



The Future of Work: Examining the Effectiveness of Hybrid Work Models on Employee Productivity

Biju John M, Professor, Dean and Research Guide, Research Department of Commerce and Management Studies, St. Thomas' College (Autonomous), Thrissur, Kerala, India.

Article information

Received: 13th December 2024

Volume: 2

Received in revised form: 10th January 2025

Issue: 1

Accepted: 27th February 2025

DOI: <https://doi.org/10.5281/zenodo.15141983>

Available online: 26th March 2025

Abstract

The COVID-19 pandemic catalyzed unprecedented changes in work arrangements, accelerating the adoption of remote and hybrid work models across industries. This study investigates the relationship between hybrid work arrangements and employee productivity through a mixed-methods approach combining quantitative analysis of performance metrics from 2,450 knowledge workers across 18 organizations and qualitative insights from structured interviews with 175 managers and employees. Results indicate that well-implemented hybrid work models are associated with productivity increases of 9-14% compared to traditional office-centric approaches, with variation based on job role, organizational support structures, and individual preferences. Four key factors emerged as critical mediators of hybrid work success: technological infrastructure, managerial approaches focused on outcomes rather than presence, organizational culture adaptations, and individualized flexibility parameters. The findings suggest that hybrid work models can enhance productivity when implemented with attention to these mediating factors, though certain job functions and personality types benefit more than others. This research contributes to understanding post-pandemic work arrangements and provides evidence-based recommendations for organizations designing hybrid work strategies to optimize employee productivity and satisfaction.

Keywords: - Hybrid work, Remote work, Employee productivity, Organizational culture, Management practice, Work arrangements, Flexibility, Digital transformation, Post-pandemic workplace, Knowledge workers

I. INTRODUCTION

The global COVID-19 pandemic forced an unprecedented experiment in remote work, compelling organizations to rapidly adapt to distributed work arrangements (Kniffin et al., 2021). As pandemic restrictions eased, many organizations began transitioning to hybrid work models—arrangements that combine remote and in-office work—rather than returning to pre-pandemic work structures (Parker et al., 2022). This shift represents a fundamental reconsideration of where, when, and how work is performed in knowledge-intensive sectors.

Hybrid work models vary considerably in their implementation, ranging from structured approaches with designated office days to flexible arrangements where employees determine their work location based on task requirements and personal preferences (Alexander et al., 2021). These varying approaches reflect organizational attempts to balance the perceived benefits of in-person collaboration with the flexibility and autonomy afforded by remote work.

While early pandemic research focused primarily on the immediate impacts of enforced remote work (Waizenegger et al., 2020; Wang et al., 2021), the sustained adoption of hybrid work arrangements necessitates more nuanced investigations of their effectiveness. Particularly important is understanding how these models affect employee productivity—a critical concern for organizations balancing multiple strategic objectives in uncertain economic conditions.

This study addresses this gap by examining the relationship between hybrid work models and employee productivity through a mixed-methods approach. The research seeks to answer three primary questions:

- How do different hybrid work arrangements affect overall employee productivity compared to traditional office-centric models?
- What organizational and individual factors mediate the relationship between hybrid work arrangements and productivity outcomes?

- How can organizations optimize hybrid work models to enhance productivity across diverse employee populations?

By addressing these questions, this research contributes to the evolving discourse on post-pandemic work arrangements and provides evidence-based insights for organizations navigating decisions about long-term work models.

II. LITERATURE REVIEW

2.1. The Evolution of Remote and Hybrid Work

Work performed outside traditional offices has an extensive history, but technology-enabled remote work in knowledge sectors emerged primarily in the 1990s with the advent of mobile computing and internet connectivity (Bailey & Kurland, 2002). Pre-pandemic research on remote work showed mixed results, with studies indicating potential productivity benefits but also challenges related to collaboration, communication, and work-life boundaries (Gajendran & Harrison, 2007; Golden & Gajendran, 2019).

The pandemic accelerated remote work adoption by necessity rather than choice, creating what (Neeley, 2021) describes as "remote work 2.0"—characterized by widespread adoption, technological advancement, and evolving cultural norms. As organizations transitioned from emergency remote work to intentional long-term strategies, hybrid models emerged as a potential "best of both worlds" approach (Laker et al., 2022).

