# xy max

#### **Exploring the Optimal Form of Hybrid Work**

From the perspective of the place of work and the allocation of time

March 11, 2022

## **Introduction: The objective of this Topic Report**

The introduction of telework by many companies due to the COVID-19 pandemic has finally begun to prompt the spread of a decentralized work style, which had been the focus of work style reforms since before the pandemic. Meanwhile, two years into the pandemic, issues are being pointed out concerning telework, which has more or less been forced on companies and deployed in a uniform manner. Whether telework enables innovation and whether employees should return to the office are also starting to be discussed.

However, since the primary purpose of telework is currently to prevent the spread of infection, there is room for improvement in matters such as the ease of work. Given such immaturity of the state of telework, it might be too early to pass judgment on this work style. A flexible work style not bound by the place of work has been aspired to as the preferred work style in Japan, which is facing an aging population and a falling birthrate. Efforts to promote telework should continue to be appreciated. What should be considered at the current stage are the specific ways to maximize the benefits of telework.

Xymax Real Estate Institute ("Xymax REI") has been proclaiming the effectiveness of hybrid work, which combines working in the office and telework, since before the pandemic, but at the same time, has deemed it difficult to propose a one-size-fits-all solution as the specifics of hybrid work are highly individual. However, even if such a solution does not exist, we believe it is worthwhile to present a better method for this moment. This report examines the current optimal solution for the "place" of work and "time allocation" by conducting a comprehensive analysis of the results of a company survey, \*1 a worker survey \*2 and an employee questionnaire survey carried out at Xymax. We hope that this report will prove to be a source for considering what kind of an environment companies should develop to achieve a work style that is beneficial and sustainable for both the workers and the company.

- \*1 Metropolitan Areas Office Demand Survey Autumn 2021, conducted in October 2021
  <a href="https://www.xymax.co.jp/english/research/images/pdf/20211222.pdf">https://www.xymax.co.jp/english/research/images/pdf/20211222.pdf</a>
  The survey covers companies located across Japan (Tokyo, Osaka, Aichi, Fukuoka, Kanagawa, Saitama, Chiba and other prefectures). Refer to the end of the report for the survey overview.
- \*2 Greater Tokyo Office Worker Survey 2021, conducted in September 2021
  <a href="https://www.xymax.co.jp/english/research/images/pdf/20211217.pdf">https://www.xymax.co.jp/english/research/images/pdf/20211217.pdf</a>
  The survey covers companies located in Greater Tokyo (Tokyo, Kanagawa, Saitama and Chiba prefectures).
  Refer to the end of the report for the survey overview.

#### Summary

The telework implementation rate in the autumn 2021 survey was 68.5% at companies and 67.3% among workers, both a record high. However, the current, actual form of telework is almost completely work from home.



- In the company survey, a larger percentage of <u>companies that also used a satellite office</u> replied that <u>the performance of their employees improved</u> from before the pandemic compared to companies that only adopted work from home.
- The internal survey at Xymax also <u>suggested the possibility that workers' productivity</u> <u>when working in the head office might improve by using a diverse range of workplaces</u> compared to when working only in the head office and home.
- As for the ideal frequency of telework, only 24.6% of those who want to telework wanted to telework for an equivalent of 5 days a week. <u>Around 60% wanted to telework for an</u> <u>equivalent of 2–4 days a week</u>, indicating that <u>a majority of workers preferred hybrid</u> <u>work</u>, which combines coming to the office and teleworking.
- A telework frequency of 3 days a week or more results in a greater probability of improvement in performance and engagement. However, we found that while the probability of performance improvement rises as the frequency of telework increases, the probability of improvement in engagement does not rise even if the telework frequency increased to 4 days a week or more. This means that while performance improves as the work style approaches a fully remote work style, engagement may drop compared to when the telework frequency is an equivalent of 3 days a week. This implies the possibility that the ideal telework frequency when focusing on improvement in engagement is an equivalent of 3 days a week.
- The telework frequency that results in greater performance varies between job categories. For example, the probability of performance improvement tends to rise when the frequency is an equivalent of 4 days a week for clerical and corporate jobs and an equivalent of 5 days a week for specialized and sales jobs.



