# The Intentional Office Organizing the Post-COVID Workplace

#### Benny Corvers & Lien Peeters (March 2021)

The current pandemic has led companies and academics alike to contemplate the changing role of the workplace environment. The focus in these discussions rests heavily on the increase in hybrid / remote working, digitization and the social meaning of the physical workspace. In this article, we would like to offer a perspective that integrates the current interest in the topic in a broader framework, where designing the workplace is an integral part of designing and continuously adapting an organization with intent. Moreover, we argue that the physical space should not only serve the overall design and purpose of the organization. It should carry the ambition of contributing to more humane and meaningful work at the level of individual workers, and sustainable adaptation at the level of the organization.

#### Finding a new balance

'The future is already here. It's just not evenly distributed yet.' William Gibson's famous quote (Gibson, 2003) applies perfectly to what is happening in the workplace today. The world of work is being transformed at a speed that is unprecedented - out of necessity and with a shocking brutality. The COVID-19 crisis has only accelerated the trends and evolutions in the world around us, challenging organizations to rethink operations, remodel client services and redo employee engagement. For some, it is an assertion of the choices they made years ago. For many though, it is a rude awakening. A pandemic such as the COVID-19 crisis urges us to think harder about the implications of organizing. Many organizations seem to have picked up this

invitation, although it remains to be seen how unevenly distributed truly innovative work arrangements will turn out to be in a postpandemic world.

Clearly, organizations are searching for a new balance in this confusing era, mixing virtual and on-site work, applying agile practices to hitherto bureaucratic processes, and finding innovative ways to serve their markets in this new reality. Looking at it from the perspective of workplace design, what seemed impossible at times, is accepted as the only logical solution today. Where some organizations resisted new ways of working with a dogged tenacity, the crisis seems to have loosened the strings. The question then is: how do we find our way amidst the chaos of the 'new normal'? How do we reap the benefits of new ways of working while making sure we don't just throw ourselves into a space that is just as full of hype and hyperbole as any of the shifts we have experienced previously? We would like to offer a view that may help to see these opportunities and challenges in a new light and offer a perspective that integrates the current movement in a broader framework for organizational adaptation.

In this article, we will outline the implications for the design of organizations and the work environment of tomorrow, building on recent experience with transformation programs in organizations from different sectors. Our focus here will be on the design of technical infrastructures mainly. Typically, we would wrap such an exercise into a more integral design effort that translates a given strategy into an operating model that includes organization design (division of labor), human resources and technical systems such as the IT-architecture, but also buildings and offices. A lot has been written on the design of organizational structures. And while it is widely recognized that the design of technical systems requires equal attention, just how this translates into a design process is hardly ever documented. That is why we'll use our experience in organization design and its application to the design of offices to try and sketch an outline of an approach and a set of design criteria for what we will call 'rich spaces': buildings and offices that contribute in a nontrivial way to humane and meaningful work for individuals and to sustainable adaptation at the organizational level.

#### To organize is to develop

From a systems viewpoint, any organization is constantly experimenting with 'survival' by balancing options. That is what they do. To organize is to change and adapt in a constant flux. At times, this flux is a wild and chaotic torrent that rocks the boat and challenges us to be the best we can be, while at a later stage it may return to a calm stream that sometimes leads us to complacency, boredom or laziness. In any scenario, to live is to adapt to the broader environment we are part of.

As such, organizations do not know a solid **state**. They are social systems that relentlessly reproduce themselves by way of the decisions they make on a daily basis<sup>i</sup>. These decisions are basically design options that come in three different flavors: strategic (who do we want to be? where do we want to go? what do we stand for?), tactical (how to create the best conditions for survival? how to arrange work? how to organize human resources and technology?) and operational (how to solve disruptions when and where we are interacting with clients?). Therefore, to decide is to design is to develop: with every design choice, the organization is being pulled forward or backward on its path of development.

