

Practices Around Working from Home and Early Indicators on Returning to Work after the COVID-19 Pandemic: Survey from Microsoft China

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ABSTRACT

An online survey administered to employees of Microsoft China during the COVID-19 pandemic gathered information about their practices around working from home and their return to work after the soft re-opening of their workplaces. The 475 responses from the Beijing, Shanghai, and Suzhou sites provide a comparison for how the practices in China are similar to or different from data reported in other parts of the world. Since workplaces in China opened earlier than many places in the world, the data also give early indicators around practices in returning to work. The data show how employees enacted a hybrid work practice mixing working from home and going into the office, and what factors led to their decisions about how to return to work.

1 The COVID-19 Pandemic Workplace Response in Microsoft China

January 23, 2020 at 2 am, Wuhan issued the first notice of lockdown to prevent the spread of the pandemic. Microsoft China responded quickly and closed all office facilities in mainland China until February 9, which was then extended twice to February 17 based on the severity of the situation. Employees were required to work from home during this period. On February 17, when the situation was dramatically eased and new daily cases in Beijing were reduced to single digits, offices in mainland China cautiously reopened and allowed employees to enter, although people were still encouraged to work from home to minimize risks. From March 13, the company started to welcome employees to come back. The data show that the daily number of employees coming to office gradually increased since then, but still not back to the normal level.

Whether work-from-home is the future of our work life has attracted a lot of attention and discussions recently. Many companies have put this into practice. However, it is still generally conducted on a case by case basis, and has never been tested on a large scale due to potential risks. Although unfortunate, the COVID-19 pandemic has placed people in a large uncontrolled experiment to help us study this topic. First, people were forced to work from home, then they worked in a hybrid mode in which they needed to decide how to divide their work between home and office settings based on various considerations. Employees in Microsoft China have been working in the hybrid mode for more than four months. Their practices and experiences of the employees are largely stabilized and may open a valuable window to help us understand the pros and cons of different work modes, and shape best practices for the work norm of the future.

In June 2020, we conducted an online survey of Microsoft China employees (including engineers, PMs, researchers, UX designers, sales/marketing, etc.), to understand their remote work experiences and productivities. In the survey, we asked questions about their productivity, work environment, collaboration experience, time arrangement, etc. Our data can be compared with other data collected around the world. Through comparison among experiences around the world, we can understand the effects of different cultures and environments and learn best practices for the future remote work experience.

The survey was sent out between June 2-5 through Microsoft Forms. In total, we invited 3170 employees in Microsoft China to participate in the survey and received 475 responses by June 16 (response rate: 15.0%). The survey was completely anonymous, contained 38 questions in total and took about 15 minutes to complete.

2 Results

We report the initial analysis results of the survey data. The results are explained from two directions, practices around working from home during the pandemic and the indicators about how people choose to work from home or office after the China offices soft opened. Although the results give good indicators for working from home practices, they are not typical working from home experiences. For example, during COVID-19, the home working environment might be complicated by having an entire family in the home and lack of available care options for children, and a high level of anxiety. In addition, please note that the results are based on only 475 responses from our survey, the statistics are likely to change if more data are collected.

2.1 Practices Working from Home During the Pandemic Response

First, we check people's environment work at home. It seems that most people have a decent environment. About 60% respondents reported having a private room and 16% a shared room. Only 15% of the respondents do not have a dedicated workspace.

However, it takes more than space to make a good work environment. People also find their workplace at home is not ready. From the responses, they find their home workplace is not a better work environment and they have insufficient workplace setups. As shown in Figure 2, 41.7% respondents do not agree they have a better work environment compared with the office, while 29.5% are neutral; more than half respondents (51.5%) agree the workplace setups (e.g., network connection, monitors, ergonomic desks, and chairs) are not sufficient. The respondents find workplace setups are important. One respondent mentioned, *"The network (VPN) is very important for WFH. And regular sync up meeting with team more frequently could make the team member feel more like work at office."* Another commented, *"Dedicated room and high spec hardware improve productivity."* People also try to improve setups during working from home period, *"I purchased monitors, keyboard, and mouse. But the limited space at home is a problem that can't be resolved."*