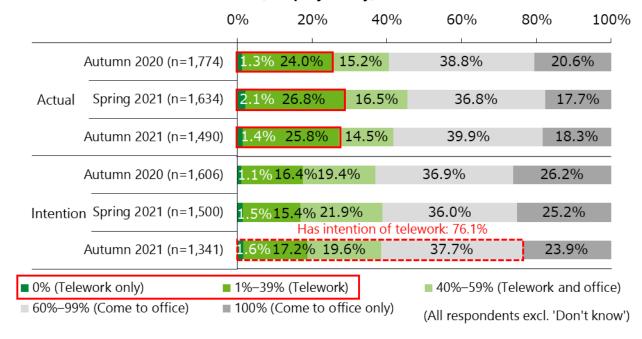
### 1. Telework Taking Root

The rapid spread of telework due to the COVID-19 pandemic is beginning to shake the conventional idea that office work is carried out by commuting to the office in the city center every day.

According to the company survey conducted by Xymax REI (autumn 2021), as much as around 30% of all companies kept the ratio of employees coming to the office to less than 40% (equivalent to all employees coming to the office for an average of 2 days a week). The ratio has been roughly unchanged since the autumn 2020 survey (Figure 1). As for intentions for after the end of the pandemic, only 23.9% of the companies intended to have their employees fully return to the office even in the latest autumn 2021 survey. The remaining 76.1% intended to continue implementing telework in varying degrees. In other words, telework is unlikely to end as a stopgap measure for an emergency situation or a temporary boom, but is likely to take root in the future as an ordinary work style. The pandemic has brought about irreversible changes to work styles and the place of work.

Figure 1: Coming-to-office Ratio (Actual and Intention; Comparison with Previous Surveys)

(Company Survey)

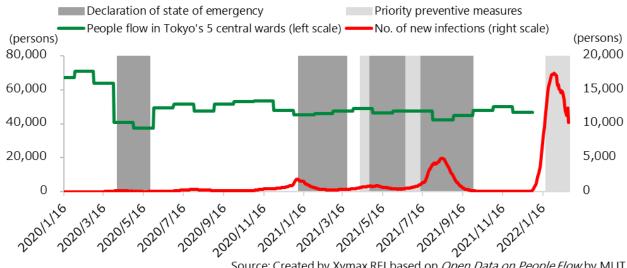


We can confirm from the open data on people flow released by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) that commuting to city centers is reduced due to the pandemic. **Figure 2** shows the number of people (people flow) in Tokyo's five central wards, the number of new COVID-19 infections and the timing of declarations of a state of emergency and priority preventive measures in chronological order. It also indicates that the change in people flow is influenced more by societal measures such as the declaration of a state of emergency than the number of infections itself and that the reduction in the coming-to-office ratio, which was seen immediately after the first declaration of a state of emergency (April 2020), became customary even after the state of emergency was lifted and continued to this day.

In other words, there is a good chance that the current work style with reduced commuting to city centers will continue even if the number of infections drops to almost zero after the pandemic has abated and take root as an ordinary work style.



Figure 2: Relationship between People Flow of Five Central Wards of Tokyo, Number of New Infections and Timing of Declaration of State of Emergency and Priority Preventive Measures



Source: Created by Xymax REI based on *Open Data on People Flow* by MLIT (https://www.geospatial.jp/ckan/dataset/mlit-1km-fromto) and *Visualizing the data: information on COVID-19 infections* by the Ministry of Health, Labour and Welfare (https://covid19.mhlw.go.jp/en/)

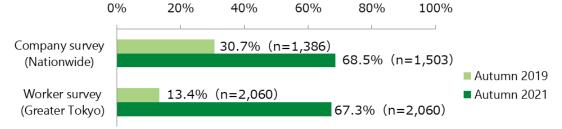
Furthermore, these work style changes may also affect the conventional urban structure that is based on the separation of the workplace and the home. According to the *2021 Report on Internal Migration in Japan*\*<sup>3</sup> released by the Statistics Bureau, Ministry of Internal Affairs and Communications (MIC), out-migration from Tokyo's 23 wards exceeded in-migration for the first time since 2014, while net migration of entire Tokyo dropped to a new low also for the first time since 2014. As the places for office work, which had been limited to central Tokyo, have begun to spill out to the periphery, places where people live and their movement trends will change, which could trigger a shift in the structure of overconcentration in Tokyo.