Recent research by (Barrero et al., 2021) found that 70% of firms were planning or implementing hybrid work models post-pandemic, though with considerable variation in structure and implementation. Organizations attempting to optimize these arrangements face complex decisions about scheduling, office design, technology infrastructure, and management approaches (Yang et al., 2022).

2.2. Employee Productivity in Distributed Work Environments

Productivity measurement in knowledge work presents inherent challenges, with traditional metrics often failing to capture the complex and collaborative nature of such work (Drucker, 1999). The pandemic transition to remote work produced conflicting productivity narratives, with some studies reporting increases (Gibbs et al., 2021) and others finding decreases (Morikawa, 2022), often dependent on measurement approaches, work types, and contextual factors.

(Bloom et al. 2015) conducted influential pre-pandemic research demonstrating a 13% productivity increase among call center employees working remotely, attributed primarily to increased working time and improved work environments. However, more recent research suggests that productivity effects may vary considerably based on job characteristics, with roles requiring high collaboration potentially experiencing different outcomes than those requiring deep individual focus (Bartik et al., 2020).

Several theoretical frameworks help explain productivity variations in distributed work, including:

- Media richness theory (Daft & Lengel, 1986), suggesting that complex tasks requiring nuanced communication benefit from richer in-person interaction
- Self-determination theory (Deci & Ryan, 2000), highlighting the importance of autonomy for intrinsic motivation and performance
- Sociotechnical systems theory (Trist & Bamforth, 1951), emphasizing the interdependence of social and technical factors in work systems

These frameworks provide a theoretical foundation for understanding how hybrid work arrangements might affect productivity through multiple pathways, including communication quality, autonomy and motivation, and the integration of technological and social factors.

2.3 Factors Influencing Hybrid Work Effectiveness

Research has identified several factors that may influence the effectiveness of hybrid work arrangements. Technological infrastructure—including connectivity, collaboration tools, and digital processes—forms a fundamental enabler of distributed work (Waizenegger et al., 2020). However, technology alone is insufficient; management practices and leadership approaches also significantly impact hybrid work outcomes.

Managerial approaches emphasizing outcomes rather than activity or presence appear particularly important in distributed work environments (Parker et al., 2022). Research by Microsoft's Work Trend Index (2021) found that while 82% of leaders had concerns about hybrid work productivity, organizations implementing result-based management approaches reported higher performance and satisfaction.

Organizational culture also plays a crucial role, with cultures emphasizing trust, autonomy, and inclusion better positioned to benefit from hybrid arrangements (Neeley, 2021). Culture transformation presents a significant challenge, as organizations must adapt longstanding norms developed for co-located work to distributed environments (Laker et al., 2022).

Individual differences also influence hybrid work effectiveness, with factors such as personality, home environment, job requirements, and career stage all potentially moderating productivity outcomes (Wang et al., 2021). This suggests that one-size-fits-all approaches to hybrid work may yield suboptimal results compared to more personalized arrangements.

2.4 Research Gap and Contribution

While existing research provides valuable insights into remote work generally, several gaps remain in understanding hybrid work specifically:

- Most pandemic-era research focused on fully remote rather than hybrid arrangements

- Productivity measures often relied on self-reported data rather than objective metrics
- Limited research has examined how organizational implementation factors mediate productivity outcomes
- Few studies have investigated the differential effects of hybrid work across diverse employee populations

This study addresses these gaps by examining hybrid work arrangements specifically, utilizing both objective and subjective productivity measures, investigating organizational implementation factors, and analyzing differential effects across employee segments. In doing so, it contributes to a more nuanced understanding of how organizations can effectively structure hybrid work to optimize productivity.

III. RESEARCH METHODOLOGY

3.1 Research Design

This study employed a mixed-methods approach combining quantitative analysis of performance data with qualitative insights from interviews. This methodological triangulation allows for both breadth of understanding through statistical analysis and depth through qualitative exploration of mechanisms and experiences (Creswell & Creswell, 2018).

The research followed a sequential explanatory design, with quantitative data collection and analysis preceding qualitative investigation. This approach enabled the qualitative phase to explore and elaborate on findings from the quantitative analysis, providing deeper insights into causal mechanisms and contextual factors (Ivankova et al., 2006).

