

RESEARCH

LIVING LAB APPLIED RESEARCH



Defining and measuring the impact of 'whether', 'how' and 'where' we work together; an objective review using organizational network analysis

RESEARCH



INTRODUCTION

During the pandemic, managers and employees reported maintaining or even increasing productivity, because of working from home. Yet wider research shows us that during the same period we lost a material part of our work network. If productivity stayed the same, what was the value of the network lost?

In today's dynamic and rapidly evolving business landscape, the value that employees bring to organizations extends far beyond their job descriptions and prescribed tasks. While human capital embodies the skills and abilities required to fulfill job responsibilities, there exists another dimension that fuels growth, innovation, and organizational success. This dimension is employee social capital - the intangible network of relationships, knowledge sharing, and tacit experiences that exist within an organization.

These informal connections, often forged within "go-to" teams, hold the key to unlocking opportunities for learning, mentorship, career development, and innovation. They serve as the lifeblood of organizations worldwide, representing the informal knowledge networks that fuel productivity and enable work to get done.

In this white paper, we share our research into what impact 'whether', 'how' and 'where' we work together has on employee human capital (formal networks) and employee social capital (informal networks); and as a result, the collective impact on organizational capital.

CUSHMAN & WAKEFIELD'S LIVING LAB

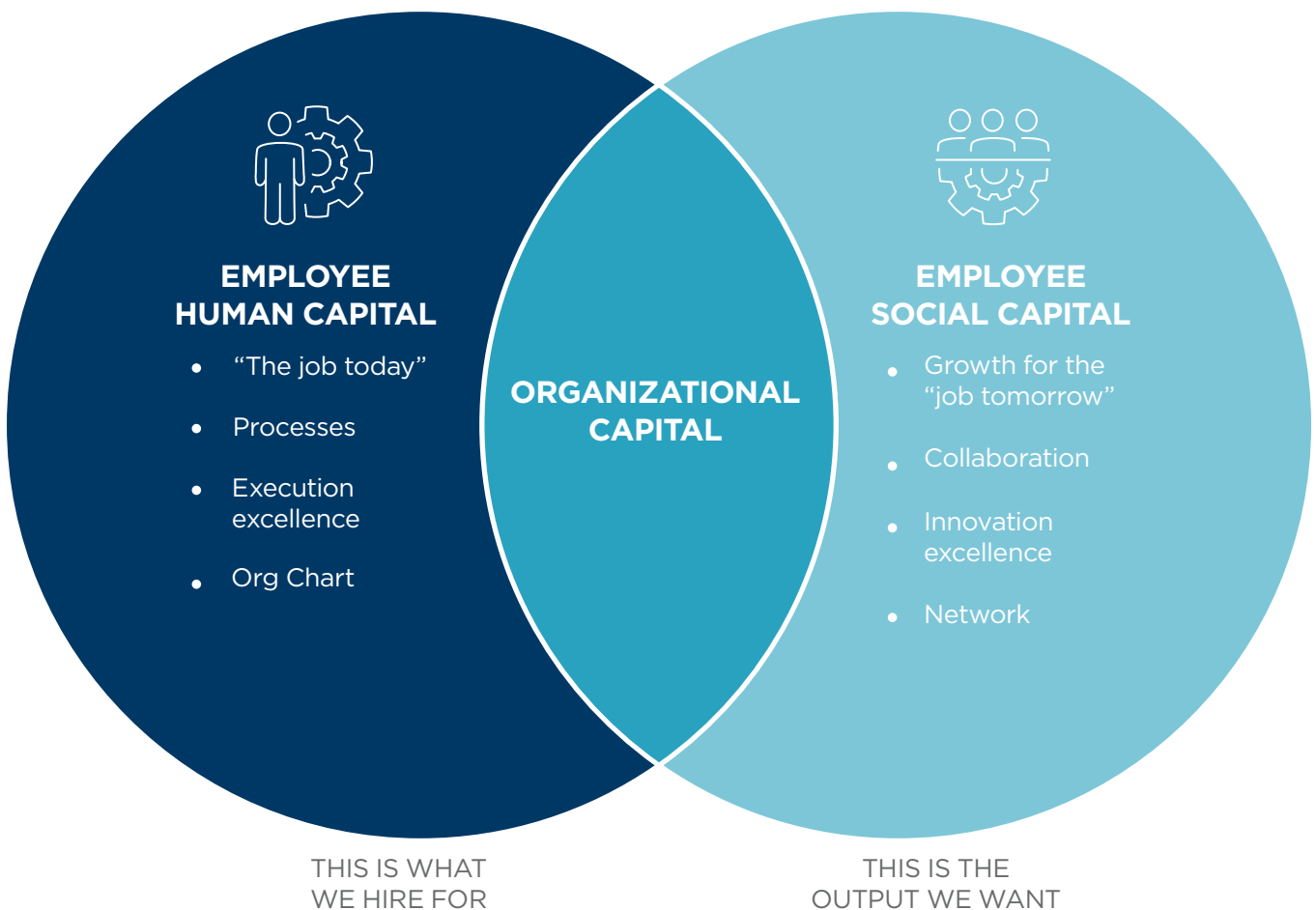
Cushman & Wakefield Living Lab is a unique initiative designed to challenge and delve deeper into the dynamics of the modern workplace and its influence on human health and performance. It serves as an experimental space to explore the intricacies of work environments and how they impact individuals and organizations.

The research conducted within the Living Lab revolves around our own workforce, allowing us to test methodologies and enhance our ability to serve and advise our clients. By studying how work happens, we aim to data-driven, evidenced-based insights into the experience of work and the workplace, providing valuable opportunities to create future-forward, people-centric office solutions to drive organizational performance and competitive advantage.

ORGANIZATIONAL NETWORK ANALYSIS

Visualizing and analyzing both formal and informal relationships within your organization can aid in shaping a business strategy that maximizes the organic exchange of information. Organizational Network Analysis (ONA) provides a structured approach to visualize how communications, information, and decisions flow through your organization.

Organizational networks consist of nodes and ties, representing people and their relationships. These relationships create the capacity and foundation for how information flows (or does not flow) within organizations. As a result, we can assess how network density is correlated with career progression; how hybrid work effects engagement of teams members and when connected to wider data sets, such as employee experience and workplace composition, can provide an insight into what type of workplace environment best cultivate influence within a network and belonging.





