

Embedding collaboration throughout the university. The UPC Nexus24 Program.

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A photograph of a modern university building with a large glass facade reflecting the sky and surrounding structures. The building is part of the Universitat Politècnica de Catalunya (UPC). In the foreground, there is a paved plaza with several young trees planted in individual pits. A few people are walking in the plaza, and a white car is parked in the distance. The sky is clear and blue.

Why
our university needed to be more
collaborative?

University values: what, why and how?

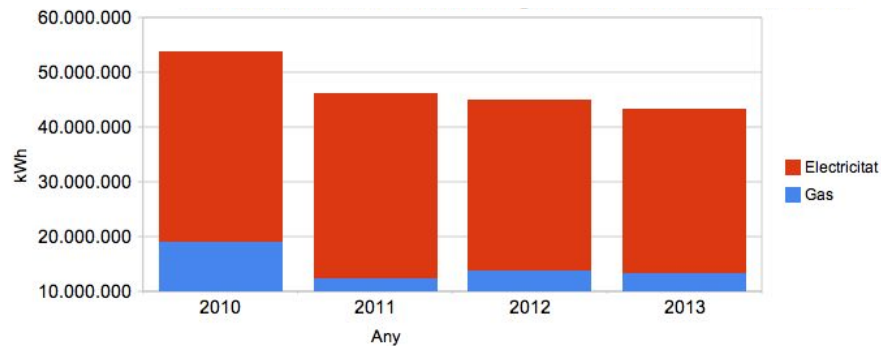
The value of **collaboration** is at the heart of any **sustainable** solution or strategy.

Sustainability efforts in universities have generally focused on **curriculum, research, operations or outreach**.

But what happens if we focus on the **organizational model**?

Back in 2014 ...

Energy consumption



Energy saving plan:

Reduced 27% consumption & emissions

UPC saved **4 M€**

sense of belonging



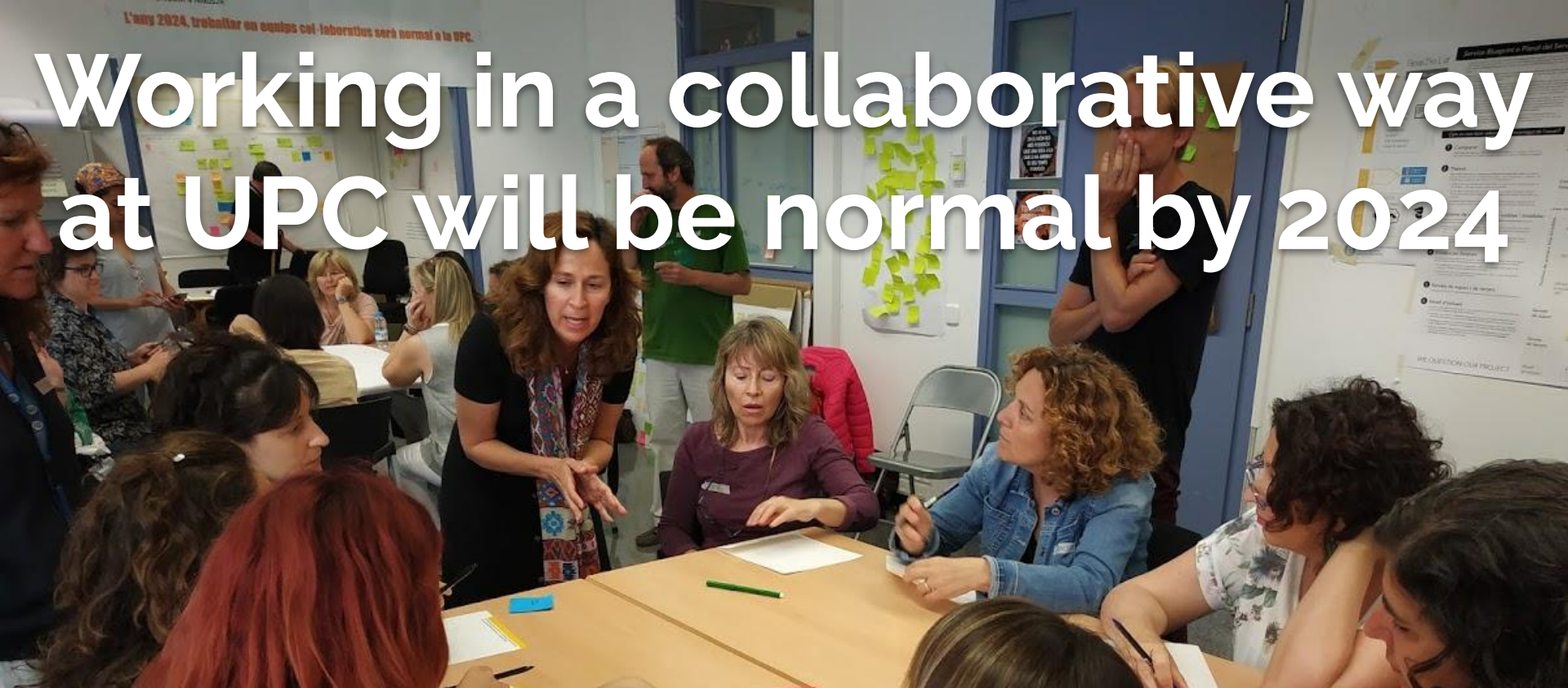
Collaboration works!