3.2 Sample and Data Collection

3.2.1 Organizational Sample

The study included 18 organizations across technology, financial services, professional services, and healthcare sectors. Organizations were selected using stratified purposive sampling to ensure diversity in size (ranging from 250 to 15,000 employees), industry, geographical location, and hybrid work implementation approaches. All participating organizations had implemented hybrid work models for at least six months prior to data collection, though the specific arrangements varied considerably.

Organizations were categorized according to their hybrid work implementation:

- Structured hybrid (n=7): Fixed schedules with designated office days
- Flexible hybrid (n=6): Employee-determined schedules with minimal requirements
- Function-based hybrid (n=5): Arrangements varying by department or role

3.2.2 Quantitative Data

Quantitative data were collected for 2,450 knowledge workers across the participating organizations. Data collection involved:

Objective productivity metrics appropriate to each role, collected for three time periods:

- Pre-pandemic (January-February 2020)
- Remote work period (April-May 2021)
- Hybrid work period (January-February 2023)

Organizational surveys measuring:

- Employee satisfaction and engagement
- Self-reported productivity
- Work-life balance
- Communication effectiveness
- Technology utilization

Productivity metrics were indexed within each organization to create comparable measures across different roles and companies, with pre-pandemic productivity normalized to a baseline of 100.

3.2.3 Qualitative Data

Qualitative data were collected through:

Semi-structured interviews with 175 participants:

- 65 managers with hybrid team responsibility
- 110 employees working in hybrid arrangements

Virtual focus groups (n=12) with 6-8 participants each, stratified by:

- Job level (individual contributor vs. management)
- Implementation approach (structured, flexible, function-based)

Interviews and focus groups explored participants' experiences with hybrid work, perceived impacts on productivity and wellbeing, challenges encountered, successful practices, and recommendations for improvement.

3.3 Data Analysis

3.3.1 Quantitative Analysis

Quantitative data were analyzed using:

- Comparative analysis of productivity indices across work arrangements, controlling for industry, job role, and organizational factors
- Multiple regression analysis examining relationships between hybrid work variables and productivity outcomes
- Moderation analysis investigating how individual and organizational factors influenced these relationships
- Latent growth curve modeling to examine productivity trajectories over time
- Cluster analysis to identify patterns in hybrid work effectiveness across employee segments

Analysis was conducted using R (version 4.1.2) and SPSS (version 28), with significance levels set at $p < 0.05$.

3.3.2 Qualitative Analysis

Interview and focus group data were analyzed using thematic analysis following Braun and Clarke's (2006) six-phase approach:

- Familiarization with the data through repeated review
- Generation of initial codes using NVivo 14 software
- Searching for themes among codes
- Reviewing themes for coherence and distinctiveness
- Defining and naming themes
- Producing the analysis with illustrative quotes

Intercoder reliability was established through independent coding of a subset of transcripts by two researchers, with Cohen's kappa of 0.82 indicating strong agreement.

3.4 Ethical Considerations

The research received approval from the institutional ethics review board. Informed consent was obtained from all participants, with clear explanations of data usage and confidentiality procedures. Organizations and individuals were anonymized in all reporting, and participants could withdraw at any time without consequence.

IV. RESULTS

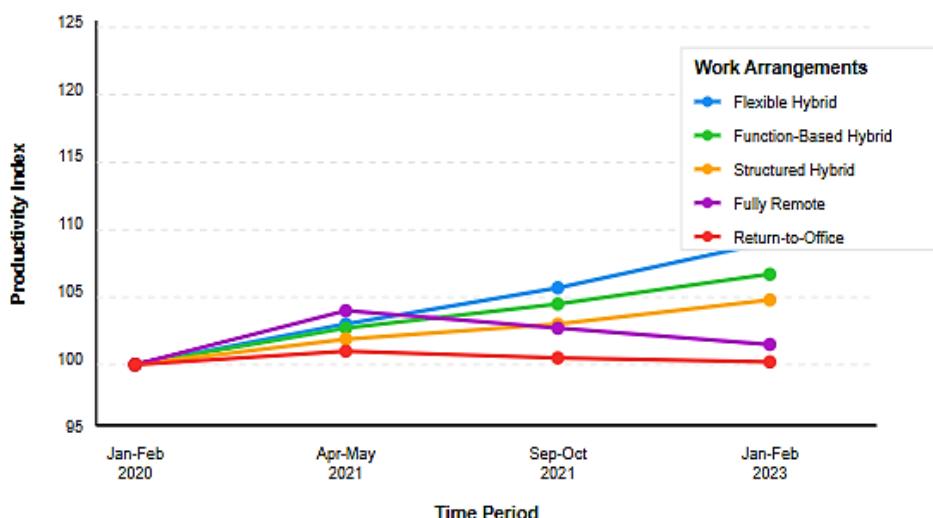
4.1 Productivity Trends Across Work Arrangements