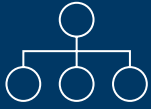


LOOKING PAST THE TRADITIONAL ORGANIZATION CHART

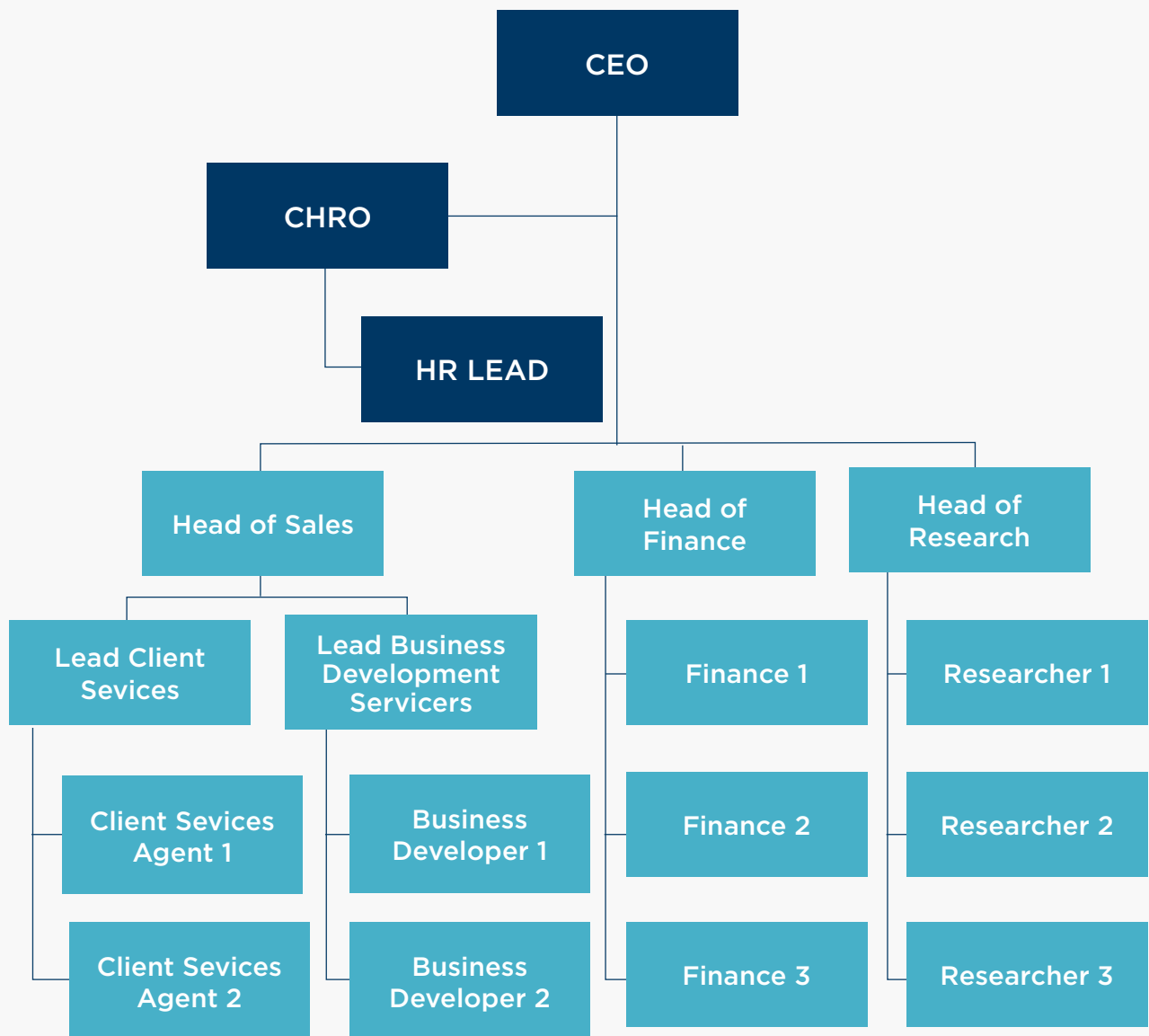
Many organizations do not ever look past the traditional organization chart, departmental groupings and self-reported information to understand how communication, collaboration and work really happens. Looking past these measures are crucial as the complexity of job titles, matrixed organizations and vague role descriptions can hinder our understanding of how businesses truly operate.

Attempting to force collaboration through matrixed or double solid-line reporting, “two in a box” approaches, and other formal mechanisms cannot replicate the natural networks that form when individuals find coworkers who enhance their work, make it easier, or simply make it more enjoyable.

Instead of promoting fruitful collaboration, companies may become bloated, misaligned, and paralyzed by leadership politics when they lack insight into how information is retained and disseminated through employee networks.

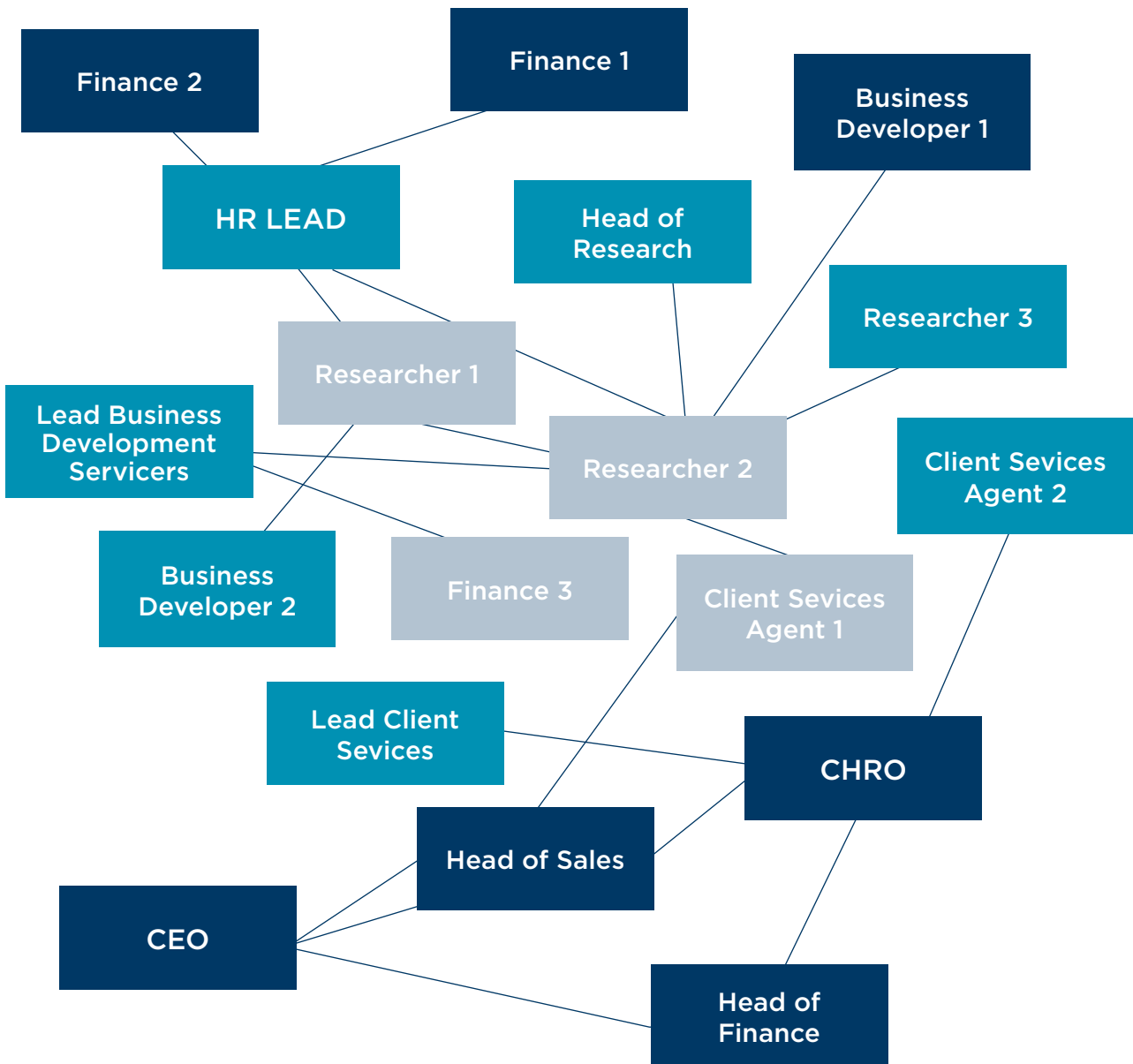


FORMAL STRUCTURE





INFORMAL STRUCTURE



THE IMPACT OF REMOTE AND HYBRID WORK ON SOCIAL CAPITAL

The rise of remote and hybrid work models has significantly impacted our social networks within the workplace. Traditional face-to-face interactions and shared physical spaces have been replaced, to some extent, by virtual platforms.

As a result, the dynamics of social connections at work have undergone a transformation. Remote work can lead to a sense of isolation and reduced opportunities for spontaneous interactions, impeding the development of strong social bonds and trust.

However, it has also pushed organizations to adopt digital collaboration tools and foster online communities, allowing employees to connect across geographical boundaries and forge new relationships.


The impact of these new work paradigms is that the way in which we create social connections between employees is shifting, potentially reducing the strength, capability and potential of these critical informal knowledge networks at work.



OUR RESEARCH



Cushman & Wakefield set out to research the effect of if, where and how we work together. Using a research population of 550 Dutch-based knowledge workers across 4 offices, C&W collected metadata to form an organizational network graph, based on patterns over email, meetings, IM's and 1:1 Teams' phone calls.