The search for balance then is a daily quest. It is quintessential to the organization, which cannot but experiment with different ways to try and survive in this constant flux. Some of the options chosen will turn out to be instantly successful, while others may disappoint or bring the organization to the brink of despair.

# The Intentional Organization

Now, most of the time, change just happens. Organizations adapt unintentionally and continuously. It is only when we consciously change the organizational infrastructure that we can say organizing happens intentionally.

In the 'intentional organization', people constantly take deliberate actions to ensure consistency in line with the organization's identity.<sup>ii</sup> It doesn't just happen all by itself. It happens intentionally and through careful deliberation.<sup>iii</sup> 'It is about being conscious that every Organization, through their Purpose, develops a direction. And in this motion, it is paramount that the inhabitants of the Organization take conscious and deliberate actions to ensure consistency across all its components, carefully balancing emergence and design' (Caredda 2020).

Intentional organizations take four fundamental positions as their starting

**point:** they are obsessed with purpose, they are not afraid of ambiguity, they take conscious decisions based on strong organizational awareness, and they make sure all actions integrate into a coherent plan.

purpose	awareness
the intentional organization	
ambiguity	coherence

Figure 1 - characteristics of the intentional organization

• First, organizations always act against the backdrop of previous decisions. These form the cultural DNA of the organization and cannot be denied or filtered away. Too often organizations hope to change ingrained habits with a wellcommunicated transformation program, and lots of training or nudging techniques at the individual level. We can only conclude though that most of these have limited impact. Intentional organizations use the forces inherent in the organizational DNA and from there carve out a path in the direction of the future. For them, acting in line with the overall **purpose** and culture is a true obsession. Strategic purpose and organizational culture come first, while structural choices and technical decisions build upon that foundation. These organizations aspire for every single element to be deliberate.

Let's take the example of a global biotech startup in the field of immunology. The company currently finds itself faced with the challenge of adapting their workspace to a rapidly changing context. Growing exponentially, they will not have enough space to accommodate all workers returning to the office post-Covid. At the same time, they have no idea to what extent remote work will remain part of the company culture. On top of that, their industry is a very volatile one. The company's growth could be steadfast, could suddenly increase thanks to a breakthrough in their research or could grind to a halt if one of their clinical trials proves a product not to be viable. To top it off, the company is on the verge of going to market, adding a commercial perspective that will impact the needs, the ways of working and the culture of the organization. Over the past few months, we have worked with this company to create an office concept for a new building – starting by translating their DNA into a set of architectural guidelines.

With several hundreds of employees across three continents, it can hardly be called a startup. Yet, their DNA still breathes the early days. The founder and CEO still manages and protects the culture by walking around. On any given day, he has tens of conversations by means of which his vision for the organization takes shape. Most companies struggle to define 'corporate values' and end up decorating their office walls with posters advertising boilerplate principles. Not here. Talk to any worker and it won't be long before they'll start explaining what humility means to them, how they strive for excellence and what it means to innovate. Their DNA acts as a compass for decisions, taking center stage in any meeting and working its way through every program.

These are some of the company's strengths:

- Strong company values underpin deliberations and decisions at all levels.
- The roots of science-based innovation are fiercely protected, including in the way the commercialization phase is taken on.

- The company attracts talent and can flaunt a high-calibre workforce, passionate about their jobs.
- People are proud to be part of a culture where 'working hard' and going the extra mile are considered self-evident.
- A strong and respected senior management team sets the standard and protects the DNA.
- A relentless focus on pipeline execution and project delivery avoids bureaucratic discussions and manifestations.
- A flat, no-nonsense organization helps to keep up with a start-up mentality.

The organization has its challenges of course and wants to use the design of a new building as a reinforcement of its cultural pillars.

