

Short Communication

Collaborative Intelligence: Optimizing Our Human-sized Digital Key Conversations for Transforming Organizations Smarter

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In a volatile, uncertain, complex, ambiguous (VUCA) environment, millions of institutions in the world are constrained to modify a significant part of their structures, procedures, and habits. For most organizations, a transformation is a 'must' and intelligent collaboration, a desired value, is mentioned in much writings and analyses. But it is not simple or often spontaneous. The first step toward a real transformation comes by improving the quality of key conversations, exploiting potential of ICTs (Information and Communication Technologies) in non-anonymous networks. Collaborative intelligence methods and tools are helping many organizations to do this. This article details the experience of a Spain-based team in implementing transformation processes by drastically improving the quality of key conversations.

CONVERSATION: A NEW PROTAGONIST

In 1990 Michael Schrage¹ declared the beginning of a Collaboration Era while he was researching the impact of digital communication on human conversation. According to him, it would suppose a great value in human development. In several publications, he and his team described how collaborative dynamics would create richness at all levels. In 1994, Pierre Lévy² imagined a networked society marked by collective intelligence in which knowledge would be shared and created worldwide in real time, enhancing individual capacities through connected computers. A "global cortex" would take human kind to a new paradigm of problem-solving. Derrick de Kerckhove,³ in 2006, focused on the implications of the body interacting with and through computers there were no smartphones at the time and creating a new kind of relationship connected intelligence. In 2006 Thomas Malone⁴ founded the Center of Collective Intelligence at MIT to analyze and measure the intelligence present in interactions between man and machines, and also to create strategies and dynamics for solving global challenges and big issues in business and enterprise.

A long journey has been embarked upon since then; many books and articles on collective and collaborative intelligence have been written, although based on very different definitions of those concepts. Two main branches describe the development of research and practice: one focused on collectivity, anonymous participation and big data (following the tradition set by Lévy²) while another branch, more human-centered, focuses on non-anonymous knowledge networks of different sizes, talking and making decisions in digital environments. The fields are general,⁵ citizenship and participation or new social leadership.⁶ Our activities are part of this general branch, applied to organizations.

The conversation regarding digital environments has increased into a central role in the decade of social networks. Smartphones and endless connectivity have made people used to combining both face-to-face and digital dialogues, through different channels, platforms, and clusters during their journeys. It is evident, though, that not every conversation is intelligent, not all connections create human links or build teams, nor does talking about a shared issue encourage people to find common ground and move forward. In other words, there are some conditions for smart conversations.

One way of looking at this issue is by analyzing big data of conversations, helped by Artificial Intelligence (AI) is to seek to better understand if, how, and when there are intelligent exchanges between people in digital environments. While those are anonymous, collective intelligence processes, instead, this will focus on human-sized conversations with acknowledge identity of participants in organizations and companies: the human exchange and creation of knowledge and decision-making, helped by digital platforms and methodologies.

THE LIMITS OF OUR USUAL WAYS OF CONVERSING

In this increasingly complex, accelerated and changing world, no team or leader, by themselves, can know the right path to follow. The knowledge they need to make decisions and move forward is not just isolated to a few heads anymore. Each person has just “a piece of the puzzle”. Leaders are not able to process all the information available and decide everything; therefore, they need to have a collaborative approach, gathering, combining, and filtering the knowledge of many dispersed and diverse individuals and groups inside and outside their organizations and work as teams. As Pierre Lévy² affirmed, “*Nobody knows everything; everybody knows something. We need to mobilize competences*”. The question is that when you try to include more individuals in a real deliberation process, methodological complexity grows, and participation usually declines.

Additionally, the typical two manners we have of establishing conversations (face-to-face and digitally mediated) are not enough anymore to face the speed of changes and increasing challenges. Face-to-face conversations have the limits of space and time and biases (stage fright, an excess of self-exposure, blindly following the trend of many, etc.), and dialogue through the current digital media is easily disorganized because digital communication tools are designed to exchange information, not think together. They all follow the timeline to organize information, so:

1. The more interventions, the easier it is to lose the initial topic: the main information is buried.
2. The vertical aggregation of answers dilutes valuable ideas among others with less value.
3. The last idea contributed often strongly influences the rest of the conversation.
4. The lack of structure of the conversation favors indefinite answers, which are generic, not very concrete.
5. If there are users who change the “subject”, parallel threads of conversation are generated.
6. Redundancy between contributions is frequent.