\*3 Source: Results of the 2021 Report on Internal Migration in Japan. January 28, 2022, Statistics Bureau, MIC

The reduction of employees going to the office in city centers is supported by telework. Xymax REI has been continuously studying the telework implementation rate\*4 by companies and workers since before the pandemic. In the latest autumn 2021 survey, the **telework implementation rate reached a record high both among companies (68.5%) and workers (67.3%)**, showing a significant growth from the autumn 2019 survey (**Figure 3**). Before the pandemic, telework was introduced in the context of work style reforms mainly by large companies as a special measure for employees with childcare or elderly care needs. **Due to the pandemic, it is now expanding its horizon as a work style to be used by many office workers**.

\*4 "Telework implementation rate" in this report refers to the percentage of companies providing or implementing at least one of the following: A work-from-home policy; a satellite office, etc. provided by a specialized operator, etc.; or a satellite office, etc. owned or rented by own company.

Figure 3: Telework Implementation Rate (vs Autumn 2019 Survey; Company and Worker Comparison)





#### 2. Place of Work: Current State and Ideal State

As mentioned in the previous chapter, telework has been spreading steadily due to the pandemic. However, **it is almost completely work from home**. For example, while 61.3% of companies provide a work-from-home policy, only 19.2% have a satellite office, etc. provided by a specialized operator, etc. and 8.3% a satellite office owned or rented by own company **(Figure 4)**.

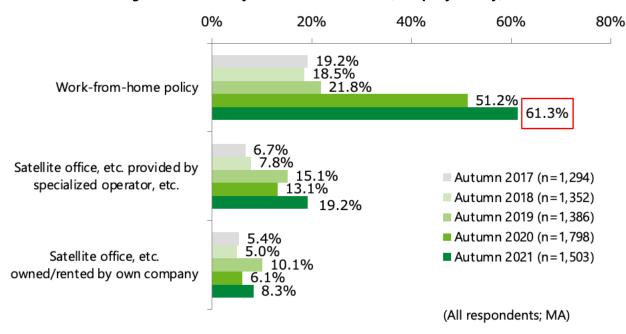


Figure 4: Availability of Place for Telework (Company Survey)

When we look at the average time workers allocate to each place of work, their regular office accounted for 60.7% of their work time and their home accounted for 36.9%, indicating that **the situation of workplaces is far from being diverse (Figure 5)**.

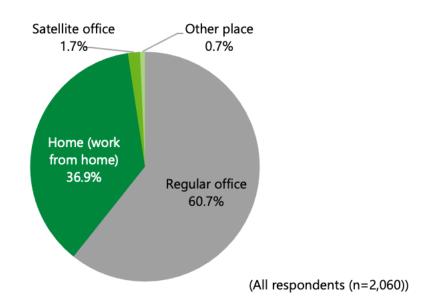


Figure 5: Average Time Allocation in Each Place of Work (Worker Survey)



As telework is currently aimed at preventing the spread of infection, there are not many choices of workplaces, and workers may be forced to work in an environment not suited for work.

In fact, when asked about their dissatisfaction with working from home, a certain percentage of workers replied that they lacked the necessary environment for work, including monitors and other devices, space and appliances suited for work, and internet connection, even at the time of the autumn 2021 survey, which was about 1.5 years into the pandemic (**Figure 6**). This revealed that not a few workers were **forced to work from home in an environment not suited for work**. Continuing to work in such conditions would lead to lower performance and engagement in the organization and could have an adverse effect on workers' physical and mental health.

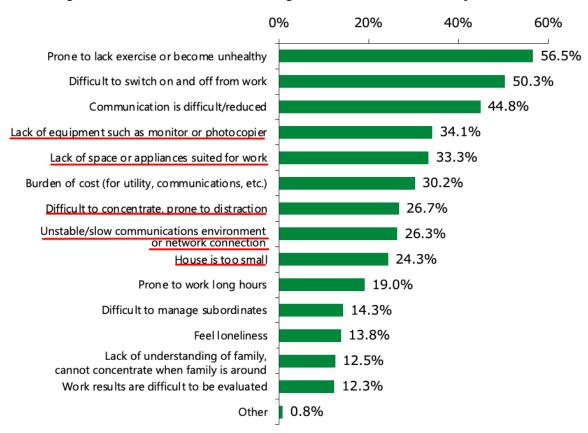


Figure 6: Dissatisfaction with Working from Home (Worker Survey)