Comunitats
Col·laboratives **UPC**
nexus24

Our purpose (2014):

Working in a collaborative way
at UPC will be normal by 2024



5 objectives

to motivate people



to share knowledge



to gain flexibility



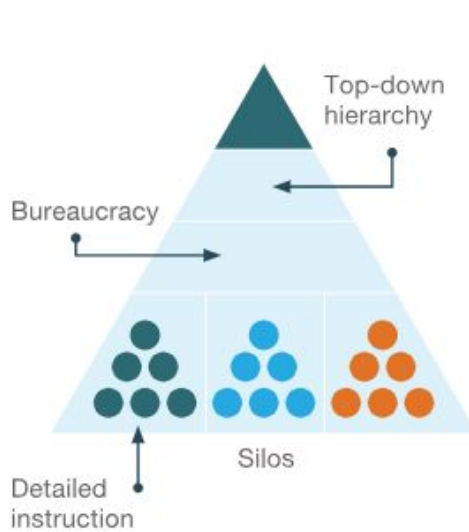
to improve the university

to take advantage of all talent

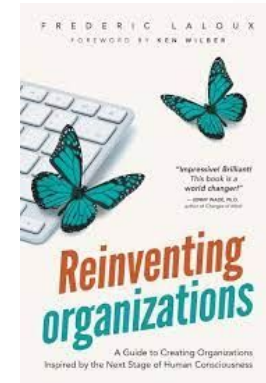
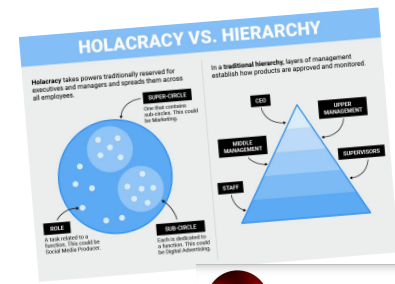
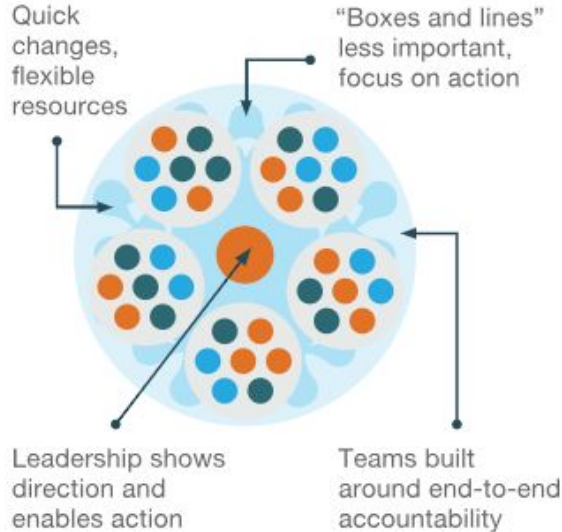
Rather than organization as machine, the agile organization is a living organism

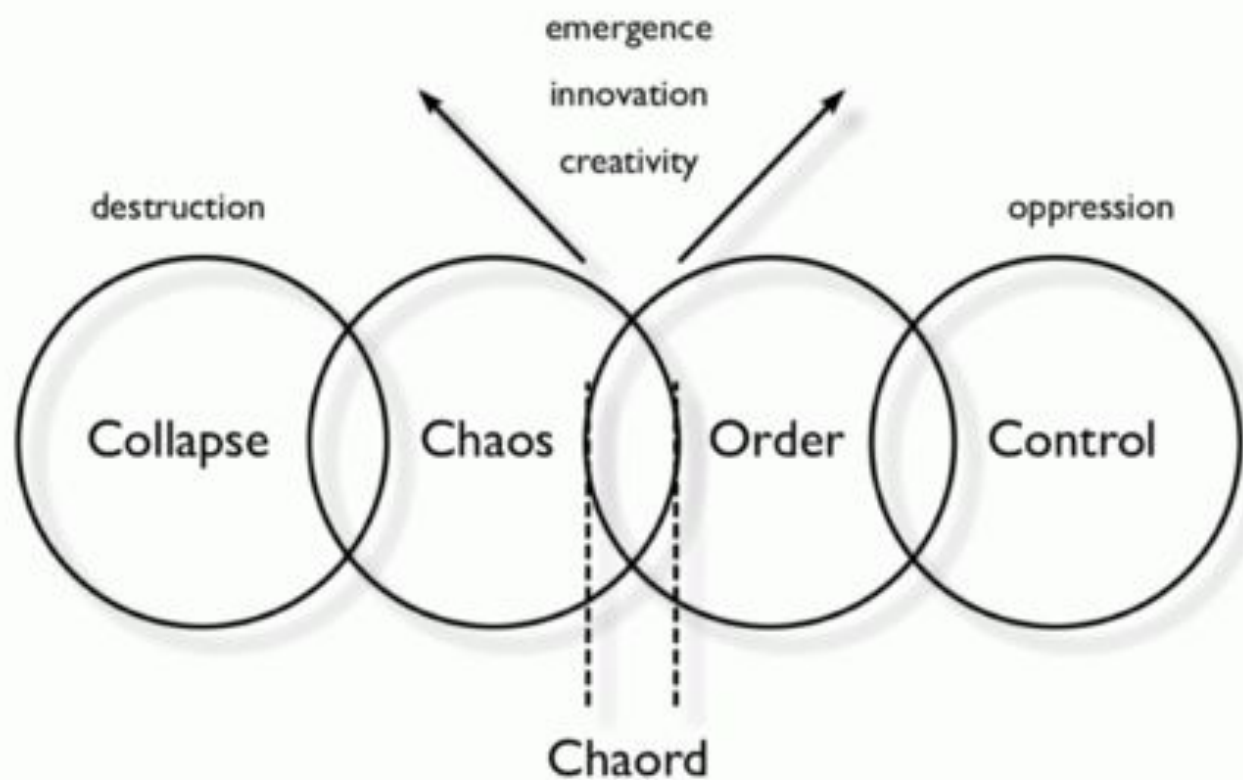
From organizations
as "machines" ...