**MEASURING
'WHETHER' WE
WORK TOGETHER
MATTERS**


Measuring the impact of 'whether' we work together was conducted comparing organizational network graphs of two separate time periods:

1. During a government mandated lockdown.
2. The proceeding 3-month period of in person work. And through Cushman & Wakefield's proprietary, self-reported employee experience and engagement survey; Experience per square foot (XSF).

The impact of 'how' we work was evaluated by assessing the effect of communication method, i.e. informal methods such as phone calls and IM's or formal methods such as meetings and emails.



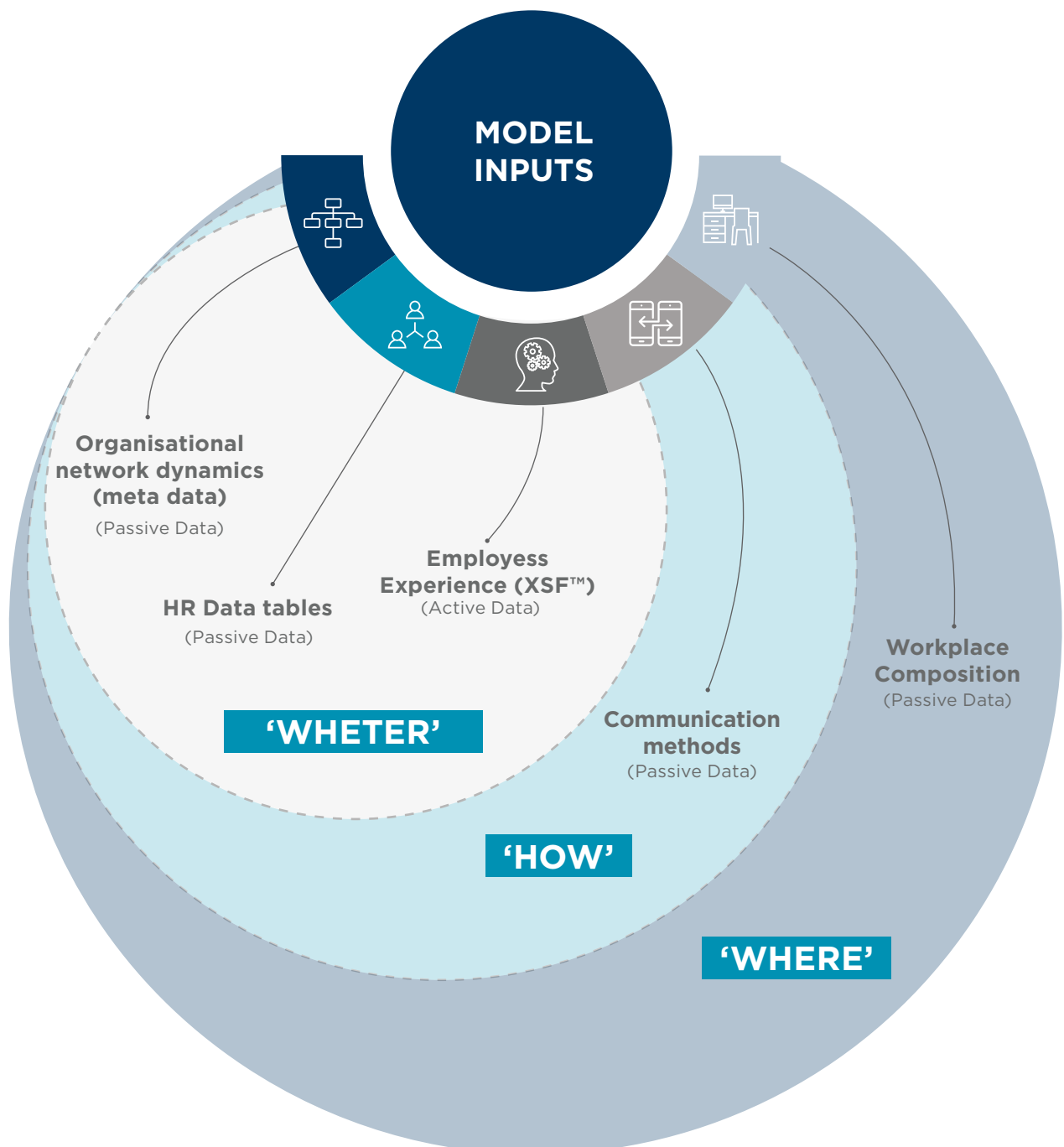
**MEASURING
WHETHER 'HOW'
WE CREATE
TOGETHERNESS
MATTERS**



**MEASURING
WHETHER 'WHERE'
WE ARE MATTERS**

The impact of 'where' we work was evaluated through C&W's proprietary workplace composition assessment tool which assesses workplace design and composition features, such as % of collaboration space and private offices, as well as building features, such as certification and age of construction and locational features such as proximity to green space and public transport. For more information, please see 'our model'.

These combined datasets were centralized into a single model. Other than the employee experience survey, all datasets were passive data sets meaning that they did not involve participation from the employee base. Data set were connected on an individual basis, before anonymization to protect the integrity of findings. As a result, researchers worked in close collaboration with GDPR.



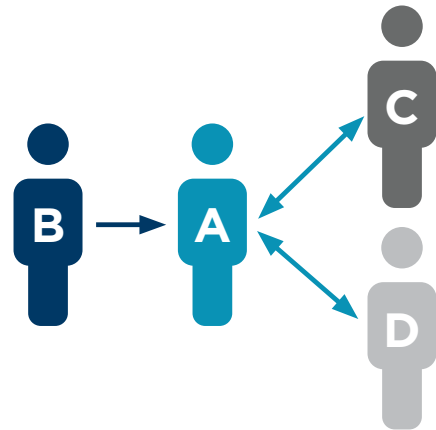


PRINCIPLES OF ORGANIZATIONAL NETWORK ANALYSIS:

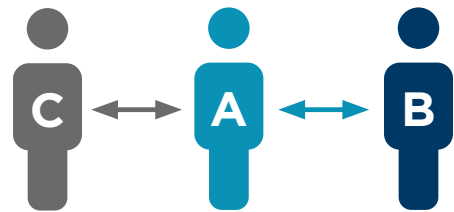
Organizational Network Analysis is a methodology that examines the relationships and interactions between individuals, teams, and departments within an organization. It involves mapping and analyzing the informal networks that exist and their impact on organizational performance.

- A. **Network density and diversity (Degree centrality)** – how dense are people’s networks with diverse connections across the network.
- B. **Betweenness (centrality)** – how fragmented the overall network is and how many times it relies on someone to connect across these fragmented groups.
- C. **Closeness (centrality)** – how close the overall network is to itself, representing bidirectional communication between employees.
- D. **Influence (Eigenvector centrality)** – how influential is the network, how many influential employees with high volumes of communication across diverse ranges of the network are connected to other influential employees.

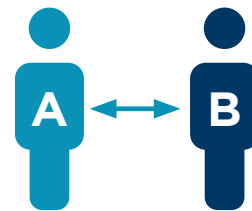
A. Your boss (person B) asks you (person A) how to implement a new AI-based technology product, of which she has no knowledge. You (person A) have a friend in the marketing department (person C) who has a background in AI and you met someone at an off site last week with experience implementing new technologies within your business (person D). Together they can help advise you on how to implement this new product. You (person A) has a higher degree centrality (denser and more diverse network) than your boss (person B), because you can access person C and D.