(Workers with work-from-home experience who feel dissatisfaction (n=1,319); MA)

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Companies also had dissatisfactions with the work-from-home policy. When we asked companies that intended to use a satellite office after the end of the pandemic the reason for their intention, 65.3% of the companies replied, "To compensate for the disadvantages of working from home (e.g., difficulty in concentrating, family nearby, house too small)." Additionally, as much as 32.0% of the companies replied, "To compensate for the disadvantages of working from home (e.g., management, attendance management, security)." This indicates that **companies also felt the disadvantages of working from home, which has become the primary place for telework, and required places such as a satellite office as a solution (Figure 7)**.

0% 20% 40% 60% To compensate for disadvantages of WFH (e.g., 65.3% difficulty in concentrating, family nearby, house too small) 59.1% To reduce employees' commute/travel time To improve employees' work-life balance 43.1% 34.1% To improve employee satisfaction To compensate for disadvantages of WFH 32.0% (e.g., management, attendance management, security) 24.9% To reduce office costs To support balance between work and 24.7% child/elderly care Enables employees to refresh, promotes health of 18.2% employees 17.9% BCP (business continuity plan in times of disaster) To reinforce hiring and reduce turnover 11.4% To promote diversity (utilization of women, 10.3% elderly, foreign nationals) 3.0% Other No answer (Companies that intend to use a satellite office in the future (n=369); MA)

Figure 7: Reason for Wanting to Use a Satellite Office in the Future (Company Survey)



**Figure 8 shows the effectiveness of introducing a satellite office in addition to a work-from-home policy when companies adopt telework**. The percentage of companies replying that their employees' performance improved (the sum of "Improved significantly" and "Improved somewhat") from before the pandemic was 21.6% among companies that introduced both a work-from-home policy and a satellite office, significantly higher statistically than companies that only introduced a work-from-home policy (12.7%).

0% 10% 20% 2.1% Work-from-home and satellite office (n=236)19.5% Satellite office only (n=102)4.9% 8.8% 11.9% Work-from-home only (n=614)0.8% Improved significantly Neither (n=452)1.5% 7.5% 9.0% Improved somewhat

Figure 8: Employees' Performance Compared to before the Pandemic (by Status of Introduction of Telework) (Company Survey)

(All respondents excl. companies that replied 'Don't know' in performance assessment (n=1,404))

However, this does not mean that working from home is bad. In the worker survey, as much as **73.8%** of the workers wanted to implement working from home after the end of the pandemic. Indicators such as worker satisfaction and well-being have become increasingly important in recent years also from the perspective of corporate competitiveness. Depending on how it is introduced, working from home offers significant benefits in terms of employees' work-life balance and stress reduction.

What is important is to **not adopt a work-from-home policy as a last resort and as a downward compatible to coming to the office but to position it as one of a diverse range of workplace choices and create an environment that allows workers to choose wherever they want to work.** As mentioned earlier, it is too early to pass judgment on telework, for both companies and workers, when the only available workplace options are the office and the home. We believe that a work style where workers can choose the place of work that is best for them from among a diverse range of workplaces and have the best of each workplace could become an ideal form of hybrid work.



# <PICK UP> Relationship between using different workplaces and work assessment –Xymax's endeavor to provide a diverse range of workplaces–

The Xymax Group has been endeavoring to provide a diverse range of workplaces. In addition to its head office and a work-from-home program, it provides a satellite office, dedicated to Xymax, and ZXY, a satellite office service for corporations, as the workplaces for its employees, and is developing an environment that allows employees to choose where they work. A questionnaire survey of employees working in this environment implied that a diverse range of workplaces could be effective in improving productivity. We will share the results of the analysis in this column.

In the questionnaire, we asked employees to rate working in the head office in terms of the following six indicators that affect work productivity on a scale of 0 to 10, with 5 being when working from home: (1) physical productivity; (2) added value productivity; (3) loose communication; (4) communication of a negative topic; (5) sense of unity with the organization; and (6) motivation.

We analyzed using a logistic regression model\*5 with the explained variables being whether the ratings of "(1) physical productivity" and "added value indicators" (the sum of (2) to (6)) are higher than when working from home, and the explanatory variables the workplace chosen by the worker (head office and home only; head office only; and different places including own satellite office and ZXY) and job categories.