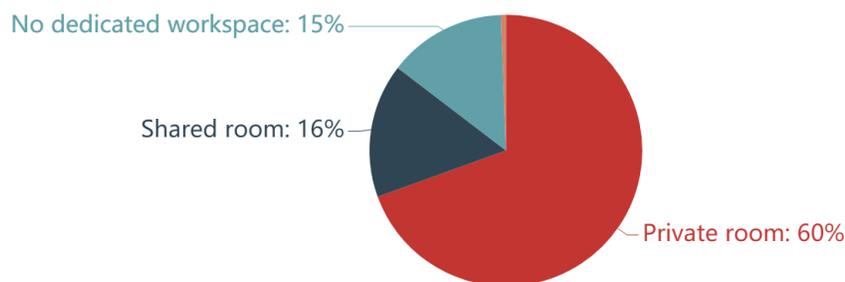


Figure 1: Distribution of people's home work environment when working from home

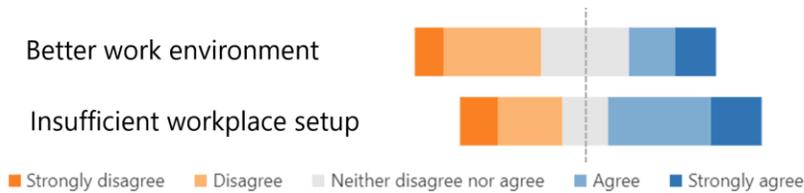


Figure 2: Likert scale rating of agreement of the statement “I have a better work environment at home” and “I have insufficient workplace setup (e.g., network connection, monitors, ergonomic desks and chairs, etc.)” from strongly disagree to strongly agree.

Respondents reported higher perceived personal productivities (6% significantly more productive, 31% more productive, 43% about the same, 18% less productive, 1% significantly less productive) and even higher satisfaction when working from home during COVID-19 (22% very satisfied, 45% somewhat satisfied, 15% neither satisfied nor dissatisfied, 14% somewhat dissatisfied, 5% very dissatisfied). They felt more autonomy (58.6% agree and strongly agree, 27.4% neutral, 13.9% disagree and strongly disagree) and less distracted in work (48.5% agree and strongly agree, 22.8% neutral, 28.5% disagree and strongly disagree). One respondent mentioned, “More focus time and less interruption by other conversations in the open workspace.” Another participant responded, “It takes to some time to adjust to the way of WFH. Once you get used to it, it gives you more control of your time.”



Figure 3: Likert scale rating of agreement of the statement “I have better work life balance at home” and “I lack work life boundary” from strongly disagree to strongly agree.

People appreciate the convenience brought by WFH. They can wear more comfortable clothing (82.1% agree and strongly agree), save commute time (80.4% agree and strongly agree), and have flexible work hours (78.5% agree and strongly agree). Working from home also improves well-being because they can be closer to family (75.6% agree and strongly agree). Although having a better work-life balance (50% agree and strongly agree), people tend to feel lack of a work-life boundary (57% agree and strongly agree) (Figure 3).

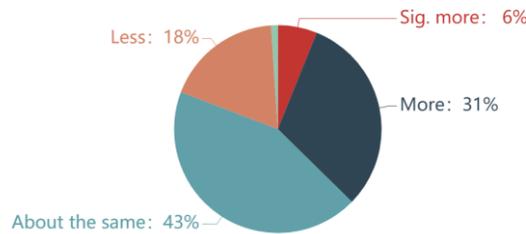


Figure 4: Changes of self-reported work productivity

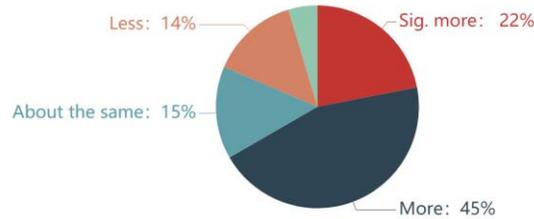


Figure 5: Changes of satisfaction after working from home.

We asked about what people miss the most at work. We find the respondents miss the work facility (54%) and workplace atmosphere (52%) when working from home. People also miss physical and social interactions at work. 42% of the respondents miss physical contact and group lunches.

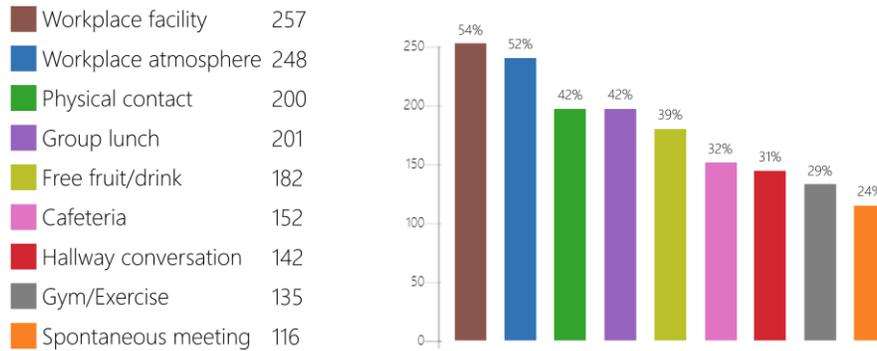


Figure 6: What people miss most when working from home.

2.2 Early Indicators in Returning to Work

After the office buildings soft-reopened, the employees entered a hybrid mode, where they can flexibly choose to work from home or office. The questions related to their experience can act as early indicators of factors impacting their choices.

