

Updated  
February 2021

# Team-building and information flow for large groups such as online hackathons

Building on Laugeri's Three Contracts model,  
Leonardo 3.4.5 team profile, and matchmaking process

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Last / editable versions

[www.openvillage.ch](http://www.openvillage.ch)

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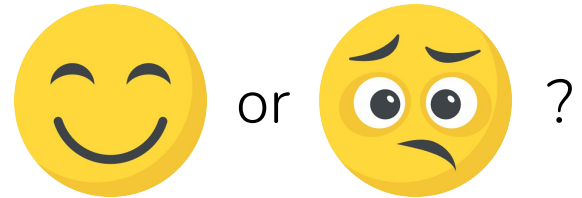
New slide  
February 2021

Between March and June 2020,

**154'000 people** took part in 136 hackathons against COVID.

This equals 957'000 days of volunteering,

for **17'700 projects** released.



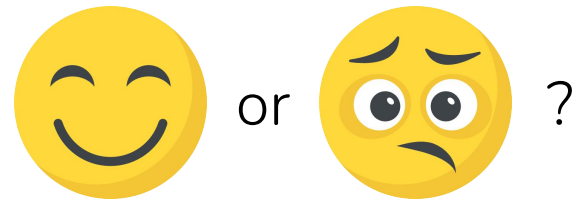
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February 2021

957'000 days of contributions equals

**3'800 people working full time** during a year.

3800 people developing 17'000 projects means

each project must be realized by a person in **< 3 month**.



20'900 participants

April 24-26, ~~60'000~~ people will join the European Union challenge.<sup>1</sup>

Total time invested: 164 years,<sup>2</sup> plus the wisdom of the crowd.<sup>3</sup>

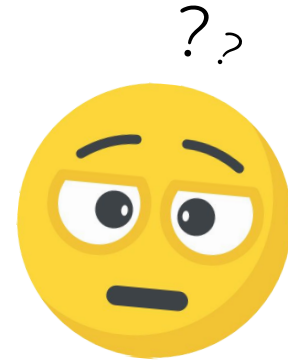
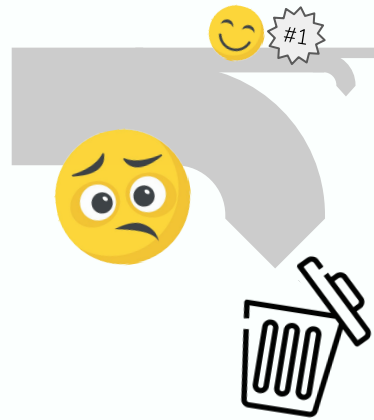
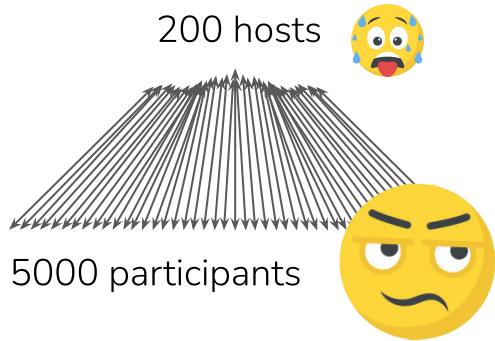
Imagine these 60'000 people transform into one living organism.<sup>4</sup>

What could we dream this 'super-body' could achieve?

Clickable links:

1. [Euvsvirus.org](http://Euvsvirus.org)
2. With an average contribution of 24 hours per person
3. [ncase.me/crowds](http://ncase.me/crowds)
4. The event is only an example to illustrate the concept.