... to organizations
as "organisms"



McKinsey&Company





The Dual model: 1 organisation, 2 operating systems

Different **principles**, different **functions**

- **Mission**
- Hierarchy
- Process
- Predictability
- **Efficiency**
- Creates certainty
- Rigidity
- Hours



- **Purpose**
- Autonomy
- Project
- Emergence
- **Resilience**
- Generates value
- Flexibility
- Results

OPERATE
WE MUST

EXPLORE
WHAT IF?

3 impacts

By collaborating, we...

...learn from each other

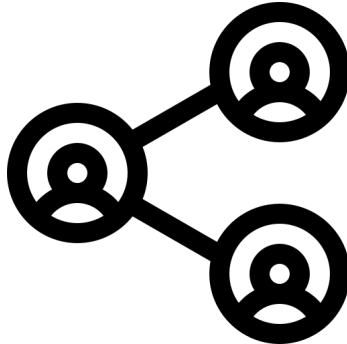


**Knowledge
capital**



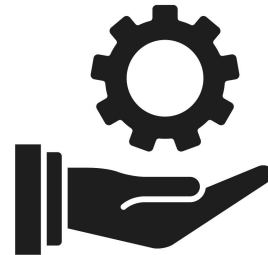
...connect each other

**Social
capital**



...solve issues together

**Utility
capital**



A photograph of three people sitting on a light-colored wooden floor in a workshop or classroom setting. On the left, a woman with dark, curly hair is wearing a black long-sleeved shirt and dark trousers. In the center, a man with dark hair and glasses is wearing a blue long-sleeved shirt. On the right, a man with glasses and a pink striped shirt is smiling and reaching towards a model. They are all focused on a structure made of thin yellow sticks and small white buttons. The man in the pink shirt is holding one of the sticks. In the background, there are stacks of grey plastic chairs, a whiteboard with a diagram, and a fire extinguisher. A yellow paper with some markings is on the floor in front of them.

**How
are we doing the transformation
at UPC?**



Like swimming, **we learn to collaborate by collaborating**



4 types of collaborative initiatives in Nexus24

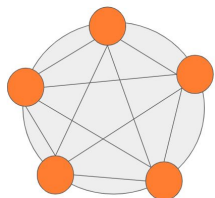
collaborative
school



6 editions
150p

Learning to collaborate
25p/edition

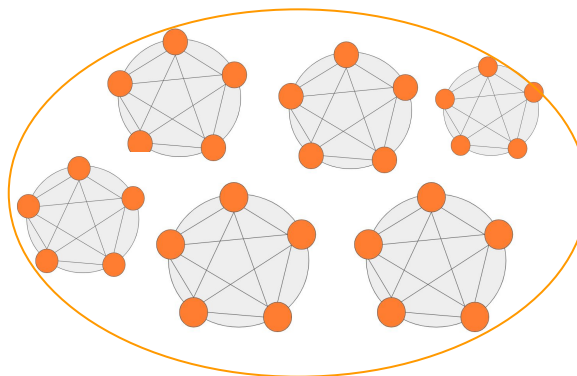
collaborative
projects



51 projects
348p

4-6 people
Focus on a problem/idea
Learning to collaborate

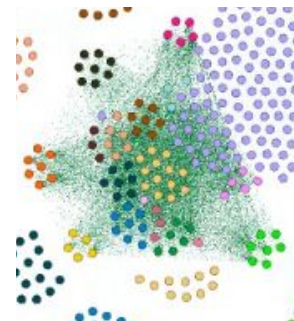
collaborative
events



73 events
615 p

20-150 people
Collective intelligence
Generating value

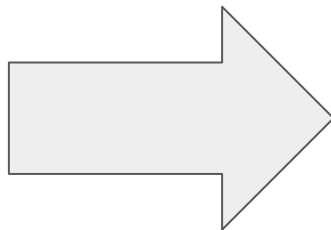
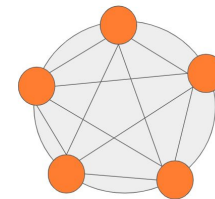
collaborative
digital knowledge
networks