\*5 A method of excluding the impact of other explanatory variables and presenting only the impact of each explanatory variable.

As a result, we found that those who alternated between different workplaces during the survey period were more likely to have higher ratings for both "(1) physical productivity" and "added value indicators of (2) to (6)" when working in the head office than when working from home compared to those who only worked in the head office and the home (Figure 9). This trend was not observed among those who only worked in the head office (refer to the end of the report for details of the analysis).

This result points to a possibility that the **productivity of working in the head office increases by using a diverse range of workplaces**. A likely reason for this is that those who choose where to work by themselves work at each place with a clear sense of purpose than those who do not choose their workplace by themselves. Providing a diverse range of workplace choices to workers would be an effective and feasible way to encourage this kind of voluntary work style and improve workers' performance.

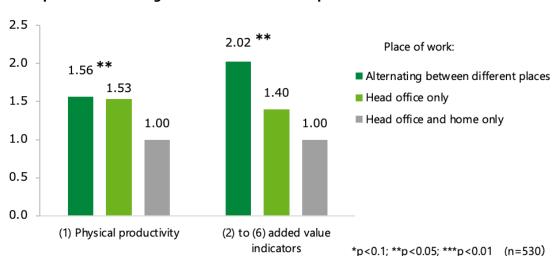


Figure 9: Impact of Alternating between Different Workplaces on Assessment of Work Productivity



# 3. Relationship between Telework Frequency and Assessment Indicators

In Chapter 2, we confirmed the importance of having a diverse range of "places" as one of the preferred directions to take in utilizing telework. In Chapter 3, we will examine "time," i.e., the frequency of telework.

According to our worker survey, as much as 30.2% of teleworkers currently more or less fully teleworked (teleworking for an equivalent of 5 days a week (81–100% of their total work hours assuming a 5-day work week)). However, in terms of future intentions, the **percentage of those who wish to telework who wish to do so for an equivalent of 5 days a week decreased to 24.6%, while the percentage of those who wish to telework for an equivalent of 2 to 4 days a week (21–80% of their total work hours) increased (Figure 10)**.

Discussions on telework usually focus on the benefits to workers (e.g., elimination of the burden of commuting, improvement of work-life balance) rather than the benefits to companies. However, the reality is that not all workers wish to fully telework but that **the majority of workers are more oriented toward a hybrid work style, which combines teleworking and coming to the office**.

0% 20% 40% 60% 80% 100% 2-4 days a week equivalent: 46.0% Actual (n=1,395) 23.8% 13.3% 14.0% 18.8% 30.2% -4 days a week equivalent: 59.6% Intention (n=1,567) 15.8% 16.1% 22.7% 20.8% 24.6% 2 days/week equivalent (21-40%) ■ 1 day/week equivalent (up to 20%) 3 days/week equivalent (41–60%) ■ 4 days/week equivalent (61–80%) ■ 5 days/week equivalent (81–100%)

Figure 10: Teleworkers' Telework Frequency (Actual and Future Intention) (Worker Survey)

([Actual] Teleworkers; [Intention] Those who wish to telework)

In order to explore the best allocation of time between coming to the office and teleworking in hybrid work, we set workers' performance and their engagement in their organization as the outcomes (performance indicators to ultimately control) and examined the relationship between the frequency of telework.

In the worker survey, we asked workers who teleworked (regardless of the number of days) to self-assess their current performance and engagement, with 100 being when coming to the office 5 days a week. To identify the impact of telework frequency on the self-assessment, we conducted a logistic regression analysis with the explained variable being whether the current performance and engagement were each higher than when coming to the office 5 days a week and the explanatory variable being the telework frequency.



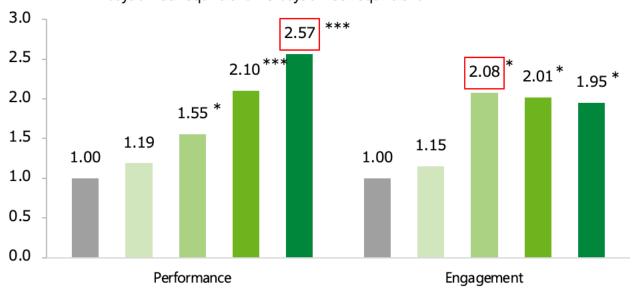
**Figure 11** is the result of the analysis. The more asterisks there are, the larger the statistically significant impact. Each figure represents an odds ratio: the larger the figure is than 1 (and with an asterisk), the more likely the current performance and engagement improve with each telework frequency. On the contrary, the less the figure is than 1, the less likely.