## Common hackathons fails



information overload

+ waste of resources

= loss of motivation

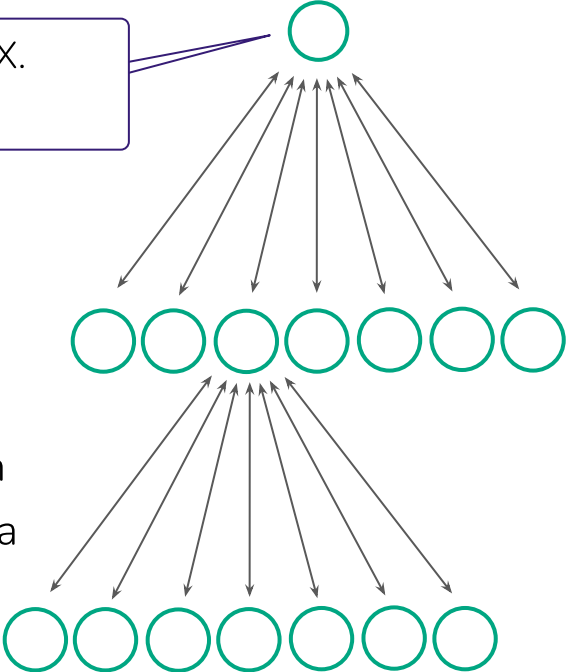
as little information  
as needed

+ coordinated work  
across teams

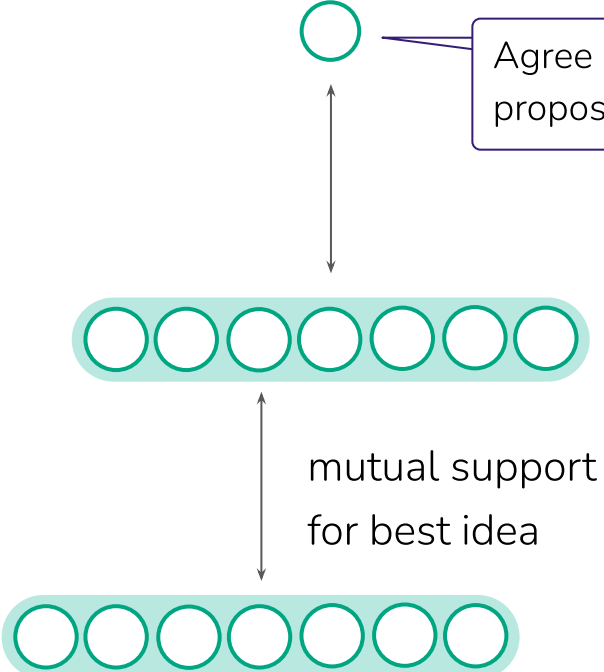
= feeling of belonging,  
projects sustain

# Changing group dynamics to value mutual support

Propose me X.  
xxx

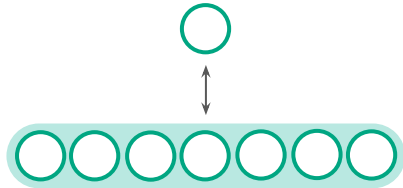


Agree on X and  
propose it to me.



In practice

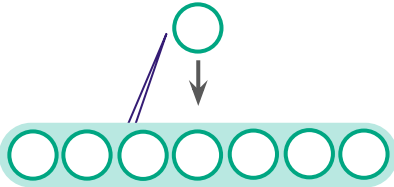
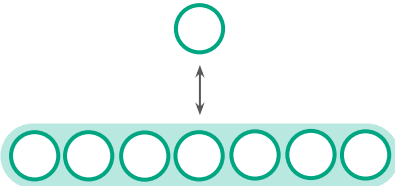
## Onboarding 7 people



lvl	people	topic	begin
1	1	Fight COVID	
2	7	?	



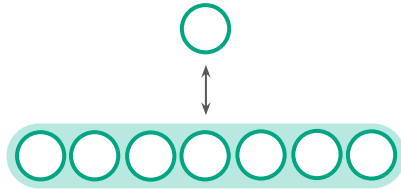
# Onboarding 7 people



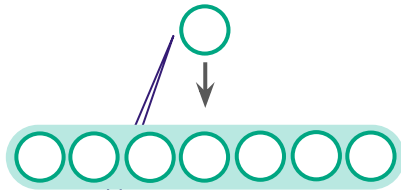
Please agree on 7 topics to fight COVID and propose them to me.

lvl	people	topic	begin
1	1	Fight COVID	
2	7	?	