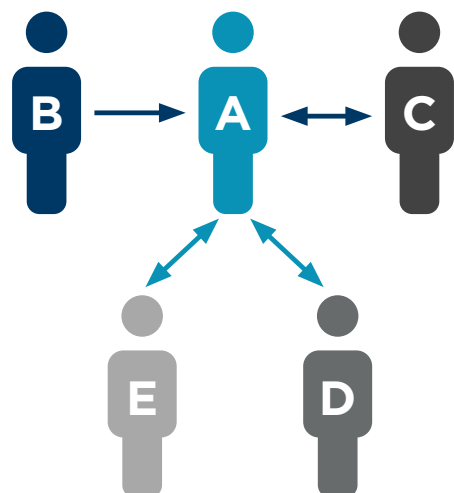
B. You (person A) speak to your boss (person B) who speaks to your counterpart (person C) with a different department. Your boss (person B) has high betweenness



C. You (person A) are working with your boss (person B) on a project. Your boss has a more extensive and diverse network than you and so can disseminate and collect information quicker than you owing to her central position within the communication network of the business. As a result your boss (person B) has a higher closeness score than you (person A).



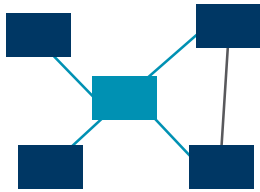
D. You (person A) have just transferred from the finance department to work with your boss (person B) where you used to be the finance business partner to the now, new CEO (person C). The CEO (person C) remembers your skills and asks you to prepare a presentation for an up and coming Board meeting to present to the head of Marketing (person D) and CHRO (person E). As a result, you (person A), have a close connection to influential and central members of the organization, which increases your capacity to influence communication across the network. If the material you present at the Board meeting is approved, your influence will be exerted over the organization's network.



HOW TO MEASURE ORGANIZATIONAL CAPITAL

01

DEGREE

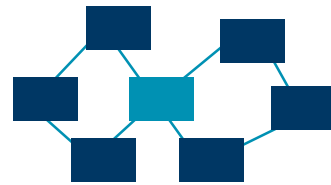


Density/ Size:

The higher the score, the bigger and more diverse my networks.

02

BETWEENNESS

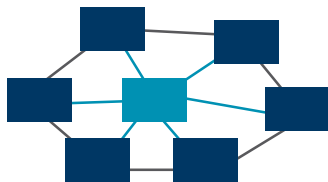


Fragmentation:

The higher the score, the more fragmented the network is without me.

03

CLOSENESS

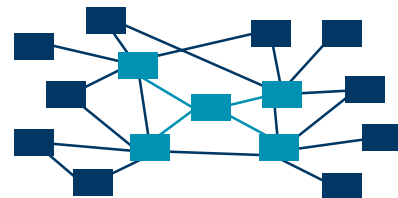


Closeness:

The higher the score, the more central and active I am in communication across the network.

04

EIGENVECTOR



Influence:

The higher the score, the more influential me and my contacts are within the network.





OUR MODEL INPUTS:



HR DATA TABLES

Insights into gender, age, tenure, team and function. All data managed inline with GDPR and privacy regulations.

- Gender
- Age
- PTE/FTE
- Manager/non-manager
- Department
- Location/floor



COMMUNICATION METHODS

In order to evaluate any changes in communication medium when working from home and following a return to office, we evaluated the communication methods used, including:

- Emails
- Teams' calls (1-2 people)
- Meetings (>2 people)
- Instant messages (IM's)



EMPLOYEE EXPERIENCE AND ENGAGEMENT SCORES (XSF)

In order to evaluate the relationship between the above factors and employees perceived engagement and experience, we included findings from questions across the following categories:

- Engagement
- Trust
- Alignment to future vision
- Growth and development
- Manger relationship
- Teamwork
- Communication
- Experience



WORKPLACE COMPOSITION:

In order to evaluate whether there were any links between the design, services and composition of the workplaces, including amenities within the immediate vicinity of the building, we measured the following workplace characteristics:

- Desks
- Meeting rooms
- Private meeting room
- Collaboration space
- Total office area
- Year of construction
- Number of floors in building
- Number of floor occupied
- Energy Rating
- Onsite Canteen
- Building quality
- Workplace quality
- Carparking
- Bike parking
- Proximity to public transport
- Proximity to restaurants
- Proximity to outdoor green space

FINDING ONE



THE IMPACT OF 'WHETHER' WE WORK TOGETHER MATTERS

FINDINGS

** The findings represented below form a small percentage of the total findings from this research. This paper therefore is the first in a series of insights derived by our ONA model, further releases of insights will be released in the future.

WORKING PHYSICALLY TOGETHER INCREASES TEAM COHESION, ENGAGEMENTS AND EGALITARIANISM COMPARED TO WORKING FROM HOME.

To evaluate the effects of working together, C&W evaluated the network patterns of how we communicated during a period of working fully apart from December 2021 – March 2022 during a mandated government lock down and compared it to the immediate subsequent three-month period March 2022 – June 2022, when the Dutch business was experiencing a return to the office with a clear directive to return 5 days per week.

The intention was to evaluate whether in person communication and collaboration differed from that which we experienced during periods of separated working.

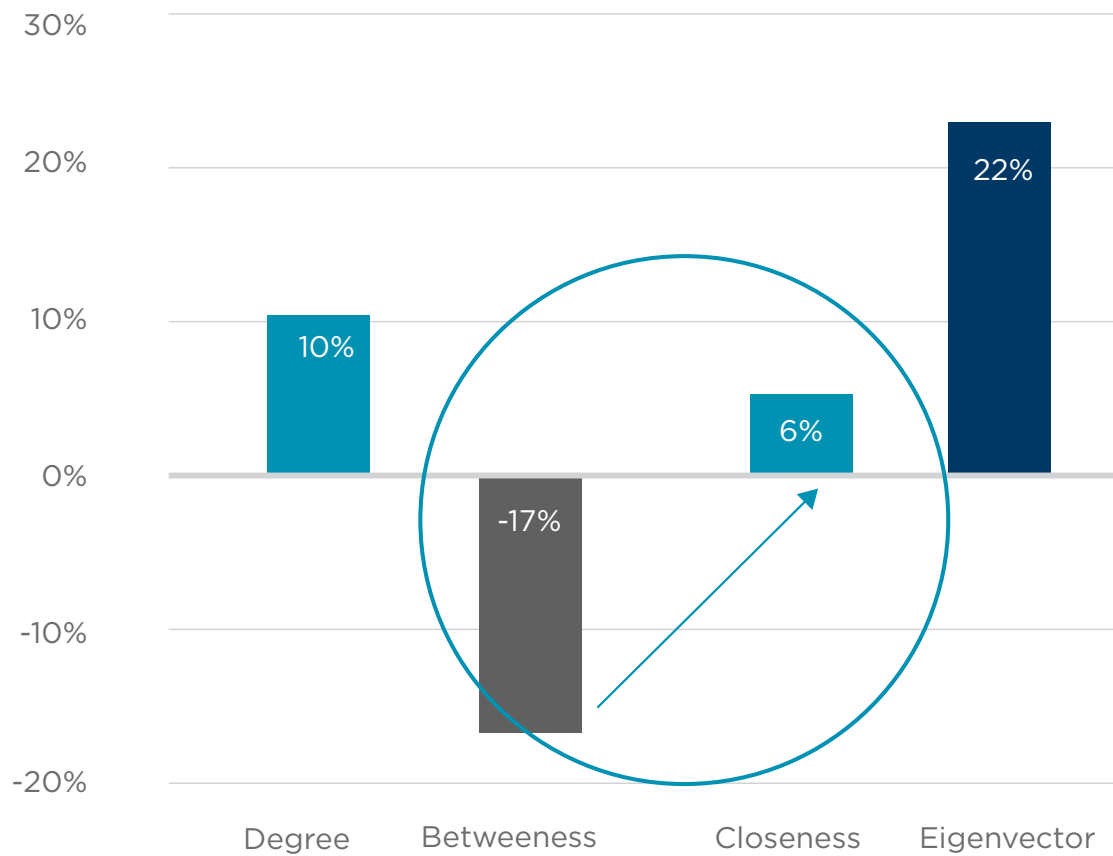
Our findings indicate that when we returned to the office we saw:

- Network diversity and density increased by 10%, which was correlated with improved speed and lower costs of innovation. This suggested that being physically present in the office fostered a more diverse and interconnected network, facilitating more efficient and innovative work.
- Influence within the network saw a significant 22% increase. This indicated that working together in the office enhanced the influence of key individuals and the overall influence of the network. Such influence is crucial for attracting and retaining talent and fostering cohesive teams.
- We observed a 17% reduction in fragmentation (betweenness) and a corresponding 6% increase in the overall closeness of the network. This implied that when working remotely, fragmentation was higher, and hierarchies played a greater role in connecting different parts of the network. Consequently, communication and culture could become stagnant and hierarchical, with junior members receiving information passively or only via formal methods of communication such as email and meetings.

