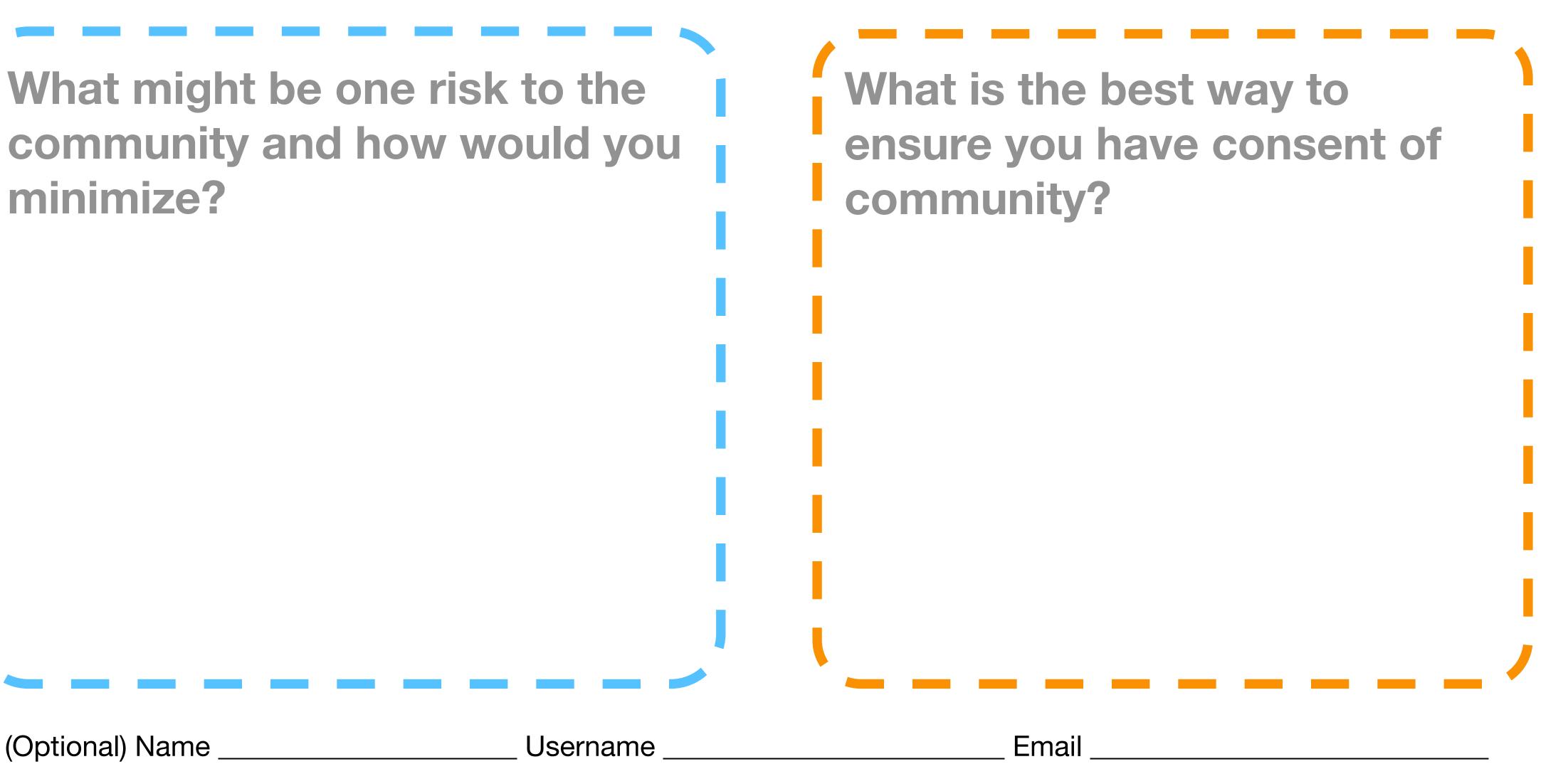




How can you ensure integrity and consent of community?

What might be one risk to the community and how would you minimize?





Share Your Ideas

Discuss Challenges

Questions

Testing Ideas for Flourishing Communities

CivilServant J. Nathan Matias & Julia Kamin CS natematias Juliakamin(cs)