# Onboarding 7 people



lvl	people	topic	begin
1	1	Fight COVID	
2	7	?	



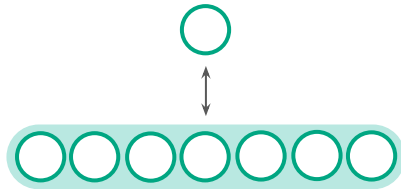
Please agree on 7 topics to fight COVID and propose them to me.



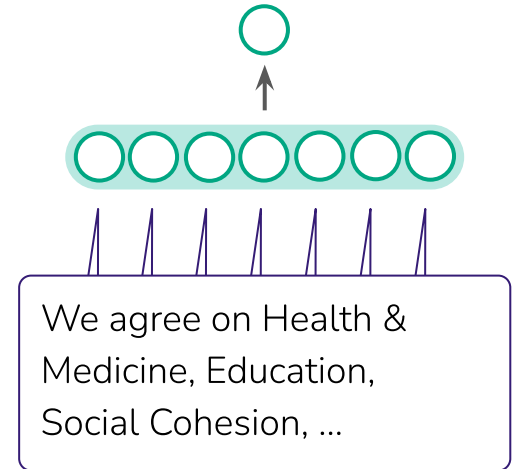
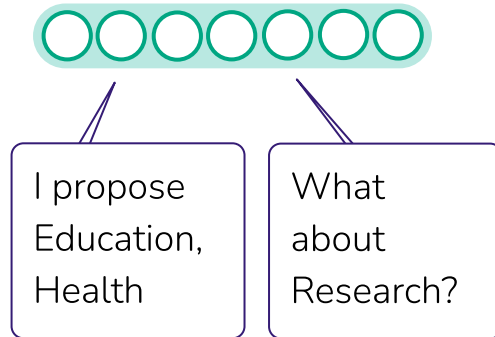
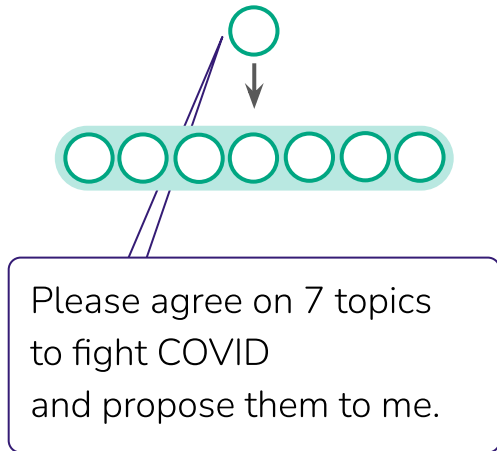
I propose Education, Health

What about Research?

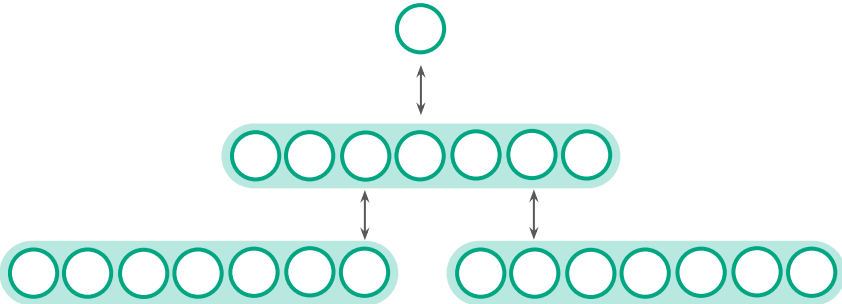
# Onboarding 7 people



lvl	people	topic	begin
1	1	Fight COVID	
2	7	?	