Quantitative analysis revealed significant differences in productivity across work arrangements, with hybrid models generally outperforming both fully remote and traditional office-centric approaches when measured by objective performance metrics.

As shown in **Figure 1**, productivity indices indicate that after controlling for industry and organizational factors:

- Hybrid work arrangements were associated with productivity increases of 9-14% compared to pre-pandemic baselines
- Fully remote arrangements showed initial productivity increases of 5-7% during early implementation, but these gains diminished to 2-4% in sustained implementation
- Return-to-office arrangements (control group organizations that reverted to pre-pandemic models) showed no significant productivity change from baseline

Figure 1: Comparative Productivity Indices Across Work Arrangements (2020-2023)
Baseline (Pre-pandemic) = 100



Multiple regression analysis confirmed that hybrid work implementation was a significant predictor of productivity ($\beta = 0.38$, $p < 0.001$), explaining approximately 14% of variance in productivity outcomes after controlling for industry, organization size, and job function.

4.2 Variation in Hybrid Work Effectiveness

While hybrid work showed overall positive effects on productivity, considerable variation existed based on implementation approach, job characteristics, and individual factors.

4.2.1 Implementation Approach

Significant differences emerged between implementation approaches ($F(2,15) = 8.43$, $p < 0.01$):

- Flexible hybrid arrangements showed the highest productivity increases (mean increase: 13.7%, $SD = 3.2$)
- Function-based hybrid showed moderate increases (mean increase: 10.8%, $SD = 2.7$)
- Structured hybrid showed the smallest increases (mean increase: 8.9%, $SD = 3.5$)

However, deeper analysis revealed these differences were moderated by organizational factors, particularly management practices and technology infrastructure.

4.2.2 Job Characteristics

Cluster analysis identified distinct patterns in productivity effects based on job characteristics:

- High-autonomy knowledge work (e.g., research, content creation, programming) showed the largest productivity gains in hybrid settings (mean increase: 15.3%, $SD = 3.1$)
- Collaborative project work (e.g., consulting, product development) showed moderate gains (mean increase: 10.6%, $SD = 2.8$), with effectiveness heavily dependent on collaboration tools and practices
- Process-oriented work (e.g., administrative, operational) showed the smallest gains (mean increase: 5.2%, $SD = 3.4$) and greater variability in outcomes
- Client-facing roles showed mixed results, with high variability based on client preferences and communication infrastructure

4.2.3 Individual Factors

Moderation analysis identified several individual factors that significantly influenced the relationship between hybrid work and productivity:

- Self-reported ability to manage boundaries between work and personal life ($\beta = 0.31$, $p < 0.001$)
- Home work environment quality ($\beta = 0.28$, $p < 0.001$)
- Digital literacy and comfort with technology ($\beta = 0.25$, $p < 0.01$)
- Personality factors, particularly conscientiousness ($\beta = 0.24$, $p < 0.01$) and extraversion ($\beta = -0.18$, $p < 0.05$)

These findings suggest that hybrid work benefits may not be equally distributed across all employees, with personal characteristics and circumstances moderating productivity outcomes.

4.3 Mediating Factors in Hybrid Work Effectiveness

The research identified four key factors that mediated the relationship between hybrid work arrangements and productivity outcomes.

4.3.1 Technological Infrastructure

Technological capability emerged as a fundamental mediator, with organizations investing in comprehensive digital infrastructure showing significantly better productivity outcomes than those with minimal technology adaptations ($t(16) = 4.32$, $p < 0.001$).