- Protecting the company's DNA in the face of growth, commercialization and internationalization is a challenge: growth and influx of personnel from traditional corporates risks the addition of bureaucratic practices, imports status symbols, etc.
- Despite the importance of collaboration and co-creation, individualism is strong with a personally ambitious workforce of highly qualified professionals.
- COVID-19 is pushing for more homework, upsetting the balance between individual excellence and creative collaboration.

Creating a design concept for their new offices started from the core values and (with the help of a multidisciplinary workgroup) was translated into a set of guidelines for architectural design.

The future office environment needs to breathe the organization's purpose and exemplify its core values throughout the building. And while this may be true for any organization, it can only be done properly when these values and principles are clear and authentic. If you have such a strong foundation, formulating a proper design guideline is a walk in the park.

# An 'intentional office' breathes the organization's purpose and culture

throughout the building and leaves cues or nudges at various levels to remind workers and visitors of key principles and values. The layout and physical attributes of the environment show the way and leave no doubt as to what is important and what type of behavior is most valued in the organization.



Figure 2 - Baseline design criteria based on the organization's cultural DNA

• Let's turn to the second characteristic of the intentional organization. As an experimenting agent, the organization needs to allow for ambiguity. True innovation emerges when a system succeeds in making its inherent polarities and paradoxes a strength, by moving away from an "either-or" approach, and into a "both-and" one. Too often, organizational tensions create unease for management teams intent on clear-cut solutions that resolve any disturbance. But most of the time, interventions aimed at such solutions create the illusion of simplicity while the underlying tension lingers in the background. Leaving tensions (fix/flex, focus/meet, private/public, ...) largely unresolved, creates the possibility for the organization as a system to adapt and oscillate between choices as it sees fit.

This is where the **concept of deliberation** comes in. Originally developed by Cal Pava in the 1980s in a quest to offer design options for non-routine knowledge work, deliberations are defined as 'patterns of exchange and communication in which people engage with themselves or others to reduce the equivocality of a problematic issue.' So indeed, almost all communications in the organization as a social system come down to deliberations about 'problematic issues' that are to a high degree ambiguous/equivocal. Recognizing the equivocality is the starting point for a different kind of dialogue, one that does not necessarily lead to solutions that eliminate but rather reduce the equivocality of the issue at hand.

A relevant example is the tension between virtual and physical meetings that is currently inflicted on organizations. The general tendency is to strike an agreement between management and employees that fixes the balance somewhere in the middle, say 2 days homework and 3 days in the office (or a variation thereof). The solution typically is a company-wide technical HR contract (called 'hybrid work policy' e.g.) that practically ends the debate and stops further deliberation. Clearly, **the textbook managerial approach confounds deliberation with resolution** and prevents custom-made solutions per team/role/function that may evolve over time.

Let's go back to our biotech example. One of the tensions they deal with is the well-known balance between a functional organization on the one hand where people work together with a team of peers predominantly, and a projectbased organization on the other hand, where different disciplines collaborate around client/market-centric demands.

In its current stage of maturity, the company is trying hard to protect its startup mentality by focusing on what matters: executing programs in the pipeline. Everything else takes backstage importance.

All startups go through a phase where their growth challenges these initial assumptions. Complexity on the outside (markets, clients, ...) is subsequently matched with internal complexity by adding layers, functions, procedures and systems that eventually turn the startup into a bureaucracy. While big pharma has adopted 'the matrix' as a solution to this conundrum, a matrix organization is the perfect prescription for more complexity by layering dual hats and reporting lines throughout the organization.

The way our biotech company deals with the tension is to take an intentional stance that embraces this ambiguity without fully giving in to one or the other. They favor clients/markets/ patients as the dominant organizational choice, and intend to compensate for functional collaboration with expert groups, forums and learning hubs. By all means, formal hierarchy is discouraged in favor of horizontal connections and quick decision making.





As for the future office layout, this means that grouping workers purely on the basis of functional affiliation is likely to create departmental silos that make the encounter of different disciplines and the joint execution of complex programs more difficult. Still, functional learning has its place, so it should be possible to easily bring together a functional group such as the R&D community or the legal department when needed, without forcing them into an allocated functional team zone.

