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**Bocconi**

**REPORT**

# **THE ROLE OF COLLABORATION AND COLLABORATION TECHNOLOGIES IN THE NEW WORK LANDSCAPE**



## INTRODUCTION

One of the goals of the Collaboration and Educational Technology Hub project was to explore how to best foster collaboration in the context of technology use – on the one hand, to ensure that various stakeholder groups benefit, and on the other, to support the ethical, transparent, and well-being-centered development of both collaboration and technologies.

Our task was to approach this issue from multiple perspectives in order to gain a comprehensive understanding. In doing so, we examined various aspects of the interplay between collaboration and technology. One of the key focuses of the project was to develop a deeper understanding of the role of collaboration technologies in the new work landscape, as well as the role of collaboration itself. Another important objective was to highlight both the benefits and challenges of using technology in collaboration settings.

With the continuous evolution of work formats, this topic has become increasingly important today. Hybrid models that combine online and offline work, as well as fully remote work, are becoming increasingly common. In this context, technologies that reduce travel time and facilitate remote work, meetings, and negotiations are gaining importance. However, within the digital environment, there is a growing need to rethink the role of collaboration.

Within the project, we employed a range of research designs – quantitative approaches to identify relationships between factors, and qualitative methods to gain a deeper understanding of the phenomena. Among the qualitative methods used were focus groups. As part of the Collaboration and Educational Technology Hub project, a series of focus groups was conducted.

These focus groups enabled to gain a richer and more nuanced understanding of the role of collaboration technologies in today's work environment, as well as perceptions of both technology and collaboration. This approach revealed deep and often unexpected insights – the kind that emerge particularly well in focus group settings. Moreover, the group-based nature of this method fosters interaction that helps participants recall more, notice details, and generate new ideas collaboratively.

The research brings number of practical Implications. This study is intended for various groups of readers, including researchers focused on collaboration and the role of technology in the modern world of work, as well as the study of these technologies and their effects. The findings are particularly relevant for the business and education sectors, where understanding how to organize work and learning processes more effectively using technology and within collaborative contexts is crucial. Additionally, the results may be valuable for policymakers in education and labor to develop strategies for implementing collaborative technologies, with attention to their specific features and impacts.

The report is structured as follows: a brief description of the research design; an explanation of the significance of focus groups as a research method; the questions posed during the study; the results obtained; the recommendations derived from the findings; and an appendix containing the questions asked and the main responses from the focus groups.

## RESEARCH DESIGN

The focus groups were composed of an average of 5 people. The sample consisted of students from executive education programmes at Bocconi University.

We point out the importance of using focus groups to answer our research question. First of all, focus groups as a qualitative method allow to better understand the phenomenon of collaborations and technologies. Understanding of the phenomenon and key mechanisms is very important for forming correct and effective mechanics of introduction and use of collaborations and technologies. Focus groups also provide a deep understanding of the experience and perception.

Furthermore, focus groups allow not just to gather opinions, but to dive into the real user experience: how technologies are used, what feelings and barriers arise. The role of collaborative technologies is not only functional, but also emotional (e.g. feelings of engagement, control, overload).

In addition, focus groups provide the opportunity to discover unexpected insights since in a group, participants often remember more and reveal more than in individual interviews or surveys. This leads to Unpredictable but valuable insights that can be missed in a standard interview (e.g. fear of isolation, "invisibility", loss of improvisation in digital interaction).

## CORE QUESTIONS

During the focus groups, four questions were asked.

Question 1 – Please summarize the top three positive and negative aspects that emerged from the group discussion and related to the use of technology for work purposes outside of the working day. –

Question 2: Please summarize how these positives and negatives impact your work-life balance?

Question 3 – Please summarize the top three positive and negative aspects that emerged from the group discussion and related to the use of technology for personal purposes during the working day.

Question 4: Summarize how these positives and negatives impact your work-life balance?

## RESULTS

This paragraph presents the summarized findings from the focus group discussions. The table below provides detailed results, while the text that follows highlights the key aggregated insights.

Table 1. Summary of focus groups results.