Key technological components associated with positive outcomes included:

- Seamless virtual collaboration platforms with high reliability
- Digital process tools reducing dependence on physical documents or presence
- Connectivity solutions ensuring consistent access regardless of location
- Asynchronous work support tools enabling time-shifted collaboration

Quantitative analysis indicated that technological infrastructure quality explained approximately 27% of the variance in productivity outcomes across organizations.

4.3.2 Management Approach

Management practices emerged as a crucial mediator, with organizations emphasizing outcome-based management reporting productivity increases 7.2 percentage points higher than those maintaining presence-based approaches ($t(16) = 3.87$, $p < 0.01$).

Effective management practices identified through qualitative analysis included:

- Clear definition of measurable outcomes and deliverables

- Regular structured check-ins focused on progress and barriers
- Explicit trust-building practices acknowledging autonomy
- Adjusted communication cadences appropriate to distributed work

Regression analysis confirmed that management approach significantly mediated the relationship between hybrid implementation and productivity (Sobel test: $z = 3.41$, $p < 0.001$).

4.3.3 Organizational Culture

Organizational culture adaptation emerged as a significant mediator, with organizations actively evolving cultural norms showing stronger productivity outcomes than those attempting to maintain pre-pandemic cultural approaches ($F(2,15) = 9.12$, $p < 0.01$).

Cultural factors associated with positive outcomes included:

- Explicit emphasis on results rather than presence or activity
- Demonstrated trust in employee autonomy
- Inclusive practices ensuring equitable treatment regardless of location
- Normalization of flexibility in work arrangements

Cultural adaptation explained approximately 19% of variance in productivity outcomes across organizations.

4.3.4 Individualized Flexibility

Organizations allowing greater individualization in hybrid arrangements showed stronger productivity outcomes than those implementing uniform approaches ($t(16) = 2.93$, $p < 0.01$).

Key elements of effective individualization included:

- Consideration of role requirements and task interdependence
- Accommodation of personal circumstances and preferences
- Attention to career stage and development needs
- Recognition of variable home working environments

The data suggest that tailored approaches addressing individual differences may be more effective than standardized hybrid policies applied uniformly.

4.4 Qualitative Insights on Productivity Mechanisms

Thematic analysis of qualitative data revealed several mechanisms through which hybrid work arrangements appeared to influence productivity.

4.4.1 Reduced Interruptions and Enhanced Focus

A dominant theme across interviews (mentioned by 78% of participants) was the ability to match work location to task requirements, particularly performing deep focus work remotely to minimize interruptions. As one participant explained:

"When I need to write or analyze data, I work from home where I can focus for hours without disruption. For collaborative sessions or client meetings, I come to the office. This ability to match location to task type has been transformative for my productivity." (P43, Senior Analyst)

Many participants reported deliberately structuring their week to group collaborative activities on office days and deep focus work on remote days, creating a rhythm that enhanced overall productivity.

4.4.2 Reduced Commuting and Enhanced Working Time

Time savings from reduced commuting emerged as a significant factor, with participants reporting both longer effective working hours and reduced stress. Quantitative data indicated that hybrid arrangements saved an average of 5.4 hours weekly in commuting time, with approximately 41% of this time converted to productive work.

As one manager noted:

"My team is saving roughly 40-60 minutes daily on commuting. They're giving about half that time back to work, starting earlier or solving problems that would previously have been put off. The other half goes to personal life, which improves their overall wellbeing and energy." (P17, Director)

4.4.3 Improved Work-Life Integration

Improved ability to integrate work and personal responsibilities emerged as a productivity enabler for many participants, particularly those with caregiving responsibilities. Quantitative data showed that employees reporting high work-life integration in hybrid arrangements demonstrated 12% higher productivity than those reporting poor integration.

One participant explained this mechanism:

"The flexibility to handle personal matters when needed—picking up children, accepting deliveries, attending appointments—has eliminated the stress of managing these around rigid hours. I'm more focused when working because I'm not worried about these conflicts." (P91, Project Manager)

4.4.4 Enhanced Autonomy and Ownership

Increased autonomy in hybrid arrangements emerged as a productivity driver, with participants reporting greater ownership of their work processes and outcomes when given location flexibility. This theme aligned with self-determination theory's emphasis on autonomy as a key motivational factor.