Figure 11: Impact of Telework Frequency on Performance and Engagement Assessment (Worker Survey)

				Explained variable: Current assessment of following vs coming to the office 5 days/week					
				Performance	Engagement				
Explanatory	variable		Telework frequency: 2 days/week	1.19	1.15				
		variable (Excerpt)	variable (Excerpt	able erpt	able	able erpt	Telework frequency: 3 days/week	1.55 *	2.08 *
				Telework frequency: 4 days/week	2.10 ***	2.01 *			
			Telework frequency: 5 days/week	2.57 ***	1.95 *				

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01 (n=1,313)

■ 1 day a week equivalent ■ 2 days a week equivalent ■ 3 days a week equivalent ■ 4 days a week equivalent ■ 5 days a week equivalent



**Figure 11** indicates that the probability of both performance and engagement to improve rises significantly if the telework frequency is an equivalent of 3 days a week or more. However, we found that while the probability of performance improvement tends to rise as the frequency of telework increases, the probability of improvement in engagement does not rise even if the telework frequency increased to 4 days a week or more (refer to the end of the report for details of the analysis). This means that **while performance improves as the telework frequency is increased and approaches a fully remote work style, engagement may drop compared to when the telework frequency is an equivalent of 3 days a week.** 

For companies, it is not only the performance but also the engagement of employees that is important as an indicator. In recent years and especially after the outbreak of the COVID-19 pandemic, there has been

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a rise in society's demand for companies' awareness toward SDGs. Companies' responsibility for their employees' work environment and mental/physical health is increasing. To consider employees' engagement in the organization will become more important than before also from the perspective of maintaining long-term corporate competitiveness. This analysis suggests that, in view of these circumstances, the most optimal telework frequency could be 3 days a week if companies are to focus on maximizing engagement.

The above is the result by all persons subject to the analysis. However, the impact of telework frequency on performance and engagement may differ depending on the attributes (e.g., gender, age, sector, job category, position) of the worker. Therefore, we then conducted multiple analyses for each worker attribute and found a distinct characteristic in the relationship between telework frequency and performance by job category. The figures in **Figure 12** (odds ratios; figures with one or more asterisks are statistically significant results) indicate that the **frequency of telework affects performance in all job categories and that the telework frequency that improves performance varies between job categories.** 

For example, the results imply that the probability of a significant improvement in performance in clerical jobs rises from a telework frequency of 3 days a week and that the probability is greatest when the frequency is 4 days a week. Similarly, the results imply that the probability of performance improvement rises when the telework frequency is 4 days a week for corporate jobs and 5 days a week for specialized and sales jobs (refer to the end of the report for details of the analysis).

Figure 12: <By Job Category> Impact of Telework Frequency on Performance Assessment (Worker Survey)

			Explained variable: Current performance vs when coming to the office 5 days/week				
			Specialized job   Corporate job   Sales job   Clerical job   (n=403)   (n=363)   (n=294)   (n=194)				
		Telework frequency: 2 days/week	` '	1.17	0.70	2.72	
atory Ible	rpt)	. , ,		1.01	1.35	5.33 **	
Explanatory variable	Varia (Exce	Telework frequency: 4 days/week	1.27	2.20 *	1.55	15.78***	
Ш		Telework frequency: 5 days/week	2.39 **	1.82	3.82 ***	6.43 **	

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01 Other jobs (n=59) are omitted

These results suggest that an almost fully remote work style is good for specialized and sales jobs if the focus is only on maximizing performance in hybrid work. However, as mentioned earlier, this choice may harm employee engagement as well as long-term corporate competitiveness, and thus requires careful judgment by the companies. Note that no result on engagement that is worth mentioning was obtained from the analysis by job category. A possible reason for this is that since engagement as an indicator is resistant to the effects of differences between job categories, the number of samples was small when divided by job category, resulting in a lack of significant results.