2 networks
452 p

150-300 people
Permanent network on a
topic
Knowledge management

Examples of collaborative projects

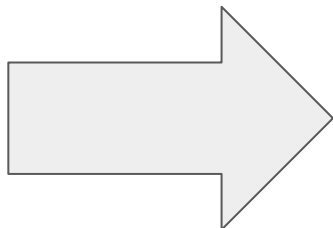


Problem: “Quality is boring”

Solution: simplification of forms, creation of a community of practice of quality

PERMANENT NETWORK since 2016

“Mail to ticket”

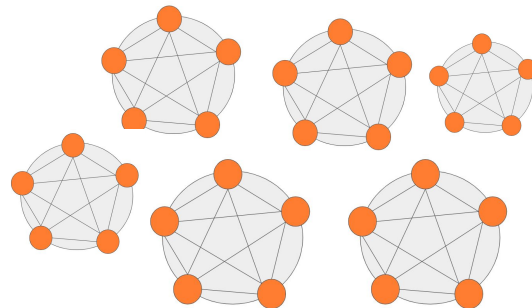


Problem: many hours lost in reading similar emails for recurring incidents

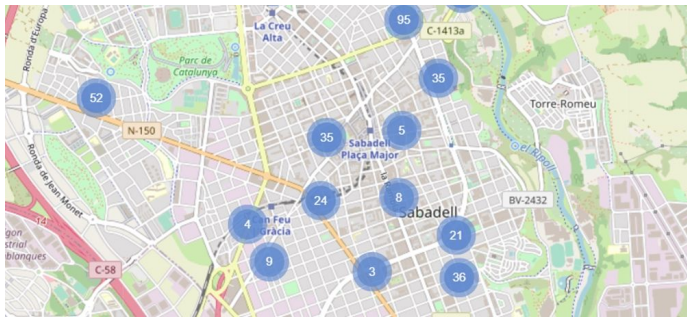
Solution: automatic process to transfer emails in a ticketing system

AUTOMATIZATION

Collaborative events



Example: mapathon of accessibility



Available mapping
tool at:
mapathon.upc.edu



En resum el Bu...

Fomenta el treball col·laboratiu

Ordena i facilita l'accés a la documentació

Experiències i lladres de temps
identificació de millores

Reconeix i fa visible el talent de les persones

Reconeix les tutories internes que ja s'estan realitzant

Results

and lessons learned

Facilitarà la comunicació i trobades ENTRE

» Serveis Experts i Enllaços

» Serveis Experts i Usuaris

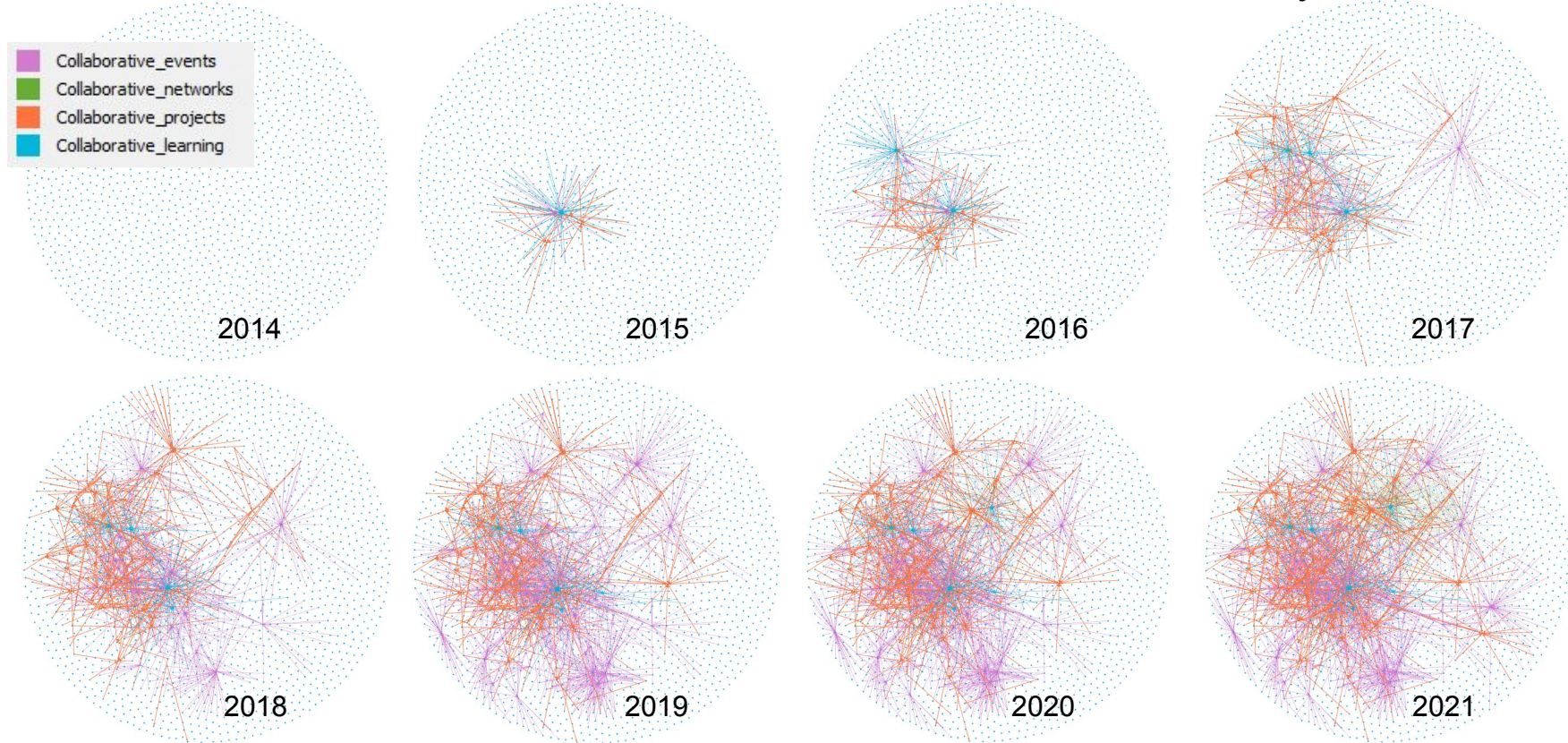
UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