However, returning to the office improved closeness, allowing junior members to actively engage in networked communication across various parts of the organization, thus restoring cohesion and promoting a more egalitarian environment.

While these initial insights are valuable, it is essential to replicate the study across other offices and consider factors like in-person office access. Additionally, the findings underscore the need to further explore the hybrid work scenario,

where some individuals are in and others are out of the office. This will be a focus of the second phase of our research, providing a more comprehensive understanding of the effects of different work arrangements.

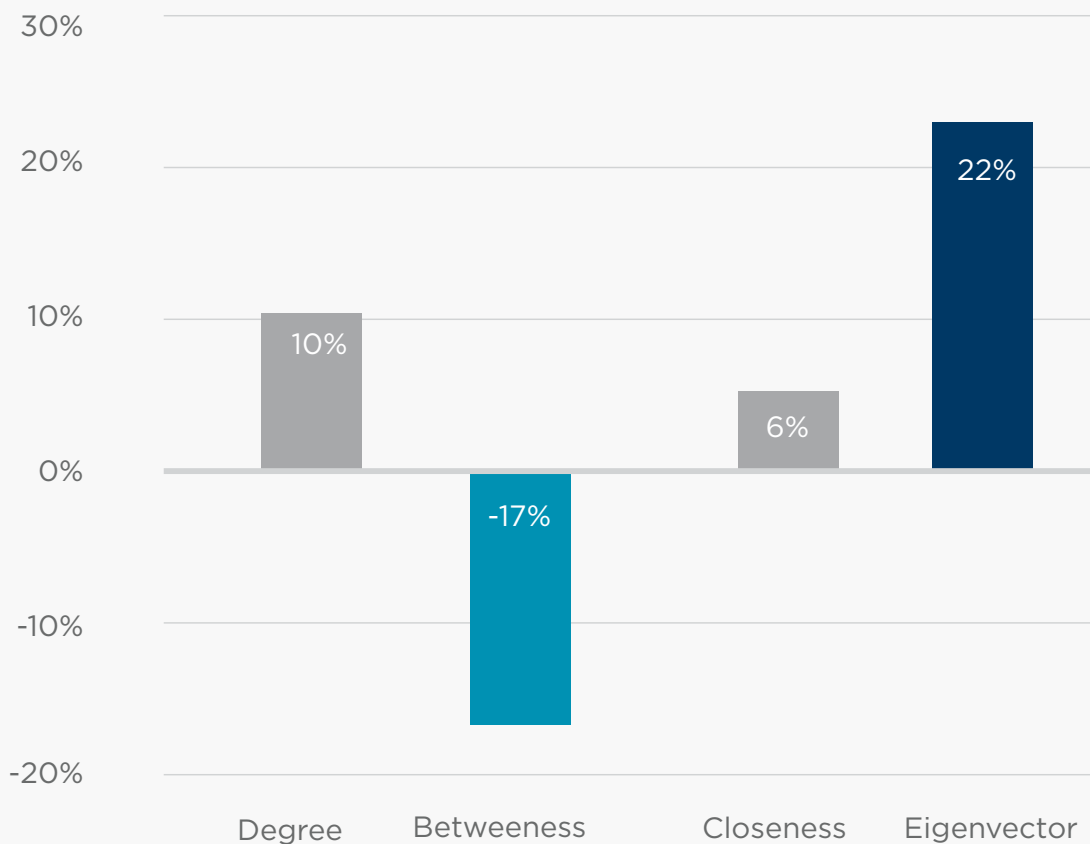


Pearsons Correlation Analysis: * P<0,5: ** P <0,01



INFLUENCE WITHIN THE NETWORK IS DRIVEN BY A SENSE OF BELONGING

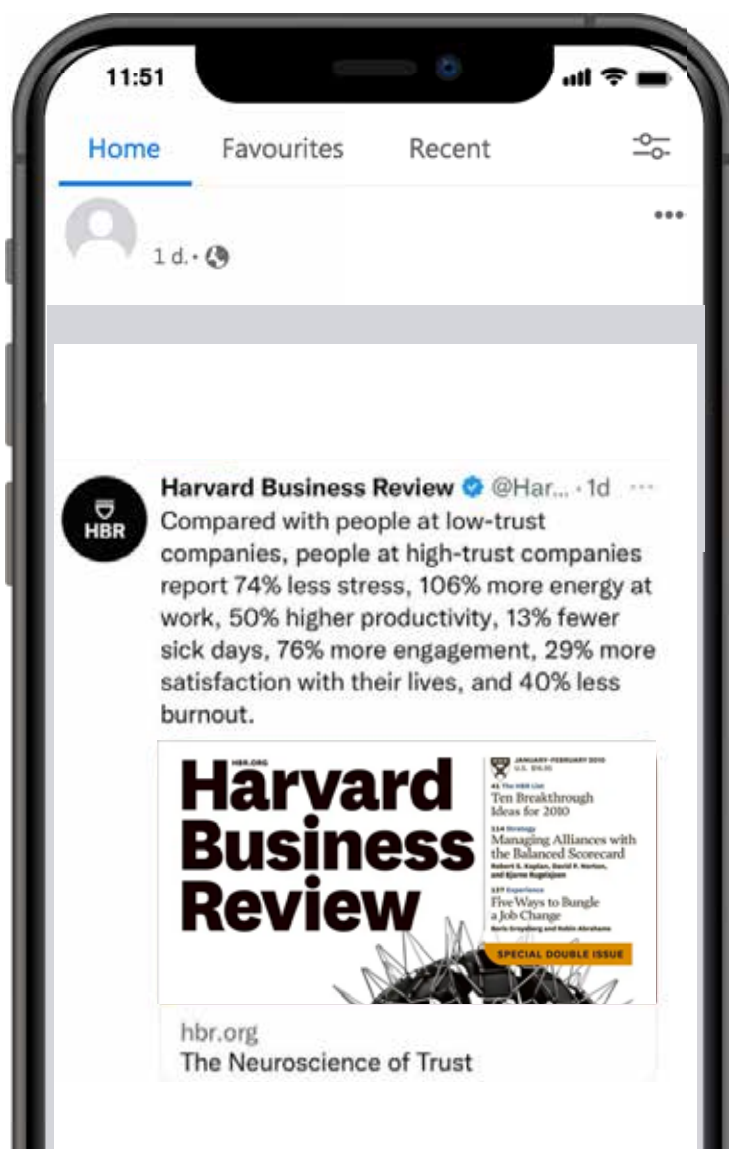
To understand the factors that drive influence within a network, we conducted an analysis of the correlation between influence and employee engagement. Our findings revealed a significant determinant of influence was tied to a strong sense of belonging within the company. We observed that individuals who were more influential within the network tended to have closer connections to others, bridged different parts of the network, and had ties to other influential nodes. This suggests that a higher degree of influence is closely linked to a greater sense of belonging and vice versa, that a higher sense of belonging increase influence within the network.



The link between influence and belonging in the workplace is a powerful one. When employees feel a strong sense of belonging, they are more likely to have a greater influence within their organization. This is because a sense of belonging fosters deeper connections, trust, and engagement with colleagues and the overall work environment. When individuals feel valued, connected, and included, they are more motivated to contribute their ideas, collaborate with others, and take on leadership roles, thereby exerting a positive influence on the organization as a whole.