7. It is difficult to draw clear conclusions because there is no closing date.

It is clear that a new way of establishing conversations, both face-to-face and digital, is needed. Let's see which kind of conversations this is referring to.

DISTINGUISHING DIFFERENT KINDS OF CONVERSATION

There are different kinds of, and levels of depth in, conversations inside organizations. Now we are not referring to the mode of conversation (face-to-face, by phone, or digitally mediated), but the type or level of complexity of the conversation. Not every exchange of words or data is equally important; not every meeting marks the strategy of the company. Nonetheless, people are always using the same methods and tools for all of those kinds of conversation.

Instant conversations, normally in real time, serve to make fast or urgent exchanges of information, on concrete practical issues, and obtain quick answers to specific questions. Regular or routine conversations are those dialogues in which the context or framework is stable, and the goals are known and consolidated, and could be described as “business as usual” oriented. Finally, key conversations are those in which the group has to understand where they are, where they should go, and how to get there. Key conversations are those in which analysis is important, when the team must create new ways of acting, and the participation of everybody should be guaranteed in order to make better decisions and optimize the chances of success. In these kinds of conversations, groups execute some of these operations: suggest solutions and ideas, analyze and prioritize options, evaluate initiatives, people, or projects, allocate resources, accept or refuse affirmations, among other operations.

The differences between these conversations are described in as shown in the below Table:

Table. Typology of Conversations in Organizations

Kind of conversation	It applies when...	Bestways to converse
Instant conversation	- Quick and simple decisions - Informal issues - Less than 10 people are involved	-Brief face-to-face meetings -Phone and instant messaging
Routine conversations	- The context is known well - Procedures are already proven - It refers to business as usual	-Face-to-face regular meetings -Project management and col laborative platforms
Key conversation	- High stakes issues - Requires thinking together - The knowledge or points of view of more than 10 people are needed - Complexity is high - Implementation of creative and new approaches	-Design thinking and other creative face-to-face methodologies -Advanced deliberation plat forms (i.e. Col laboratorium)

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Organizations and society in general should improve the quality of every conversation, but especially those in which shared and complex problems or issues need to be decided upon.

IMPROVING THE QUALITY OF KEY CONVERSATIONS

Rafael Mira, myself and our team in Spain (www.collaboratorium.biz) have dedicated five years to exploring and refining different methodologies and creating platforms to improve the quality of key conversations, especially using ICTs for optimizing them. We are basing our actions on the concept of *collaborative intelligence*, which deals with the capacity of a group of persons with shared challenges to analyze, deliberate, and make decisions, creating new knowledge and optimizing their possibilities to move forward and face a complex environment. It supposes not only sharing information but also thinking together in an orderly and agile manner. We are not talking about big data and massive conversations, but about human-sized, practical and operative conversations—those in which collaboration is essential, and the intelligence of the exchanges is key in optimizing the possibilities of success. All mid-level management in organizations is marked by the urgency to make good decisions in decreased timeframes, and they are overwhelmed by the quantity and quality of problems they need to solve.

Working with more than 30 organizations of different sizes and kinds, we have found that almost everybody is trying to face complexity and ambiguity by multiplying the number of face-to-face meetings, creating groups, and exploring different kinds of collaborative digital spaces.

Some of our insights are summarized here:

- The first step to transform an organization is to improve its key conversations (a maximum of 10% of all conversations).
- Face-to-face meetings are essential for maintaining closeness and empathy, but they are completely insufficient when it is necessary for groups of more than 10 persons to think together about complex issues and make decisions.
- Digital environments are created to share information or to organize tasks by clusters or specific groups, but they are not designed for Collaborative thinking. All of them organize information following the timeline, or by hash-tags to facilitate researches, where opinions of different qualities mix, get buried, and finally get lost.
- A new way of structuring conversations is needed to improve the quality of important digital conversations.
- A good combination of quantitative and qualitative manners of expressing opinions helps people to contribute in solving a shared problem.
- Individuals think alone, but when they share and dialogue about their insights, their thoughts reach a new depth. It is important to give participants time to think, research and elaborate on the initial information and the contributions of each member of the group.