◆ The third strength in this intentional process of deliberation is to have proper organizational awareness: every choice made impacts the organization, every new person, every decision communicated is yet another experiment with the intent to organize for meaningful survival. Organizational awareness based on constant feedback loops then becomes a core capability to be developed both individually and as an organization, as it will help to push the limits towards a proper, consistent, intentional design.

The office is a tool that can boost productivity as long as its users are aware of the behavioral

rules and the impact of personal/team choices on the performance of the system as a whole. Here again, most implementations fall short by giving little or no attention to user involvement, training and ongoing reflection *after* moving to a new environment. This results in a fancy and often expensive new office where old habits rule, complicating the adoption of new opportunities.

Let's look at how organizational awareness can be increased by involving users in the design choices. There currently is a general tendency to design offices primarily as meeting hubs where people connect. This means a shift from closed cubicles and fixed desks towards more activitybased environments that favor meeting people over focus work. However, research based on global surveys, such as the well-known Gensler studies<sup>iv</sup> indicates that on average 50% of all knowledge work still requires focused concentration – and this number is on the rise. This seems to be confirmed by the data collected through interviews and surveys at two companies we recently studied. People typically expect to work up to 2 or 3 days at home post-COVID19. Based on the assumption that at least half of the remaining time in the office is going to be used for focused work, the office will need to cater for concentration as well, and not just for those with dominant focus jobs.

Since most office implementations suffer from the lack of privacy (visual/acoustic), one recent implementation at a global technology company is reserving 30% of the space for workplaces that allow concentrated work. These can come in various shapes and forms, not just 'cubicle'-type closed offices.

Since the need for privacy is both personal and function-related, a tailored plan is co-created with representatives from different roles and functions. As stated, this process of co-creation does not start off by thinking about floor plans and architecture. Its first step is to facilitate deliberations on the added value of organizing an office with intent, thus stimulating a mindset of organizational awareness. Secondly, the team applies this to their own context. That means they put into words their organization's intent and later translate it explicitly to infrastructural design guidelineswh. In the process, people not only come up with better design choices, but (more importantly) they learn to understand that there are different options and figure out how to deal with these choices so that a given design can evolve over time, taking into account new organizational developments. This leaves a company with the capability of continuously adapting their workspace, not by grand transformation projects, but in everyday decisions by anyone on the team.

Thus, organizational awareness also provides insight into why successful office concepts cannot simply be copied. They can serve as inspiration for another organization's design, but for a concept to work, its principles have to be deeply ingrained into the minds and habits of an organization's workforce.

◆ The fourth and final characteristic of intentional organization is coherence: it means that every design decision needs to exist together with other choices and be part of an integral design philosophy. Practically speaking: workspace interventions need to be balanced by supporting HR processes, the introduction of new habits, the leadership styles and strengths of the organization and the way work is organized in units and teams. This may seem like a logical approach, yet research shows that many projects with a spatial component consider only one dimension (bricks/distance/proximity – the physical space) or at best two (bricks and bytes - the physical space and the technical/digital infrastructure) or in some cases a superficial reflection on power relations or new habits<sup>v</sup>.

Integral design means that the office is more than a cool juxtaposition of slick furniture. It requires thinking through all aspects of a layout from the intended users' perspective.

In our experience, a great starting point for establishing a coherent concept is creating a multidisciplinary design team that refuses to delegate office design to architects and facility managers only<sup>vi</sup>. Once senior management understands the impact and importance of intentional office design, the topic moves up on the strategic agenda and gets proper attention from HR and business roles. Ideally, coherence naturally follows from our third characteristic: organizational awareness. Therefore, it is crucial that users, management and supporting functions (HR, IT...) understand that office design isn't just the delivery of a blueprint, but rather an intentional and ongoing conversation that balances different options and creates coherent solutions in line with the organization's purpose.