In turn, this reinforces their sense of belonging, creating a virtuous cycle that enhances both individual and collective success.

Extensive research has shown that organizations with a strong sense of employee belonging and trust experience a remarkable 74% reduction in voluntary turnover. This highlights a potential connection between the effects of in-person working and positive organizational outcomes.



By shedding light on the relationship between influence, belonging, and ways of working, we aim to provide valuable insights for organizations seeking to optimize their workforce and create a thriving work environment. The results of our study will serve as a foundation for evidence-based strategies that promote employee well-being, performance, and retention. Together, we can unlock the potential of belonging and drive positive organizational outcomes.

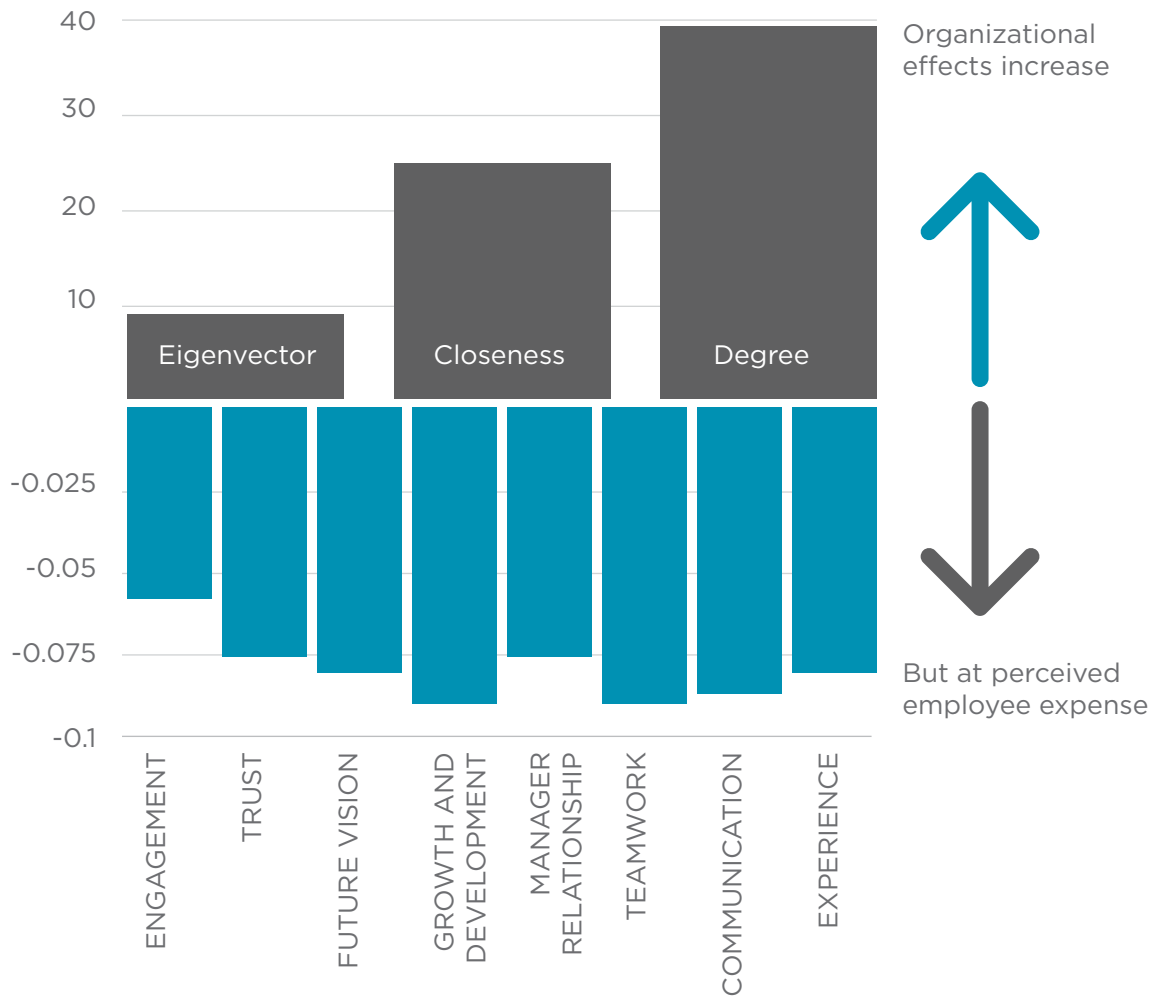
In the next phase of our research, we will delve deeper into understanding the correlation between various HR indicators and the impact of both remote and in-person work. Our goal is to assess whether these different working modalities contribute to higher rates of employee performance, improved health (resulting in fewer sick days), and reduced staff turnover.

HIGHER EMPLOYEE EXPERIENCE SCORES DO NOT ALWAYS ALIGN WITH HIGHER ORGANIZATIONAL OUTCOMES

In recent years, there has been a growing emphasis on improving the employee experience, accompanied by an influx of employee engagement surveys. These surveys typically strive to boost engagement scores, assuming a direct correlation between higher engagement and improved business outcomes. However, the question remains: is this correlation truly valid in the way in which we think it is?

To delve into this matter, we conducted a comprehensive analysis that examined the interplay between organizational network dynamics and employee experience scores. Our findings revealed a fascinating insight: a reduction in fragmentation within organizations was associated with noteworthy increases in network density, closeness, and influence; positive indicators of social capital.

However, when we compared these outcomes with employee experience, we made an intriguing observation. While decreased fragmentation correlated with improved network dynamics, it was also linked to decreases in certain aspects of employee experience. This suggests that solely focusing on maximizing employee experience scores could inadvertently undermine organizational outcomes.



Moreover, our research underscores the fact that certain positive facets of organizational growth and development, such as innovation, collaboration across borders, learning, and communication, may not always elicit highly positive individual experiences. Yet, just as people recognize the long-term benefits of brushing their teeth every night, these endeavors contribute to the overall well-being of the organization in the long run.

By shedding light on the complex relationship between employee experience and organizational network dynamics, our findings challenge conventional wisdom and prompt a reevaluation of strategies aimed at optimizing both individual and organizational success. Embracing a holistic approach that considers the intricate interconnections within an organization will enable managers to navigate these complexities and create an environment where both employee experience and organizational outcomes thrive.

FINDING **TWO**



THE IMPACT OF 'HOW' WE WORK TOGETHER

INFORMAL COMMUNICATION METHODS DRIVE THE DEVELOPMENT OF SOCIAL CAPITAL; MEETINGS KILL IT.

To understand how social capital was reestablished upon returning to the office, we carefully examined the usage of different communication methods and their impact on the four key dynamics of organizational networks.