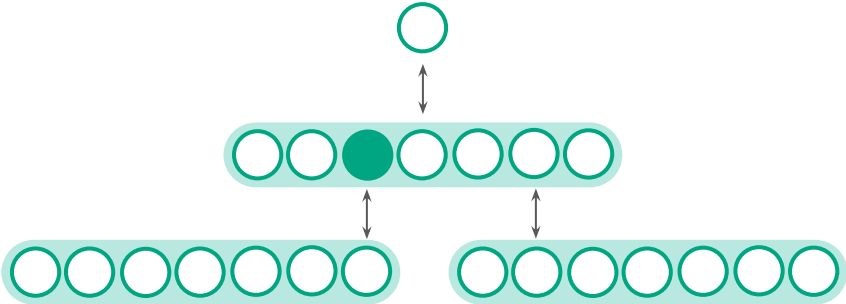


# Onboarding 49 more people



lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	?	

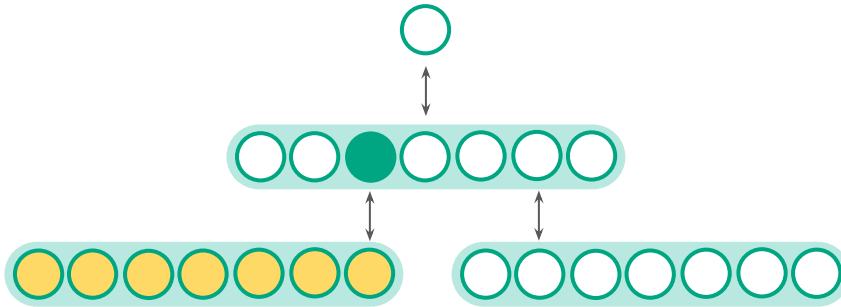
# Onboarding 49 more people



lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	?	

Let's take ●.

## Onboarding 49 more people

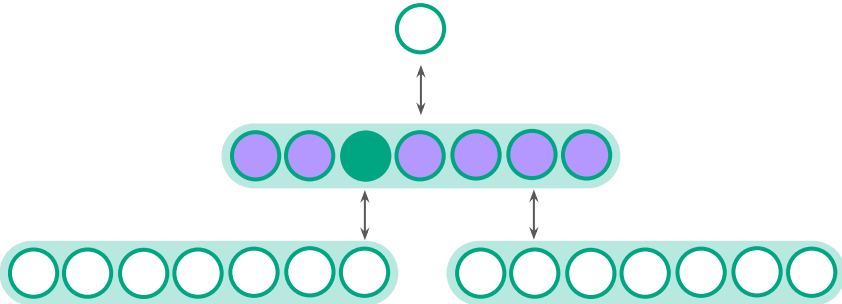


lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	?	

● asks ○○○○○○○ to agree on seven topics.

○○○○○○○ share the seven topics they agreed on to ●.

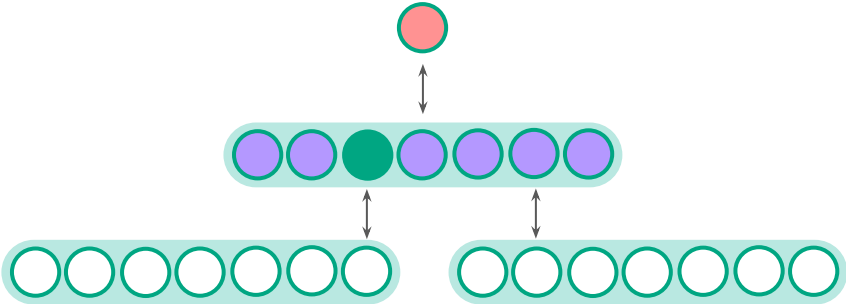
# Onboarding 49 more people



lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	?	

● agrees with ○○○○○○○ to validate / adjust the 49 topics.