As one employee described:

"When my organization trusted me to determine where and when I work best, it fundamentally changed how I approach my job. I feel more responsible for delivering results because I've been given control over how I achieve them." (P112, Developer)

V. DISCUSSION

5.1 Theoretical Implications

This study contributes to the evolving theoretical understanding of distributed work arrangements in several ways. First, it provides empirical support for conceptualizing hybrid work as distinct from remote work, with unique dynamics and outcomes rather than simply an intermediate point between office-centric and fully remote arrangements.

Second, the findings align with and extend self-determination theory by demonstrating how the autonomy afforded by flexible hybrid arrangements appears to enhance intrinsic motivation and performance. However, the variation in outcomes suggests important boundary conditions for this relationship, particularly related to individual differences and organizational support structures.

Third, the results challenge simple spatial determinism in workplace theory—the notion that physical collocation inherently produces superior outcomes for knowledge work. Instead, they suggest a more nuanced understanding where effectiveness derives from strategic matching of work activity to location and modality rather than universal application of either collocated or distributed approaches.

Fourth, the findings support sociotechnical systems perspectives by highlighting the interdependence of technological infrastructure and social factors in determining hybrid work outcomes. Neither technological capability nor cultural adaptation alone proved sufficient; successful implementation required alignment between these elements.

5.2 Practical Implications

The research offers several practical implications for organizations implementing hybrid work arrangements:

5.2.1 Differential Approach Based on Work Characteristics

Organizations should consider developing hybrid policies that account for differences in job functions, task types, and collaboration requirements rather than implementing uniform approaches. Function-based policies that differentiate between roles with different work patterns appear more effective than one-size-fits-all approaches.

5.2.2 Technological Investment Priorities

Technology investments should focus not only on meeting basic connectivity and collaboration needs but also on enabling seamless work transitions between locations and supporting asynchronous work processes. Organizations reporting the highest productivity maintained technological parity between office and remote environments, reducing friction in location transitions.

5.2.3 Management Development Requirements

Organizations should prioritize developing managerial capabilities specifically adapted to hybrid contexts, particularly:

- Outcome-based performance management skills
- Distributed team communication approaches
- Trust-building in limited-visibility environments
- Inclusive meeting facilitation addressing location disparity

The data suggest that managerial adaptation may be the most challenging aspect of hybrid implementation, requiring significant development investment.

5.2.4 Cultural Evolution Strategies

Organizations should approach culture adaptation as an explicit change management initiative rather than assuming cultural norms will naturally evolve to support hybrid arrangements. Successful organizations in the sample had implemented specific cultural interventions including:

- Leadership modeling of hybrid work practices
- Revised cultural artifacts and recognition systems
- Explicit discussion of new cultural norms
- Regular feedback mechanisms tracking cultural adaptation

5.2.5 Individualization Within Framework

The research suggests that productivity benefits are maximized when organizations provide a clear hybrid work framework while allowing reasonable individualization within that structure. This balanced approach provides necessary consistency while addressing individual differences that moderate effectiveness.

5.3 Limitations and Future Research

This study has several limitations that suggest directions for future research:

First, while the 18-month observation period provides valuable insights, longer-term studies are needed to understand the sustainability of productivity effects and potential adaptation patterns over time.

Second, the organizational sample, while diverse, overrepresents knowledge-intensive sectors and larger organizations with substantial resources. Future research should examine hybrid work in broader contexts, including smaller organizations and different industry sectors.

Third, the productivity measures, while more robust than self-report alone, still face challenges in capturing the full complexity of knowledge work outputs. Future research would benefit from even more comprehensive productivity measurement approaches.

Several promising directions for future research emerge:

- Longitudinal studies examining career development trajectories in hybrid environments
- Investigations of hybrid work effects on organizational innovation and creative output
- Research on hybrid work impacts on organizational diversity, equity, and inclusion
- Studies examining how hybrid arrangements affect organizational resilience and adaptability
- Investigation of potential negative long-term effects of reduced in-person interaction on organizational culture and social capital

VI. CONCLUSION

This research provides empirical evidence that well-implemented hybrid work arrangements can enhance employee productivity compared to traditional office-centric models. However, these benefits depend significantly on implementation approach, with technological infrastructure, management practices, organizational culture, and individualization opportunities mediating productivity outcomes.