## 4. Summary

In searching for the current optimal solution for hybrid work, we focused on telework, which many companies are still exploring, and examined the optimal form for each of the two factors of "place" and "frequency." The result implied that the most appropriate in terms of place could be a diverse range of choices from which workers can choose, and around 3 to 5 days a week in terms of frequency, although this varies depending on the job category and the desired outcome.

However, it must be noted that these are only the results of analyses based on the current state of telework. As mentioned in Chapter 2, the current state of telework is still immature in that workers cannot choose their place of work. Should this situation improve in the future, the optimal frequency of telework may also change. Furthermore, what companies set as their outcome will also vary between companies.

At the same time, as long as hybrid work is aimed at maximizing outcome by alternating between teleworking and coming to the office, the role of the main office is also an important issue that should also be considered.

As we described in Chapter 1, the ratio of employees coming to the office in city centers remains reduced due to the prolonged pandemic and is unlikely to return to 100% even after the pandemic abates. For companies, a more urgent issue than how to utilize telework is how to deal with the unused office space and the unnecessary rent payment, which they currently face. Going forward, we expect the **main office** to be optimized and the strategy for the overall workplace, including the introduction of a satellite office, to be reconsidered in the process. We also expect companies to begin exploring their ideal form of hybrid work.

In any case, we believe **companies that think they only have to simply return to the way they used the office before the pandemic have become a minority**. For many workers who experienced a new work style during the pandemic, returning to the past for lack of strategy would lead to distrust in the organization and a decline in the organization's cohesiveness. It will also have a negative effect not only on securing human resources but also on labor productivity and innovation. While not all companies need to adopt hybrid work, if companies are to require their employees to return to the office, it will be essential for them to convey such intentions as the company's message.

With the number of infections failing to decline as desired and further prolongation of the pandemic feared, it is difficult to predict the outlook of the pandemic. Although the results of the analyses are provisional, it should provide a source for strategy formulation in times when companies are required to be agile against rapid changes in the business environment. Workplace strategies are becoming increasingly important as a management issue that companies should continue to consider in order to achieve sustainability. Xymax REI intends to continue providing material that will serve as a guide.



**Survey Overview** 

Survey title	Metropolitan Areas Office Demand Survey Autumn 2021
Survey period	October 26–November 7, 2021
Target respondents	Emails were sent to 42,581 companies in total that include:  • Tenant companies in office buildings managed by the Xymax Group  • Companies subscribing to ZXY, a satellite office service for corporations  • Client companies of XYMAX INFONISTA Corporation
Number of valid answers	1,503; response rate: 3.5%
Geographical coverage	Nationwide (Tokyo, Osaka, Aichi, Fukuoka, Kanagawa, Saitama, Chiba prefectures and others)
Survey method	Email

Survey title	Greater Tokyo Office Worker Survey 2021
Survey period	September 10–12, 2021
Target respondents	<ul> <li>(1) Screening: 5,000 men and women aged 18 and above</li> <li>(2) Main survey: Those who replied in the screening that their profession was either an officer or staff of a company or organization, whose job category was managerial, specialized/technical, clerical or sales, whose regular office was located in Greater Tokyo (Tokyo, Kanagawa, Saitama and Chiba prefectures), and whose current and pre- pandemic primary workplace was the office or home.</li> </ul>
Number of valid answers	2,060
Geographical coverage	Greater Tokyo (Tokyo, Kanagawa, Saitama and Chiba prefectures)
Survey method	Online

The percentage mix in the charts contained in this report are rounded to the first decimal place and therefore may not add up to 100%.



# **Details of the Analyses**

#### Variables of the logistic regression analysis conducted in Figure 9

Variable	Description	Unit
(1) Physical productivity dummy	With rating of "(1) physical productivity" when working from home at 5, "1" if rating for working in head office is 6 or more; "0" if it is 5 or less	(0,1)
(2) to (6) Added value indicator dummy	When rating of "(2) added value productivity," "(3) loose communication," "(4) communication of negative topic," "(5) sense of unity with the organization," and "(6) motivation" when working from home is 5 each, "1" if the total score when working in the head office is 26 or more; "0" if it is 25 or less	(0,1)
Place of work	Three categories: Head office and home only $(n=153)$ ; head office only $(n=7)$ ; different places (at least one of following: head office, own satellite office or ZXY) $(n=370)$	-
Job category	Four categories: Specialized, sales, corporate, clerical	-