First, we check how people split time between home and office. In the hybrid work mode, the time arrangements between office and home were evenly diverse (Figure 7). People adopted different time split strategies. 33% of the respondents go to offices on fixed days and 31% go to offices on demand.

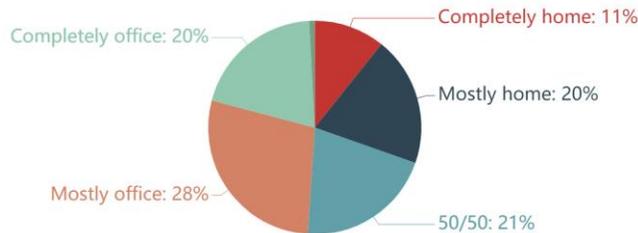


Figure 7: How time is split when people can freely choose to work from home or offices

For those who go to office, we also ask about their schedules. There also seem to be no dominant patterns. Half of them go to the office as needed, half of them have a fixed schedule (Figure 8). Further, for the days they stay in office, it is also fairly evenly distributed between one and five days (Figure 9).

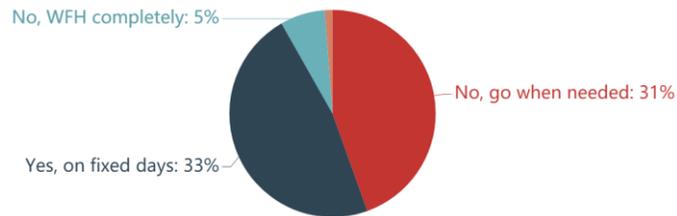


Figure 8: People may go to offices on fixed days or when needed

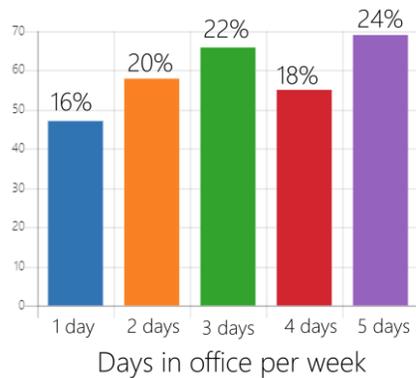


Figure 98: Number of days in a week people choose to go to offices.

Regarding the reasons for staying at home or going to the office, the answers are divided into three categories. When people choose to stay at home, the major reason is to save commute time (59%). Other reasons include family needs (42%), focus time (39%), health risk (33%), and weather (27%), are also important. Specifically, we interpret people try to avoid commuting through bad weather because Suzhou people gave a lot of weight to weather. We speculate this is because during the survey period, Suzhou is in the plum rain season – which is a period in a year that rains a lot.

For people who go to the office, there are some cases in which people need to go to office. For example, while in-person meetings are approved but discouraged in the office, one major reason for going to office is to attend meetings in-person (43%). Another reason is people need to complete specific tasks in office (42%). For those who prefer to go to the office, the main factors are workplace setup (63%), workplace atmosphere (43%), social opportunities (43%), and food (28%).

Generally, people take advantage of the hybrid mode. One respondent wrote, s/he can “(1) save commute time to achieve more. (2) occasionally working in office introduces great opportunity for socializing with colleagues, which is very good for mental health.” Another respondent mentioned “I feel more efficient and

effective when WFH. The only drawback of WFH to me is the lack of opportunities for socializing. That's why I like the hybrid mode.”

However, there are still some challenges. For example, people mentioned having difficulty synchronizing home machines and office machines. *“Special setup must be done to make future transitions between home PC and office PC smooth, otherwise each time moving to a different place requires re-configuration and synchronization in the PC there.”*

Then, we asked people to compare the work from home mode and the hybrid mode. Generally, from the survey responses, people agreed that work home is more productive, but the hybrid mode is the most productive. Comparing with productivity levels before COVID-19, hybrid mode was considered much more productive (10.3%) and more somewhat more productive (38.2%) with only a few downvotes (5.5% somewhat less productive and 0.6% much less productive). 69% of the respondents preferred it as a work option after COVID-19, because with the hybrid mode, people can combine advantages of both working from home and in office to maximize productivity and flexibility.

However, we still need be careful when interpreting the results because hybrid mode is what people first experienced after the lockdown. The hybrid mode could be preferred just from the rebound effect of emerging from lockdown.

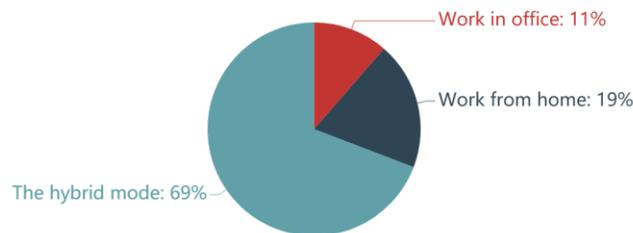


Figure 9: The most preferred mode is the hybrid mode that people can mix work from home and offices.