# Onboarding 49 more people

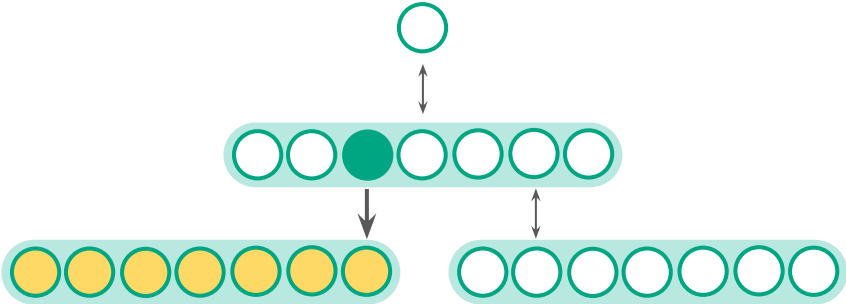


lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	?	

If needed,  ask questions to , who answers them.



# Onboarding 49 more people



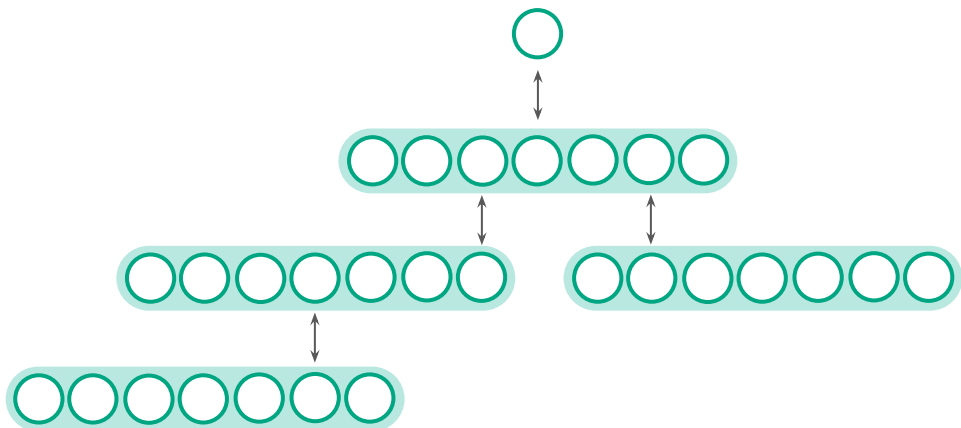
lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	One open-science ventilator	

● validates / adjusts and comes back to  .

Scalable

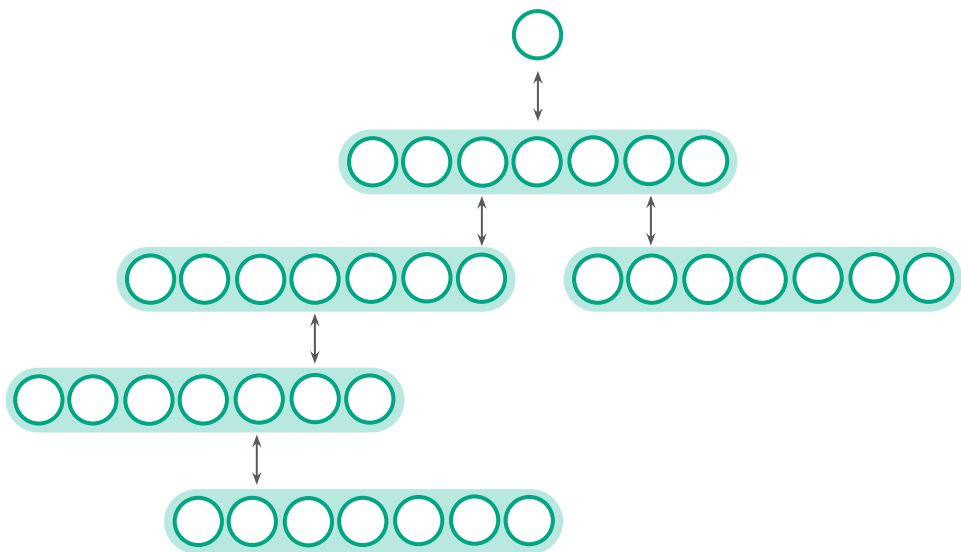
An illustration based on an event with 60'000 people.