SMART VS. STUPID DYNAMICS

The intelligence of a group does not result from the IQ of its members, even though a high individual intelligence and talent could help; It is the fruit of the intelligence of their dynamics of exchange. There are groups of highly talented people interacting in ineffective manners, and thus acting together against their own interests and goals.

Which would be some of those stupid dynamics groups should avoid in their dialogues?

- Leaders or coordinators **monopolizing** speech in meetings and communications.
- “Beauty contests” in the conversation, as a result of **big “egos”** competing to be brighter than each other and win.
- **Exclusion** of some people or groups in the organization from the deliberation, wasting and ignoring their knowledge and capacities.
- Fragmentation of language in **specialized jargons** without a common set of concepts.
- Prevalence of **prejudices**, assumptions, and labels on people, groups, or sectors of the organization.
- **Lack of time for individual thinking** during the deliberation, resulting in reckless decisions.

The opposite dynamics would, evidently, favor great contributions and deliberations able to make the organization move forward and face big challenges:

- **Inclusion and participation** of all people able to offer in sights and a point of view.
- Incentivize **collaborative attitudes** in the context of the organization.
- Sharing a **common set of words and concepts** to move forward.
- Admit the **diversity of opinions** and freedom to express, within clear rules of mutual respect.
- **Time to think** and elaborate on the other’s suggestions and opinions.

Smart dynamics and collaboration suppose a change in the leadership model. From “the-leader-owns-all-the-answers” to a “the-leader-poses-smart-questions”, which means he/she has the capacity to mobilize the knowledge and competencies of several people (inside and outside of the team), listen to all of them, co-create new knowledge with them, aligning the team, and finally, making more deliberate decisions.

COLLABORATIVE INTELLIGENCE: STRUCTURING KEY CONVERSATIONS

Our experience in organizations has confirmed that collaborative intelligence is a very effective methodology to face these problems

and improve the quality of key conversations. In fact, we have created a collaborative intelligence platform (Collaboratorium) which specifically helps to organize complex digital deliberations in a human-sized measure. We have found that one significant way to do that is to give a specific structure to the screen to each kind of problem. A timeline is not enough to facilitate shared thinking. If a conversation is not structured, it does not flow, or it can deviate in any direction. The incentives to continue participating decrease when there is no progress in the desired direction.

Adequate structure in a digital conversation helps to focus attention-it stimulates thought and activates participation and the capacity of co-creation of the people involved. This facilitates an authentic deliberation and the achievement of the main objective at hand.

Deliberation templates are the mechanism by which Collaboratorium structures important conversations. These templates organize the contributions of the participants according to their nature, meaning, and quality, not only by a timeline.

In each of them:

- The objective of the conversation is always clear so as not to deviate.
- There is a visual synthesis of the state of the conversation.
- There are organized spaces to place and comment on opinions.
- There is a system of notifications to promote participation.
- There are various customization options/parameterization according to needs.
- There is a space to draw conclusions, form next steps, and formalize decisions.

These templates act as a “shared thought accelerator” and allow the desired objectives to be reached much more quickly in the conversation.

In synthesis, intelligent collaboration cannot be expected if we continue to consider it a spontaneous result of good intentions, exhortations, and generous attitudes, but from a concrete decision of a team and its leaders to organize procedures and methodologies in order to reach it. The first step is to improve key conversations. Although this requires a period of learning and training, the results are extraordinarily positive.

DISCLOSURE(S)/CONFLICTS OF INTEREST(S)

None.

REFERENCES

1. Schrage M. *Shared Minds*. New York, USA: Penguin Random House. 1648
2. Levy P. *Collective Intelligence*. New York, USA: Basic Books. 1999.
3. De Kerckhove D. *The Skin of Culture*. South Brisbane, Queensland, Australia: Somerville House Books. 1995
4. Malone TW. How human-computer ‘superminds’ are redefining the future of work. *MIT Sloan Management Review*. <https://sloanreview.mit.edu/article/how-human-computer-superminds-are-redefining-the-future-of-work/>. Accessed May 21, 2018.
5. Markowa D, McArthur A. *Collaborative Intelligence*. New York, USA: Penguin Random House. 2015.
6. Rey A. Bloginteligenciacolectiva Web site: <http://bloginteligenciacolectiva.com>. Accessed October 25, 2018.
7. Mira R. Collaboratorium Web site: www.collaboratorium.biz. Accessed October 31, 2018.