The four characteristics of intentional organizing (obsession with purpose, allowing for ambiguity, experimentation firmly anchored in organizational awareness and coherence) can thus all be translated into a language and methodology for designing an intentional office.

# **Towards Rich Spaces**

Intentional office design can be an important contributor to the intentional organization. There is no question that proper design of the physical environment impacts the ability for organizations to adapt and survive<sup>vii</sup>. But we might still ask the question: is that enough? Should we not expect more than mere 'survival' from 21<sup>st</sup> century organizations?

An organization's survival can be called 'rich' if it contributes to more humanity at all levels<sup>viii</sup>: for the owners and employees, for their clients, and for the organization and society at large. **Humane organizing requires a culture where meaningful work takes center stage.** Where people can have a real say in the way work is done, and where motivation, learning and wellbeing are the foundation for productivity.

When we say 'rich survival', it means survival can be 'poor' as well. If we start from a selfcentered and short-term perspective, without considering the broader context of the organization or the importance of a decision's long-term impact, the organization may still survive and can even be very meaningful to the owners, but it won't lead to a sustainable future, let alone a better world.

We can then ask ourselves how 'rich spaces' can contribute to 'rich organizing'. We could characterize rich spaces by **a set of five criteria for designing any type of spatial environment**: rich spaces help balancing different types of value creation, they start from productivity ambitions rather than a pure cost mindset, they provide opportunity for *control*, they involve the user and they facilitate experimentation. Below, we elaborate on each of these five criteria.

 Rich spaces should help to balance different types of value creation (for clients, employees, partners, shareholders and society). The best buildings and offices seek to reconcile the needs and requirements of these different users and stakeholders, keeping them in mind while designing options and flows. This is not a trivial requirement, since most infrastructure programs take organizational benefits into account without ever giving proper attention to the true needs and expectations of clients or employees, let alone other stakeholders. Involving these different users throughout a design process is rare. Having them learn to contribute and participate together as a multidisciplinary team, is the next big thing for complex architectural endeavors.

♦ Rich design starts from productivity ambitions rather than a cost mindset, based on the fundamental assumption that the marginal cost per square meter is no match for the potential productivity benefits based on maximizing human assets. This is also why a rich and purposeful dialogue is required between different stakeholders: business, facilities, IT, finance and HR. Involving all parties throughout the design and build process is crucial to see the meaning of 'value' through different lenses not just cost or the reduction of square meters.

• Rich spaces provide ample opportunity for **'control' at all levels**: individual, team and

organization. We believe that smart alternatives can be designed for the often-ridiculed open office, without having to move to the closed cubicles of the 1980s. The alternative is called *choice & control*. From sociotechnical organization design theory<sup>ix</sup> we learn that certain design choices create better opportunities for organizations to adapt in a complex environment. The better design decisions lead to strong teams with a great deal of autonomy in a loosely connected network. So what are design choices are a good fit when designing the office of the future?

At the **organizational level**, the control set is determined by the design criteria that are defined at the beginning of a project. This is where we decide the intended outcome of our design for the organization at large: is it cost savings we seek, or productivity gains, or flexibility? A proper set of design specifications is aligned with the organization's strategy and DNA, and is the result of a deliberation between different stakeholders at all levels of the organization. Being able to govern and regulate the office environment requires a design that is flexible, not fixed forever. A design that allows for constant experimentation and adaptation with the constraints of the design criteria helps organizations take control of their destiny while confirming its strategic direction.

At the **team level**, control means being able to make conscious choices and decisions as a team. In the workspace, it boils down to a physical layout where each team's home base is adapted to the actual work of the team, balancing concentration, connection and collaboration. This is where the team builds a shared identity in the broader context of the organizational purpose. Team hubs can come in a wide array of different options and flavors, catering for fixed and flexible teams, and for the activities the team is responsible for. The fundamental requirement for control at this level though is the ability for teams to pick and choose a way of working from a broad set of choices, depending on the moment and the specific task at hand.