<b>Question 1. Please summarize the top three positive and negative aspects that emerged from the group discussion and related to the use of technology for work purposes outside of the working day. – Video Transcript</b>	<b>Question 2..Please summarize how these positives and negatives impact your work-life balance? – Video Transcript</b>	<b>Question 3. Please summarize the top three positive and negative aspects that emerged from the group discussion and related to the use of technology for personal purposes during the working day. – Video Transcript</b>	<b>Question 4. Summarize how these positives and negatives impact your work-life balance? – Video Transcript</b>
New technologies increase productivity and work efficiency, also fostering teamwork thanks to the ability to work via calls, share documentation, work on the same document, and exchange ideas.	The opportunity is certainly the improvement of work-life balance. The risk, however, is the increase in work hours and therefore having less time for personal or free time.	A positive aspect is being able to use tools for private life and being able to dedicate attention during the workday to personal issues and daily matters.	The positive aspect is a better balance between private and work life because it allows better time management. The negative aspect is the risk of working longer hours and having fewer relationships with colleagues, thus reducing the relational aspect at work.
New technologies allow faster and more efficient real-time sharing of documents and information, leading to greater efficiency by saving time on secondary tasks and making it easier to reach colleagues, also shortening distances.	It's certainly possible to have a better work-life balance, but on the other hand, there's a trade-off: isolation, loss of empathy, lower performance, a weakened professional network, and intellectual laziness.	The greatest risk is distraction, with lower concentration and the influence of personal and family matters during working hours, which, on the flip side, provides greater flexibility in a trade-off of availability.	It's hard to detach from work reality when working from home, so one must self-regulate and set boundaries. Communication happens remotely, increasing the risk of isolation and interpersonal detachment.
New technologies ensure greater efficiency in daily work activities by reducing operational and repetitive tasks, such as translation or writing emails, especially with AI. They also reduce distances between colleagues working in different regions, fostering a sense of	From an opportunity point of view: efficiency, reduced distances, increased productivity, elimination of repetitive tasks. The risks: hyperconnectivity, which increasingly blurs the line between private and work life. This leads people to work more, reduce family time, and be constantly connected and available.	Positive aspects: efficiency, connectivity, speed. Negative aspects: hyperconnectivity, the merging of work and private life, the risk of always being "on."	These aspects can positively influence the work-life balance: in emergencies or illness, you can work from home, stay in touch with your manager, colleagues, and join meetings. But they can also negatively affect balance due to hyperconnectivity, loss of clear work hours, and reduced family time. You risk

closeness. The key concept is efficiency.			always being available due to phones, emails, Teams, etc., even during personal time. You need to be good at separating the two spheres.
Shortened distances, increased speed, more flexibility. No. In my opinion, a minimum duration of 20 seconds is needed. Maybe each cluster should be described.	Risk-opportunity: risk of disconnection from the world, risk of negative contact if you're not able to organize your work properly. Opportunity: better life-work balance, faster work, thus more free time.	Flexibility between work and private life, more distractions, but better management of family activities. Eh. No.	Lack of separation between work and private life, but at the same time more time to manage family and better personal time management. Right to disconnect.
We chose flexibility because new technologies let us work more flexibly, multitask, and better plan our work. Then we chose simplicity because these technologies make it easier to collaborate on the same document, reach each other via email, and organize cross-department meetings. The third point was multi-connectivity – we can connect with more people simultaneously and organize trainings or webinars more easily.	As a risk, we listed multitasking – with all these technologies, you can end up doing too much multitasking. Also, the lack of freedom – you're often asked to respond quickly, which can be overwhelming due to the volume of emails and calls, making it hard to manage response times. An opportunity is greater efficiency and thus potentially working fewer hours in the future thanks to increased productivity.	Positive points: being able to respond to personal life events immediately, like booking a doctor's appointment or receiving a package at home, or picking up kids from school. Negative points: work can easily enter personal life, and multitasking can mentally affect you by switching between personal and work matters.	Positive aspects relate to communication, connection, and flexibility. Negative aspects include overthinking and the inability to clearly separate work and personal life, which can cause spillover of stress from one sphere into the other.
People are more easily reachable because technology makes one's presence and availability obvious, making contact easier and more informal compared to the past.	We see higher productivity and efficiency at work with new tools – less downtime, travel time, or time between meetings. However, there's also lower effectiveness and quality of output and decision-making due to reduced in-person interaction.	The use of collaboration tools designed for work also helps with personal activities – for example, joining personal interest events online during work hours without leaving the office, like parent-teacher meetings. This gives more flexibility to reconcile personal and work commitments. Remote work also saves commuting time, which can be used for personal interests.	Overall, the balance between private and work life has improved. However, there are no longer clear boundaries between personal and work activities, resulting in more blending of the two realms.