343 people



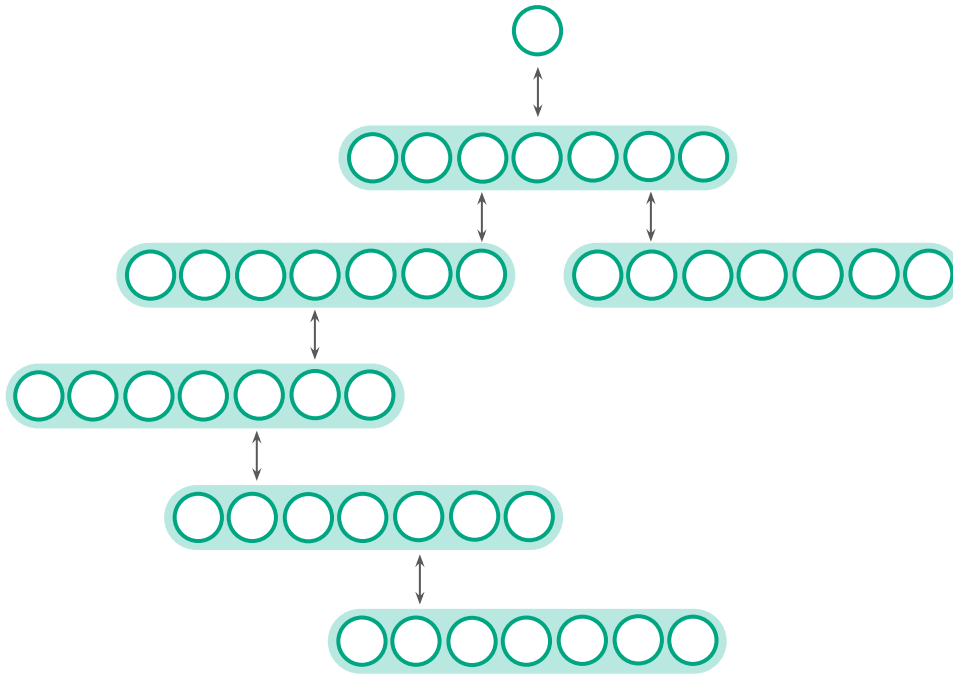
lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	One open-science ventilator	
4	343	?	19.04

2401 people



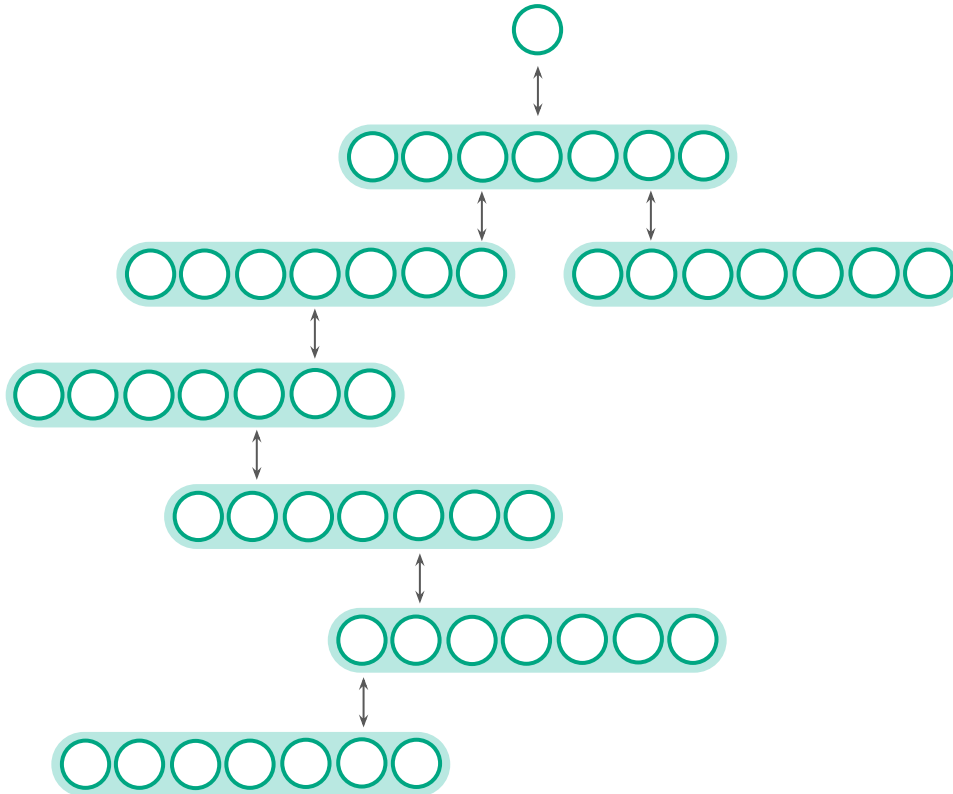
lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	One open-science ventilator	
4	343	Gather field needs	19.04
5	2401	?	20.04