#### Details of the results of Figure 9 (figures represent odds ratios)

		Explained variable: Productivity in head office			
		vs working from home			
		(2) to (6) added value indicators			
ple	Place of work: Different places	1.56 **	2.02 **		
variable	Place of work: Head office only	1.53	1.40		
Explanatory	Job category: Clerical	1.24	1.15		
	Job category: Sales	2.85 ***	1.09		
Exp	Job category: Corporate	2.36 **	3.02 *		

<sup>\*</sup>p<0.1; \*\*p<0.05; \*\*\*p<0.01 (n=530)





#### Variables of the logistic regression analyses conducted in Figures 11 and 12

Variable	Description		Figure 11Figure 12	
Performance dummy	"1" if performance due to current work style is higher than when coming to office 5 days/week; "0" if lower		✓	✓
Engagement dummy	"1" if engagement due to current work style is greater than when coming to office 5 days/week; "0" if smaller	(0,1)	✓	<b>✓</b>
Age	Actual number	years	✓	✓
Commute	Actual commute time to main office	minutes	✓	✓
Job position dummy	"1" if officer or management; "0" if not	(0,1)	✓	✓
Number of employees dummy	"1" if respondent's company has 1,000 or more employees; "0" if not	(0,1)	✓	✓
Telework frequency	Five categories: 1 day/week equivalent (1–20% of total work hours based on 5-day work week); 2 day/week equivalent (21–40% of same); 3 day/week equivalent (41–60% of same); 4 day/week equivalent (61–80% of same); 5 days/week equivalent (81–100% of same)	-	✓	✓
Number of measures implemented by the company	Actual total number of measures implemented from among seven work style-related measures (using a system that enables workers to check emails and schedules anywhere with smartphone or mobile PC (mobile work); using a system that enables workers to work outside the office in the same network environment as the office with smartphone or mobile PC (mobile work); providing IT device such as smartphone, mobile PC and tablet to employees to enable mobile work; using chat tools for work; using online conference tools; flextime program; work-from-home allowance (for supplies, utility costs, etc.)	-	✓	✓
Job category	Five categories: Clerical, specialized, sales, corporate, other	-	✓	-



#### Details of the results of Figure 11 (figures represent odds ratios)

	Explained variable: Current assessment of follow		
	vs coming to the office 5 days/wee		
		Performance	Engagement
	Age	0.98 ***	0.97 ***
	Job category: Clerical	1.01	1.12
	Job category: Sales	1.00	0.91
e e	Job category: Corporate	1.14	0.89
iabl	Job category: Other	1.23	1.22
Explanatory variable	Commute	1.01 **	1.00
tony	Job position: Officer, management	0.99	1.26
ana	Employees: 1,000 or more	0.98	0.80
dx	Telework frequency: 2 days/week	1.19	1.15
"	Telework frequency: 3 days/week	1.55 *	2.08 *
	Telework frequency: 4 days/week	2.10 ***	2.01 *
	Telework frequency: 5 days/week	2.57 ***	1.95 *
	No. of measures by company	1.11 ***	1.02

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01 (n=1,313)

#### Details of the results of Figure 12 (figures represent odds ratios)

		Explained variable: Current performance				
		vs when coming to the office 5 days/week				
		Specialized job	Corporate job	Sales job	Clerical job	
		(n=403)	(n=363)	(n=294)	(n=194)	
	Age	0.98	0.98	0.95 ***	0.98	
a u	Commute	1.01 *	1.01	1.01 **	0.99	
variable	Job position: Officer, management	1.35	0.99	0.85	0.29 *	
	Employees: 1,000 or more	0.86	1.37	0.83	1.07	
tory	Telework frequency: 2 days/week	1.23	1.17	0.70	2.72	
Explanatory	Telework frequency: 3 days/week	2.09	1.01	1.35	5.33 **	
ldx	Telework frequency: 4 days/week	1.27	2.20 *	1.55	15.78 ***	
"	Telework frequency: 5 days/week	2.39 **	1.82	3.82 ***	6.43 **	
	No. of measures by company	1.06	1.35 ***	1.00	0.92	

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01 Other jobs (n=59) are omitted

# For further inquiries please contact below:

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