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Sessió
Final de Projectes

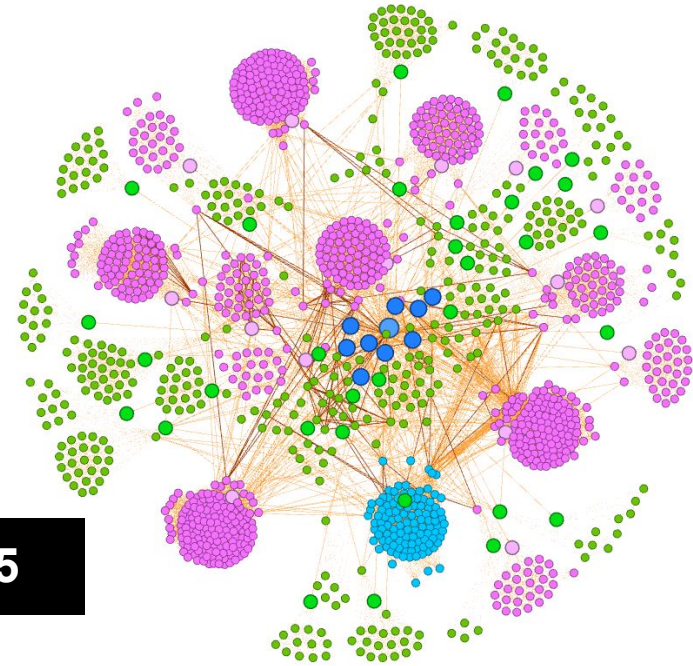
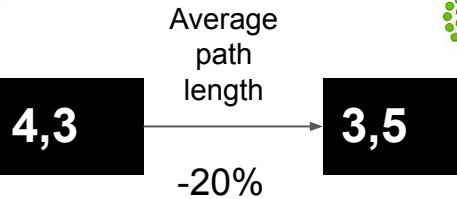
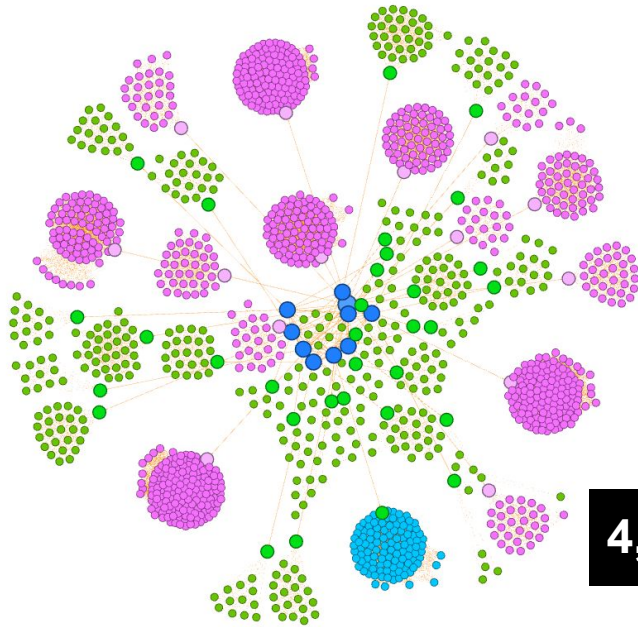
We want to visualize how collaborative work connects the university staff



73 Collaborative events with 615 different people connected / 6 Collaborative yearly events with 150 different people connected
51 Collaborative projects with 348 different people connected / 2 Collaborative **digital** large networks with 452 different people connected

BEFORE Nexus24 collaborative projects (2014)

AFTER Nexus24 collaborative projects (2021)



Nodes= 1450p admin. staff.
Edges = collaborative projects
Violet= Schools management units,
Green= central services,
Blue Libraries.