**Individual control** prevents team members from being locked into a single scenario throughout their day, particularly the dreadful 'open office'. Part of a professional worker's daily activities can be done remotely (at home for instance), part of it requires office presence for technical or social reasons. Some if it requires a high degree of focus and concentration. A few hours later, it needs to offer space for spontaneous connections or planned conversations. Again, offering *choice* is key to individual autonomy.

• Rich spaces **involve the user** throughout the design and implementation process. Many workspace implementations only pay lip service to employee involvement, planning quick one-way interviews or surveys intended to come up with a common denominator.

At best it figures out what the top priorities are the new design should fix. But typically, it leads to top-down implementations of a blueprint that caters for 'the average worker'.

In his well-known rebuke of open offices, Theo Compernolle<sup>x</sup> put this at the heart of his attack: 'A root problem is that these offices are developed and built for the company, not for the workers. The workers have to adapt to the office instead of the other way around, even if the office makes it impossible to be really productive.'



Figure 4 - Example of a user-based scenario for the micro design of a team environment

The design of a truly rich environment taps into the creativity and wisdom of the collective, and engages the employee, the manager and the president alike for their input and close involvement. Not only does this approach lead to higher levels of buy-in, it also leads to better solutions.

Here are some creative ways to involve users throughout the design process:

- Set up micro-design workshops with teams/functions/roles to decide on the right mix of options and create the proper variety.
- Prevent a one-size-fits-all solution by working with scenarios.
- Validate design options with a crossdisciplinary user panel.
- Agree on behavioral rules and guidelines and create a team charter that helps teams make the best of the new environment.
- Enhance organizational awareness by educating people about the importance of the workspace as a tool to shape the culture.
- Organize experiments: adopt a scientific method to workspace design by formulating a design hypothesis and test/validate it in practice, with real users and based on real evidence.
- Help office design move from being a project to being an ongoing conversation.

• Most importantly, 'rich spaces' can help organizations to successfully play their game of experimentation. They provide infrastructural conditions for the type of deliberations that help its members to see what works, to adapt and change, and to make decisions that contribute to the richness of its fundamental repertoire. The design of an intentional office therefore lays out a wideranging collection of settings for deliberations of all kinds: concentration rooms, conference call bubbles, small informal meeting zones, war rooms, team hubs, scrum zones, etc. Ideally the layout of the office takes into account the organization design and the interdependencies between teams, departments and different hierarchical levels in order to properly connect them together. The workspace in this case is no longer an impediment for work but can be seen as an important tool for effective dialogue.

It won't come as a surprise when we say that the impact of spatial design, no matter how well it is

executed, will always have its limits, considering the vast array of conditions the organization has to cope with. But despite the above set of design criteria not being sufficient, it *is*, in our experience, crucial for any design effort and can make the difference between grandiose furniture introduced with great fanfare on the one hand, and effective and sustainable behavioral impact on the other. If we take it on intentionally and coherently, the design of offices for the future of work can be a great source of adaptability.

# Conclusions

The COVID-19 crisis has forced us to rethink our organizations and is changing the dominant role of the office. New ways of working are being adopted, while we are all still struggling to come to grips with a new world. Rather than stating the obvious ('the future will be hybrid'), we believe a new language is needed that helps organizations go beyond current hypes and look at the fundamental criteria for adaptability.

In this context, we have argued that now more than ever it is relevant to create the conditions for adaptation at all levels, creating an organization that organizes and reorganizes constantly and intentionally.

The intentional office translates purpose, ambiguity, awareness and coherence into concrete architectural concepts, offering us a new language and methodology for tackling infrastructural design.