16807 people



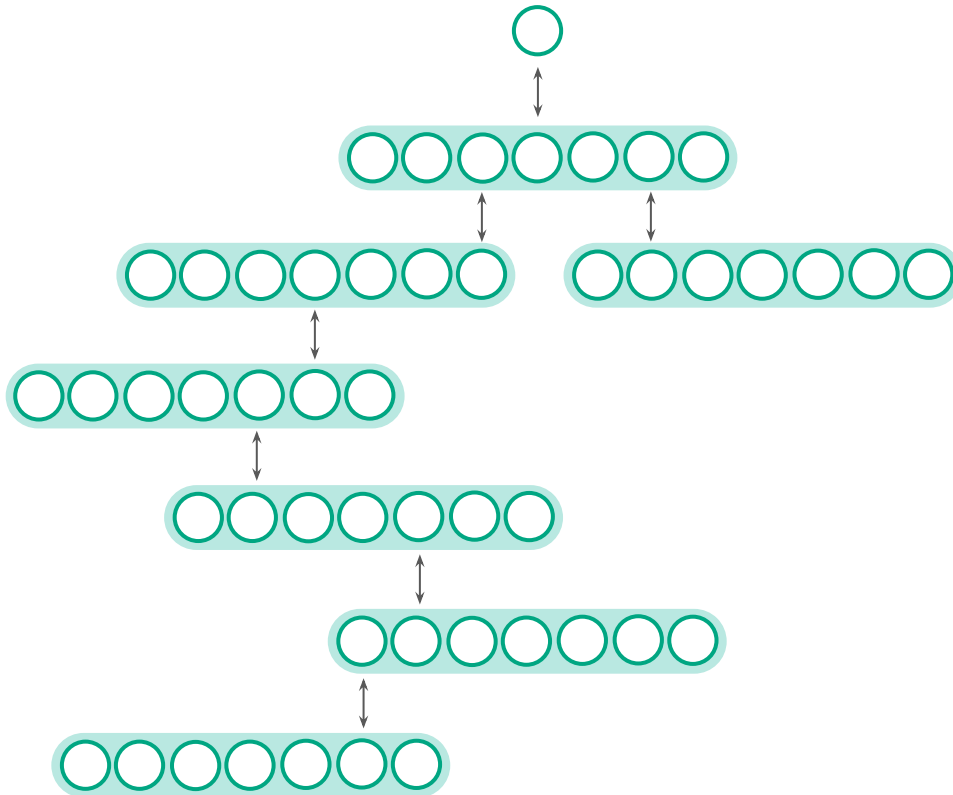
lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	One open-science ventilator	
4	343	Gather field needs	19.04
5	2401	List resources required for local production	20.04
6	16807	?	21.04