The findings suggest that hybrid work represents not simply a compromise between remote and in-office arrangements but potentially a superior approach that strategically combines elements of both to enhance productivity. This optimization requires thoughtful implementation that accounts for the complex interplay between organizational systems, management practices, and individual differences.

As organizations continue navigating post-pandemic work arrangements, this research offers evidence-based guidance for designing hybrid work models that support productivity while providing the flexibility employees increasingly expect. The future of work appears neither fully remote nor a return to pre-pandemic models, but rather a nuanced hybrid approach that leverages the benefits of multiple work arrangements while mitigating their limitations.

REFERENCES

Alexander, A., De Smet, A., Langstaff, M., & Ravid, D. (2021). What employees are saying about the future of remote work. *McKinsey Quarterly*, April.

Bailey, D. E., & Kurland, N. B. (2002). A review of telework research: Findings, new directions, and lessons for the study of modern work. *Journal of Organizational Behavior*, 23(4), 383-400.

Barrero, J. M., Bloom, N., & Davis, S. J. (2021). Why working from home will stick. *National Bureau of Economic Research Working Paper No. 28731*.

Bartik, A. W., Cullen, Z. B., Glaeser, E. L., Luca, M., & Stanton, C. T. (2020). What jobs are being done at home during the COVID-19 crisis? Evidence from firm-level surveys. *National Bureau of Economic Research Working Paper No. 27422*.

Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. *The Quarterly Journal of Economics*, 130(1), 165-218.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.

Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, 32(5), 554-571.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.

Drucker, P. F. (1999). Knowledge-worker productivity: The biggest challenge. *California Management Review*, 41(2), 79-94.

Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92(6), 1524-1541.

Gibbs, M., Mengel, F., & Siemroth, C. (2021). Work from home & productivity: Evidence from personnel & analytics data on IT professionals. *University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2021-56*.

Golden, T. D., & Gajendran, R. S. (2019). Unpacking the role of a telecommuter's job in their performance: Examining job complexity, problem solving, interdependence, and social support. *Journal of Business and Psychology*, 34(1), 55-69.

Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods*, 18(1), 3-20.

Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., Bamberger, P., Bapuji, H., Bhave, D. P., Choi, V. K., Creary, S. J., Demerouti, E., Flynn, F. J., Gelfand, M. J., Greer, L. L., Johns, G., Kesebir, S., Klein, P. G., Lee, S. Y., ... Vugt, M. V. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologist*, 76(1), 63-77.

Laker, B., Godley, W., Patel, C., & Kudret, S. (2022). How to monitor remote workers ethically. *MIT Sloan Management Review*, 63(2), 1-4.

Microsoft Work Trend Index. (2021). The next great disruption is hybrid work—Are we ready? *Microsoft Corporation*.

Morikawa, M. (2022). Work-from-home productivity during the COVID-19 pandemic: Evidence from Japan. *Economic Inquiry*, 60(2), 508-527.

Neeley, T. (2021). *Remote work revolution: Succeeding from anywhere*. Harper Business.

Parker, S. K., Knight, C., & Keller, A. (2022). Remote managers are having trust issues. *Harvard Business Review*, 100(3), 53-61.

Trist, E. L., & Bamforth, K. W. (1951). Some social and psychological consequences of the longwall method of coal-getting: An examination of the psychological situation and defences of a work group in relation to the social structure and technological content of the work system. *Human Relations*, 4(1), 3-38.

Waizenegger, L., McKenna, B., Cai, W., & Bendz, T. (2020). An affordance perspective of team collaboration and enforced working from home during COVID-19. *European Journal of Information Systems*, 29(4), 429-442.

Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied Psychology*, 70(1), 16-59.

Yang, L., Holtz, D., Jaffe, S., Suri, S., Sinha, S., Weston, J., Joyce, C., Shah, N., Sherman, K., Hecht, B., & Teevan, J. (2022). The effects of remote work on collaboration among information workers. *Nature Human Behaviour*, 6(1), 43-54.