In response to Question 1: "Please summarise the top three positive and negative

aspects that emerged from the group discussion and related to the use of technology for work purposes outside of the working day,” both positive and negative effects were identified.

Among the positive effects, the most frequently mentioned were 1) Increased productivity and efficiency of work. 2) The possibility of remote interaction, collaboration, document sharing. 3) Flexibility in time management and the possibility to work from anywhere.

Among the negative ones: 1) Risk of hyper-connectivity – working ‘always online’. 2) Blurring the boundaries between work and personal life Increased workload, overtime, reduced personal time

In Question 2, we asked: "How do these positives and negatives impact your work-life balance?" Participants in the focus groups identified the main positive impact as an easier balance due to flexibility and the ability to work remotely. Among the negative impacts, they primarily mentioned a deterioration of the balance due to constant availability, overtime, and the inability to disconnect from work. Next, it was important for us to understand (Question 3) the top three positive and negative aspects that emerged from the group discussion and related to the use of technology for personal purposes during the working day. Focus group participants identified several positive aspects: the ability to deal with personal matters during the working day (e.g., meetings, deliveries, family matters), flexibility in time management and personal tasks, and the simplification of work-life balance. They also pointed out several negative aspects, such as the risk of distractions and loss of concentration, decreased quality of work and cognitive overload due to multitasking, as well as the mixing of work and personal spheres and increased stress levels.

Question 4, asked in the focus group, addressed a key issue in today’s working conditions — work-life balance. We asked: "How do these positives and negatives impact your work-life balance?" Participants noted that the positives contributed to an improved balance by enabling them to deal with personal issues during the day and saving commuting time. At the same time, the negatives led to a decreased quality of rest and blurred boundaries between work and personal time.



## RECOMMENDATIONS

Based on our research, we have developed several recommendations for different groups of stakeholders.

### Recommendations for business and university leaders

- Given that our results show that collaborative technologies and collaboration in the context of technology lead to increased efficiency and help people work more productively, leaders in both the business and education sectors should develop strategies for implementing collaboration in the work environment.
- However, it is important to design strategies that also take into account the negative effects of collaboration and technology, including hyperconnectivity and the blurring of boundaries between work and personal life. This blurring can result in stress, poor work behavior, fatigue, reduced work quality, and cognitive overload. This is a significant finding that highlights the need for strategic approaches and tactical measures to mitigate the negative consequences of hyperconnectivity resulting from the use of collaborative technologies.
- It is essential to introduce a system for research and monitoring to track the impact of technologies on work performance and well-being.
- Develop recommendation systems and programs designed to help restore work-life balance, as well as hiring specialized psychologists to help students and staff maintain a clear boundary between work and home life.
- Additionally, it may be useful to establish workplace norms regarding working and resting hours. While new tools have contributed to increased productivity and efficiency – by reducing downtime, travel time, and gaps between meetings – they have also resulted in decreased effectiveness and quality of output and decision-making due to reduced face-to-face interaction.



## **Recommendations for Employees**

- Self-regulation is essential for employees. First and foremost, it is important to establish personal rules and boundaries. Everyone has the right to disconnect during non-working hours and weekends. It is equally important to monitor one's own cognitive overload and stress levels. When signs of such conditions arise, it is crucial to pause and take restorative breaks.
- A balanced, careful, and thoughtful approach is also necessary when integrating technology into working process.

## **Recommendations for Developers of Collaborative Technologies**

- Based on the research findings, it is important to address stress, cognitive overload, and fatigue among users of collaborative technologies. To achieve this, monitoring systems can be embedded within the tools themselves.
- Scheduled rest and break systems can also be integrated into technological solutions, such as automatic pause suggestions at defined intervals.

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