2.3 Key Factors Affecting Time Arrangements in Hybrid Mode

We conduct a further analysis on possible factors affecting people’s time arrangements in the hybrid mode after offices re-opened in China with both ANOVA and multivariate linear regression. Using the question *“After the reopening of offices, how do you arrange your time working from home and in office?”* as the dependent variable, and analyzed effects of possible factors including user profiles, attitudes, and behaviors on it. Finally, the ANOVA results indicated that 6 key factors significantly affected people’s time arrangements in the hybrid mode (Table 1). The multivariate linear regression results were also shown in the Table 1. The results indicated the 6 factors explained about 23% of the variances according to the coefficients, the factors, are ordered from biggest to smallest effects respectively 1) perceived productivity of WFH; 2) working location; 3) necessary childcare; 4) working disciplines or occupations; 5) Satisfaction of WFH; and 6) working habit before COVID-19.

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	1.846	0.332	5.561	0.000
F1. Did you work from home regularly prior to COVID-19?	0.170	0.057	2.987	0.003
F2. Necessary childcare	0.357	0.109	3.259	0.0012
F3. Perceived productivity on WFH	0.370	0.068	5.439	0.0000
F4. Satisfaction of WFH	0.183	0.052	3.512	0.0005
F5. Disciplines	-0.210	0.059	-3.560	0.0004
F6. Working Location (Beijing, Shanghai, Suzhou)	-0.366	0.067	-5.463	0.000

Table 1. The multivariate linear regression results with the 6 factors

On average, the respondents who thought their WFH is more productive or significantly more productive stayed at home longer than in the office. The respondents who thought WFH has similar, less, or significantly less productivity compared to working in the office all worked more in office than from home ($p=0.0000$) in the hybrid mode. The effect is very consistent with the working arrangement of people, and people who believed having more productivity by WFH stayed longer at home. In a sense, the perceived productivity seemed to be anchored to people's time arrangement in the hybrid mode.

It was found that most participants in all 3 cities stay longer in the office than working from home in the hybrid mode. Suzhou participants stayed in office much longer than participants in Shanghai and participants in Beijing stayed the least in the office ($p=0.0099$). One of the possible reasons is that as a tier 2 city, people in Suzhou may require much less commuting time and effort to the office compared to people in big cities like Shanghai and Beijing, both of which are tier 1 cities. Shanghai geographically is smaller than Beijing, assuming less average commuting time in Shanghai than in Beijing. Moreover, Suzhou, as a tier 2 city, has less pressure or risks for a further wide spread of COVID-19 compared to Beijing and Shanghai, which may result in people's longer stay in offices.

Participants with or without children all spend more time in the office than working from home in the hybrid mode. However, participants without children reported longer office time than people who have children ($p=0.037$). The results indicated family care or childcare is one of the factors that will affect people's time arrangements between office and home. However, this finding might be especially influenced by availability of school and childcare. During the pandemic, most schools are closed, and children need to stay at home. This may complicate the findings.

People with different roles and responsibilities arranged their working time differently ($p=0.052$). Business operation teams including administrators, IT and some other supporting functions, researchers, data scientist

and engineers stayed longer in office than in home. PM and design teams reported about half and half working in home and office. Sales and marketing teams report the least office hours.

People's working habits before COVID-19 also affect their current time arrangement in the hybrid mode ($p=0.0000$). The respondents who reported having a habit of WFH before COVID-19 tended to WFH for longer time periods than others who reported WFH when needed or not WFH at all before COVID-19.

People's satisfaction level on WFH also affected their time arrangements in the hybrid mode ($p=0.0000$). Interestingly, the two groups who are the very satisfied or very dissatisfied with WFH worked more in home than in office. People with the highest satisfaction of WFH did so for the longest time. People who are somewhat dissatisfied with WFH worked in the office for the longest time, followed by people who are neutral or somewhat satisfied with WFH.

Some of the detailed effects are easier to explain or form assumptions, but some of the effect directions may be a bit hard to explain at the current stage. We may rely on some further in-depth interview to understand more about the "why" part. Moreover, in the above analysis, we only examined the direct effect from the independent variables to the dependent variable. It is possible that some of the factors mediate or moderate some others in the total effect.

3 Conclusions

In this paper, we report the result of an online survey conducted on 475 employees of Microsoft China, which aims at understanding their practices around working from home and early indicators on returning to work after the the COVID-19 pandemic. The data allow for comparing of what practices in China were like with data collected in other parts of the world. The initial results show that our participants have a clear preference for the hybrid work arrangement. In addition, these results can help improve the hybrid return to work experience in other regions, especially paying attention to how the factors listed shape how people chose to return to work when their workplace re-opens.

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