Our findings revealed some intriguing insights:

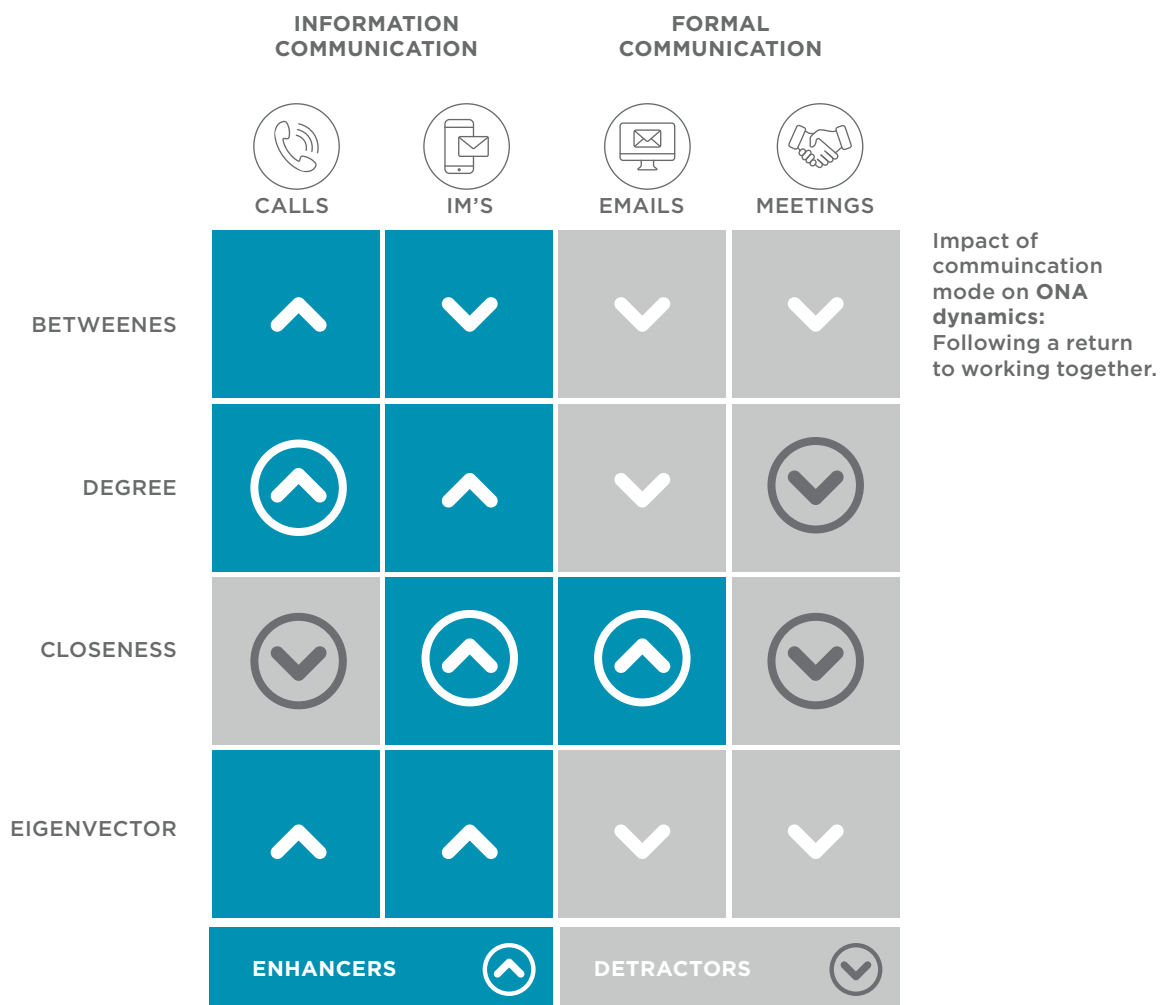
- An impressive 75% of the positive improvements in organizational network strength were directly attributed to informal communication methods, such as phone calls and instant messages (IMs). These casual and spontaneous interactions played a significant role in enhancing team cohesiveness, engagement, and egalitarianism within the organization.
- In contrast, when we delved into the elements that weakened organizational network strength, a striking 88% could be attributed to formal communication methods like meetings and emails. Surprisingly, attending more meetings and sending numerous emails had an adverse effect on team cohesiveness, engagement, and egalitarianism.

These findings lead us to a crucial realization; for every email and meeting sent, group cohesion and network density reduced and hierarchical, group fragmentation increased.

The implication is clear: if we strive to foster stronger team cohesiveness and engagement, it is essential to embrace and encourage informal communication channels. By prioritizing phone calls and instant messaging, we can create a more favorable environment where collaboration thrives and individuals feel more connected.

Understanding the impact of informal communication on social capital empowers organizations to actively nurture an atmosphere that cultivates genuine connections and strengthens team dynamics. Embracing a communication approach that values the power of spontaneous conversations and personal interactions will pave the way for enhanced team engagement and a vibrant organizational culture.

Emphasizing formal methods of communication, such as emails and meetings, may reduce cohesive organizational networks due to limited interaction, power dynamics, one-way communication and lack of personal touch associated with these communication forms. As a result, the effect could be that relationships are diminished rather than enhanced and over time this can reduce the effectiveness of knowledge transfer and receipt.



75%
of ONA dynamics are **increased** by informal communication

85%
of ONA dynamics are **decreased** by informal communication

“Working from home enables us to do our job, but we may be missing out on developing the social capital needed to get our next job, innovate and learn”

FINDING **THREE**



THE IMPACT OF 'WHERE' WE WORK TOGETHER

HIGH PERFORMING WORKPLACES CONNECT EMPLOYEES TO ORGANIZATIONAL VISION, BUT CANNOT COMPENSATE POOR TEAM RELATIONS.

While the physical design and location of a building undoubtedly influence employee experience, it is increasingly recognized that exceptional workplace design alone cannot compensate for interpersonal relationships. With this understanding, we embarked on a study to explore the relationship between workplace characteristics and employee experience across our sample.

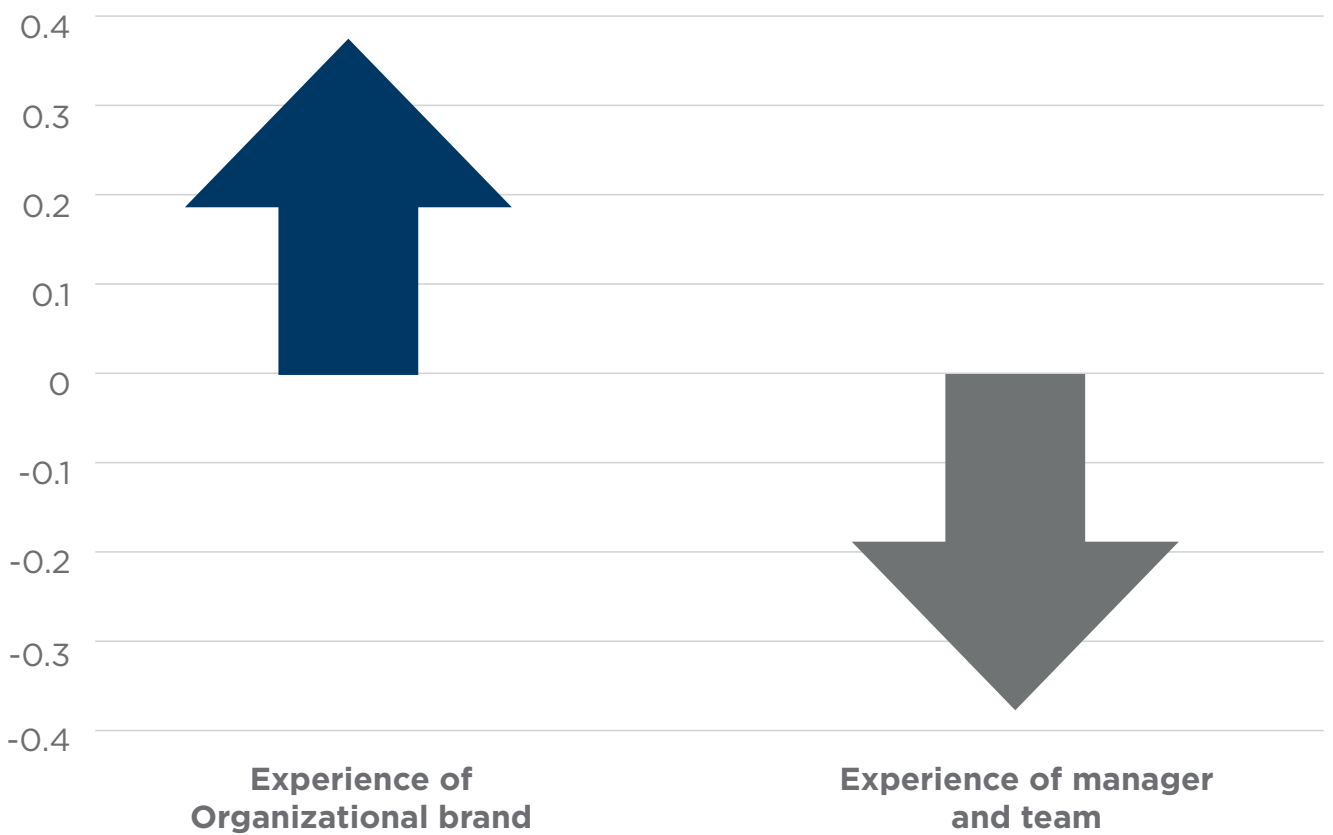
We examined various factors, including interior design, building characteristics, and features of the local vicinity. Meanwhile, employee experience scores were categorized into questions that assessed the sense of connection, engagement with the organization, brand, and its mission, as well as the operational experience of working with teams and managers.