In addition, we have proposed a set of design criteria for the office environment of the future that may support the creation of truly *rich* workspaces that can help realize the ideal of a humane organization. Together, these form the foundation for any design effort going forward, creating the conditions for adaptation in a world where the rules of the game are changing constantly.

# **About Prepared Mind**

Prepared Mind is a consultancy based in Leuven (BE) and Nijmegen (NL), focused on the future of work, organization design, participative change and workspace design.

The end result of our work is profound and sustainable change in the way people work together in organizations, networks, teams, offices, ...

We design and develop the conditions to mobilize the entire system for clients who want to rethink the future and have the ambition to make the world a better place.

Check us out at <u>www.preparedmind.be</u>.

For this article, we are indebted to our colleagues Ivan Cols and Philippe Van der Velpen for their inspiration and research support!

#### References

Achterbergh, J. & Vriens, D. (2010). *Organizations. Social systems conducting experiments*. Berlin: Springer.

Achterbergh, J. & Vriens, D. (2020). Organizational development. Designing episodic interventions. London: Routledge.

Caredda, S. (2020). *Building the intentional organization*. <u>https://sergiocaredda.eu/organisation/building-the-</u> <u>intentional-organisation - last visited 30.11.2020</u>.

Compernolle, T. (2015). *The office is naked*. Brussels: Compernolle Consulting.

Gensler (2015).

https://www.gensler.com/uploads/document/306/file/Foc us in the Workplace 10 01 2012.pdf (last visited March 2021).

Hoendervanger, J.G. & Hofkamp, G. (2017). *Het hedendaagse kantoor*. M&O, 71(3/4): 49-64.

Kegel, P. (2017). *The impact of the physical work environment on organizational outcomes: a structured review of the literature.* Journal of Facility Management and Research, 1(1): 19-29.

Kuipers, H., Amelsvoort, P. van & Kramer, E.H. (2020). *New Ways of Organizing. Alternatives to bureaucracy.* Leuven: Acco.

Luhmann, N. (1984). *Soziale Systeme*. Frankfurt am Main: Suhrkamp. (For an introduction to the work of Luhmann, refer to Achterbergh & Vriens 2010).

Mobach, M., Rogier, J. & Smid, G. (2017). *Het gebouw als habitat en habitus van organiseren*. M&O, 71(3/4): 49-64.

Pava, C. (1983). *Managing new office technology. An organizational strategy*. New York: The Free Press.

Sailer, K. et al. (2009). *Comparative studies of offices pre and post. How changing spatial configurations affect organizational behaviours.* Proceedings of the 7<sup>th</sup> international space syntax symposium. Stockholm: KTH.

Taylor, S. & Spicer, A. (2007). *Time for space: a narrative review of research on organizational spaces*. International Journal of Management Reviews, 9(4): 325-346.

### Notes

<sup>i</sup> The concept of self-reproduction in organizations as a particular type of social system is based on the work of Niklas Luhmann (1984).

<sup>ii</sup> Thanks to Sergio Caredda (2020) for introducing the concept of the Intentional Organization.

<sup>iii</sup> See Achterbergh & Vriens (2019) for a similar view on designing episodic interventions for organizational development.

<sup>iv</sup> Gensler publishes annual surveys on the Future of Work and spots trends in the market of office design. See gensler.com for the most current research.

<sup>v</sup> See for instance: Sailer et al. (2009), Taylor & Spicer (2007),

Hoendervanger & Hofkamp (2017), Kegel (2017).

 $^{\rm vi}$  Mobach, Rogier & Smid (2017) have elaborated on this requirement extensively.

 $^{\rm vii}$  For an overview, refer to the literature mentioned under v (above).

viii Achterbergh and Vriens (2010) have coupled systems

thinking with a business ethics perspective that is particularly

relevant in this context.

 $^{ix}$  For introductions, check out Achterbergh & Vriens (2010, CH7) or Kuipers et al. (2020).

<sup>x</sup> Compernolle, T. (2015).