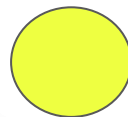
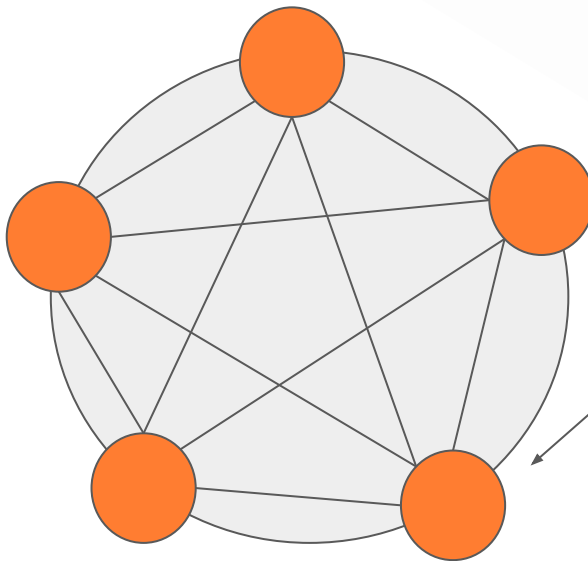


Simulation run on Gephi.
Both Library and campuses move to the center of the graph.

Fostering collaboration needs 3 roles

facilitator

helps in improving
the quality of the
collaboration



sponsor

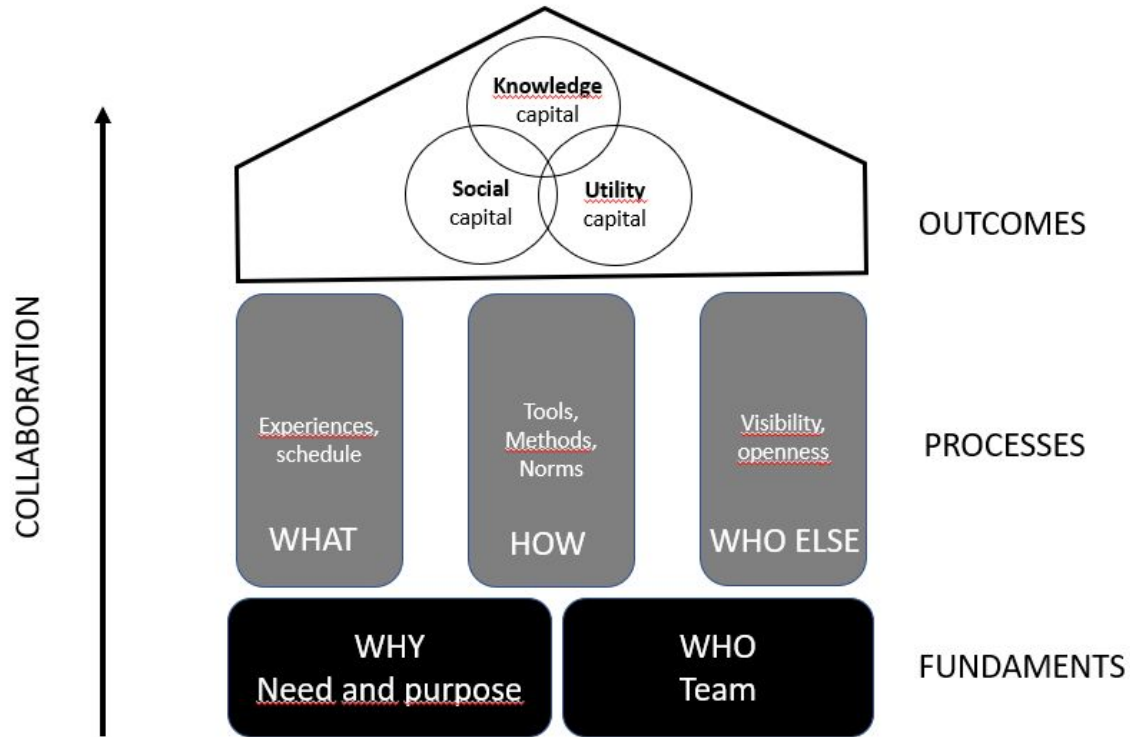
protects and gives
importance to the
work done