117649 people



lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	One open-science ventilator	
4	343	Gather field needs	19.04
5	2401	List resources required for local production	20.04
6	16807	In Central Europe	21.04
7	117649	?	22.04

117649 people



lvl	people	topic	begin
1	1	Fight COVID	
2	7	Health & Medicine	
3	49	One open-science ventilator	
4	343	Gather field needs	19.04
5	2401	List resources required for local production	20.04
6	16807	In Central Europe	21.04
7	117649	In Switzerland	22.04

This replicates how the body works:

- ✓ as little information as needed:  
each person closely interacts with **14 people**.
- ✓ coordinated work across teams:  
every individual contributes to one congruent whole.

Coordinators can **rely on autonomous teams** to support them.

Individuals support each other to be part of a **meaningful whole**.

There is a feeling of belonging, and projects sustain.



1 in 49 outcomes possible

2'400 participants  
coordinate 60 open  
versions being built



880'000 ventilation machines  
needed to avoid deaths



✓one freely reproducible machine

- ready for mass/crowd production in all countries
- iteratively improved/validated

# Technical implementation

## Team building

L3 agreed on **49 topics** through rapid iterations with L2 (and L2 with L1 if needed)



### Prioritize 10 topics you care of

Open source ventilator  
Handrub production  
Knowledge transfer  
Infection prevention  
etc.

### Your preferences at work

stability		change
short term		long term
product		method
focus		consensus
centralized		decentralised

→ To onboard, L4 prioritize **10 topics** they prefer and fill a **team profile** such as EU funded Leonardo 3.4.5



April 19, **343 people** (L4) are invited to a team based on their preferences.



L4 agree on **343 topics** through rapid iterations with L3 (and L3 with L2, L2 with L1 if needed)

# Interfaces

## User registers

Michele

- **profile:** stabilization
- **available:** from 19.04
- **prioritized topics:**
  - 1.3.2) ventil resources
  - 1.3.4) ventil certification
  - 3.4.2) education for elders

→ gets allocated to highest bucket available →

19.04	4	343 p
20.04	5	2401 p
21.04	6	16807 p
22.04	7	117649 p

→ is invited to join team based on preferences (algorithm) →

You are invited to join **Channel #1.3.4** ventil certification.

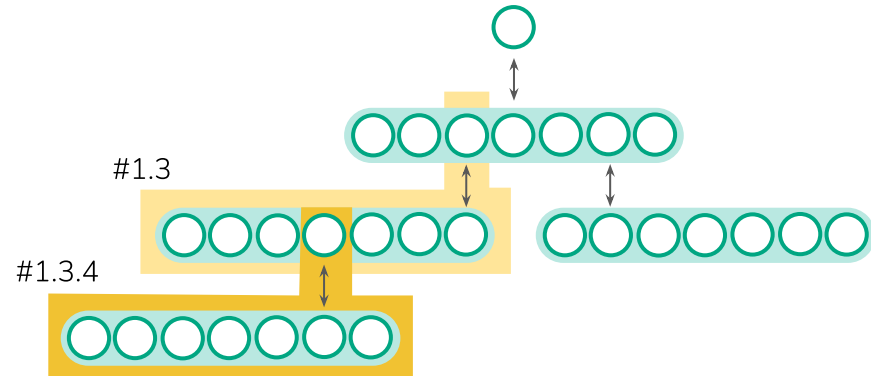
The coordinator 1.3 will contact you.

Then

- group agrees on 7 topics to cover 1.3.4
- once topics validated by 1.3, group is asked to create **channel #1.3.4.1** to **#1.3.4.7**

Website, database, matchmaking algorithm

Channels



New slide  
February 2021

## Open science and commons

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<https://routledge.com/Critical-Theory-Today-A-User-Friendly-Guide/Tyson/p/book/9780415506755>

Thank you.