Our research revealed intriguing findings. We observed that newer buildings with higher fit-out quality were associated with positive increases in employee engagement towards the organization and brand. However, when it came to evaluating the link between workplace characteristics and experiences with teams and managers, we found a negative correlation for newer buildings with higher fit-out quality.

These findings suggest that when the exceptional workplace experience fails to align with the experience of working with teams and managers, our overall engagement and satisfaction tend to suffer. It implies that organizations seeking to prioritize team cohesion and positive relationships with managers should invest more in development of people, cohesive teams and management capabilities, rather than allocating more investment to the physical workplace environment.

On the other hand, for organizations aiming to foster a strong sense of connection to the company's culture, brand, and mission, as well as attract and retain talent, the workplace itself plays a crucial role. These two points taken together highlight the holistic approach that is required to achieve high performing teams and workplaces, identifying that both organizational and environmental experience must align and work in tandem to be successful.

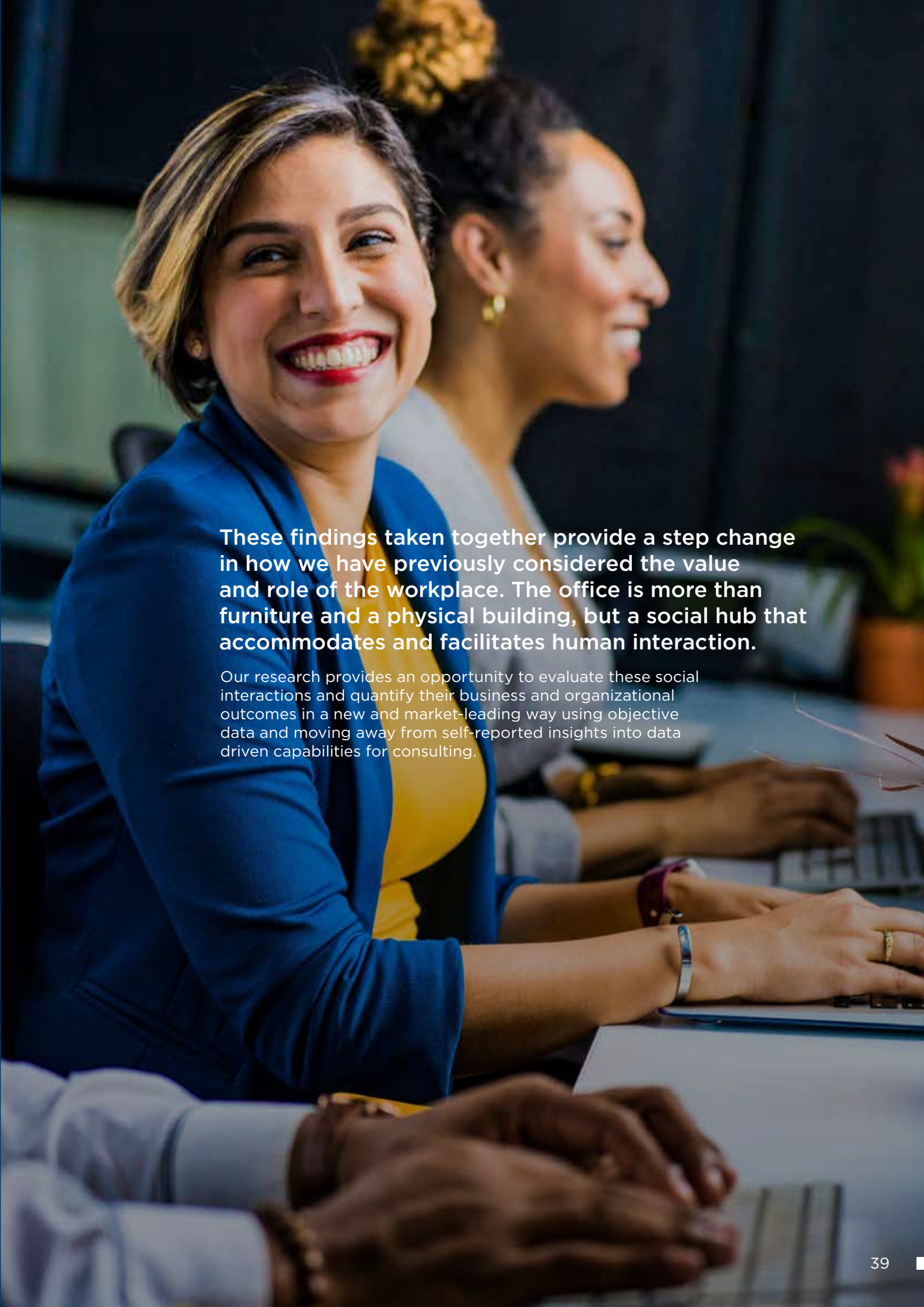
Newer, higher-quality buildings and workplaces correlated with positive experiences of organizational brand



Newer, higher-quality buildings and workplaces correlated with negative experience of manager and teams

“If your mission is to facilitate productivity, invest in high performing teams and managers. If your mission is to facilitate innovation, learning and a sense of belonging, invest in high performing workspaces where employees have the opportunity to build the relationships that they need to make work happen and provide the the right physical environment to support high performing teams thrive.”

CONCLUSION

A woman with short, wavy brown hair, wearing a bright blue blazer over a yellow top, is smiling broadly and looking towards the right. She is seated at a desk with her hands on a laptop keyboard. In the background, another woman with dark hair tied up is working at a computer, looking at the screen. The office environment is modern and professional, with soft lighting and blurred background elements like a potted plant and office furniture.

These findings taken together provide a step change in how we have previously considered the value and role of the workplace. The office is more than furniture and a physical building, but a social hub that accommodates and facilitates human interaction.

Our research provides an opportunity to evaluate these social interactions and quantify their business and organizational outcomes in a new and market-leading way using objective data and moving away from self-reported insights into data driven capabilities for consulting.

RESEARCHERS & HOW CAN WE HELP?

Join us in embracing this paradigm shift in how we perceive the workplace. Together, let's harness the power of evidenced based, data-driven insights to drive meaningful change and create market leading organizations and workplaces.

To join the mission of being at the forefront of redefining the workplace for a more productive and collaborative future, please contact Rachel Casanova and Sophie Schuller.

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CONTINUING WITH OUR RESEARCH:

Moving forward, we will continue to build upon this research to conduct a comprehensive evaluation of the impact of hybrid work on organizational networks. Our focus will be to explore the optimal number of days employees should spend in the office to maximize both organizational and employee outcomes. In addition, we aim to further evaluate the effect of hybrid on different employee groups, such as junior, less tenured staff or those with specific work-style personas; to evaluate how hybrid work may impact the productivity and experience of the group, rather than just individual performance.

Finally, we aim to delve into the network and knowledge transfer effects arising from hybrid work and assess their influence on key organizational performance indicators such as HR performance, attrition rates, performance scores, and financial metrics, such sales and revenue to further understand the effect of balancing employee experience with organizational outcomes. By continuing to research and understand these dynamics, we strive to provide new, novel and valuable insights for our clients to effectively design and deliver hybrid work models that drive success and wellbeing for both the organization and its employees.