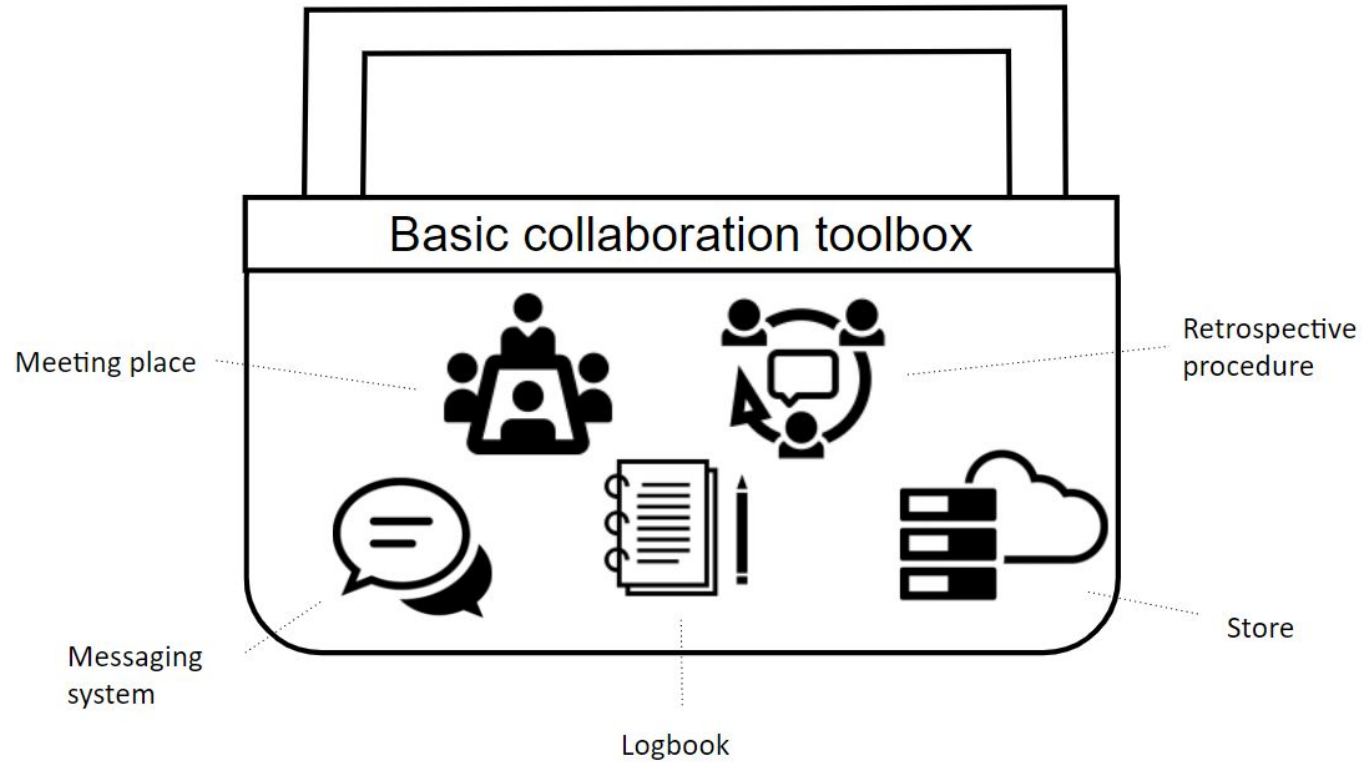
collaborators

"do the work"

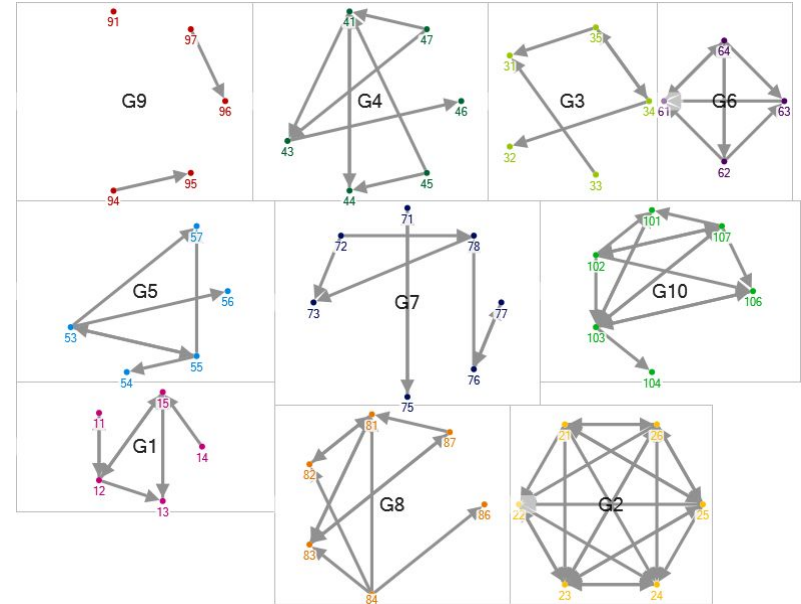
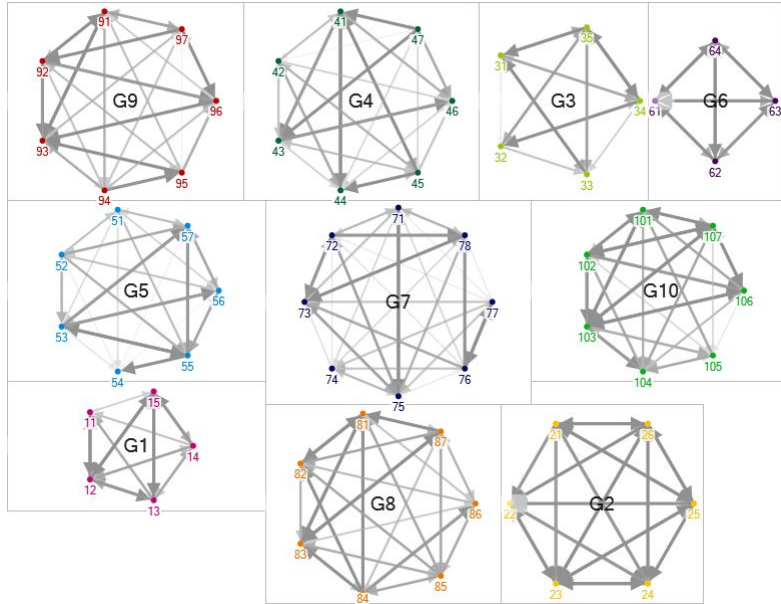




Fundamental elements of collaboration



Dynamics in collaborative teams



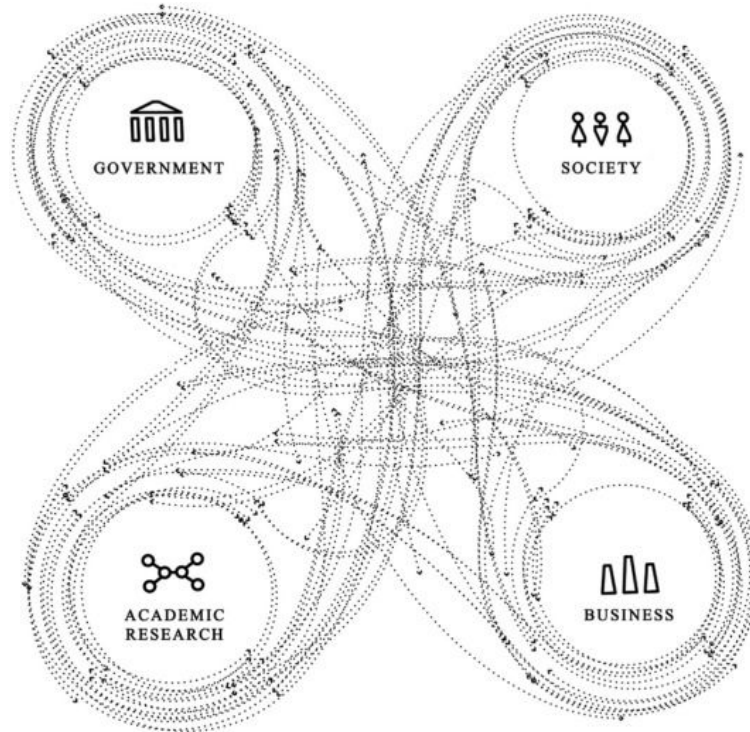
Conclusions

1. **Give real value.** Everyone says “collaboration is important”, but giving value means resources, tools, method, culture, attitude.
2. **Effectivity + Affectivity:** Care the human dimension -
3. **Growing slow like a wood.** 10Y process (8Y until now)
4. **Show and count collaboration!** The importance of visualizing & measuring collaboration (and the difficulty)
5. **Into the core of the HR strategy.** Collaborative competences in selection processes, retain and motivate people, collaboration management & facilitation can be a key a professional skill for admin staff.

A close-up photograph of a person's hands working on a collage project on a wooden table. The person is wearing a blue long-sleeved shirt and a silver ring on their left ring finger. They are using yellow-handled scissors to cut a piece of white paper with green circular patterns. Various craft supplies are scattered on the table, including a yellow glue stick, several markers (yellow, blue, black), a red rubber band, and a piece of perforated paper. In the foreground, there is a white sheet of paper with black silhouettes of people and a red tomato. The background shows a magazine with the title 'Fulls dels' and a small image of a building.

Challenges and opportunities

In this “VUCA” world, embracing the collaborative mode is crucial for all -included universities-



4-helix model

Our challenges

Manage the dual model internally

- Make better use of *collective intelligence* processes & tools
- Train and hire staff with collaborative competences
- Ensure the heads of units to allow non-hierarchical collaboration to occur

Expand the collaborative communities from the administrative teams to the whole university: academic, students, alumni, external...

- Collaborative communities for relevant topics
- Solid fundamentals for collaborative learning (in the classroom)
- Transdisciplinary research, citizen science and other social-centered research processes





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Innovation & Community Bureau, UPC