

Changing Work Style in Activity Based Working (ABW)

Shin'ichi Fukuzumi¹ and Keiko Kasamatsu²

¹Center for Advanced Intelligence Project, RIKEN, Tokyo, 103-0027, Japan

ABSTRACT

The authors conducted a survey of change during the pandemic on work content, work locations, freedom, etc., compared to before the pandemic. As a result, it was found that some changes were occurring, regardless of whether they were good or bad. It was found that these can be classified at the level of changes in the social environment, the environment in the company or at home, and the policies of the company or department. Therefore, we broke these down into more detail and conducted a new survey on the following items: Advancement of equipment, Advancement of tools, Changes in internal systems Improvement of the internal environment (network, etc.), Company and department policies, Changes in the social environment (increase in co-working spaces, improvement of Wi-Fi environments in public spaces, faster home networks, etc.). This paper presents a detailed analysis of the survey results and the requirements for introducing work style reform.

Keywords: Work style, COVID-19, Communication, Workplace

INTRODUCTION

In many countries, so-called work style reforms that promote work styles that take work-life balance into consideration have been advocated for some time. However, the reforms have progressed slowly because only slogans have preceded them and no concrete measures had been put into place. However, due to the COVID-19 pandemic, going out, including going to the office, has been restricted, and people have been forced to work from home. This has led to various changes in work styles, although there are differences in industry and occupation (JES, 2020). Changes in work style include not only changes in location, but also changes in working hours, freedom of work order, etc. (Veldhoven, 2020). The authors conducted a survey during the pandemic on work content, workplace, freedom, etc. before and after the pandemic. As a result, since it is still in the early stages, the percentage of companies that have introduced some form of work style reform was about 50%. However, regarding communication, many opinions were heard that the frequency of communication has decreased due to the sudden shift to online. It was also found that these opinions differed depending on the management, manager, and general employee classes, and it was found that differences in position must be taken into account when analyzing (Fukuzumi, 2022).

²Tokyo Metropolitan University, 6–6 Asahigaoka, Hino, Tokyo, Japan

After the pandemic ended, various opinions were heard regarding work styles, such as returning to the pre-COVID-19 era, the same as during COVID-19, or further changes.

When we investigated this issue, we found that while in some cases the work styles that changed during the COVID-19 pandemic continued as they were, in about 30% of cases they returned to the pre-COVID era (Kasamatsu, 2025). It was also found that some changes, both good and bad, were occurring at this time. These could be classified into the following levels: changes in the social environment, the environment at work or at home, and company or department policies. Therefore, we conducted a re-investigation by breaking down these into more detail.

INVESTIGATION OVERVIEW

Survey Target

A resurvey was conducted on those who answered "there has been a change" in the previous survey (Kasamatsu, 2025). The number of respondents was 305, 158 males and 147 females. The occupations were: executive/director, managerial position, professional/technical position, research position (technical research, survey research, etc.), clerical position, sales position (customer contact, such as visiting clients/negotiating), and others. Of these, managerial and professional positions accounted for approximately 22% each, and clerical positions accounted for approximately 38%, meaning that these alone accounted for more than 80%.

Survey Items

As mentioned above, the survey items were classified into "changes in the social environment," "changes in the environment and systems within the company," and "changes in the environment and understanding within the home." The following detailed questions were asked to those who answered that "the way of working has changed during the COVID-19 pandemic compared to before COVID-19" and those who answered that "the way of working has changed since COVID-19 was classified as category 5 compared to before COVID-19."

- 1) Changes in the social environment
 - (a) Increase in co-working spaces
 - (b) Improvement of Wi-Fi environments in public spaces
 - (c) Faster home networks
- 2) Changes in the environment and systems within the company
 - (a) Advances in equipment
 - (b) Advances in communication tools
 - (c) Improvements in the company environment (networks, etc.)
 - (d) Changes in the attitudes of those around you (at work) toward teleworking

- 3) Changes in the environment and understanding within the home
 - (a) Advances in home equipment and communication environments
 - (b) Securing space within the home
 - (c) Understanding within the home of teleworking/teleworking

Survey Method

An online survey was conducted among domestic research panelists held by research company Intage Inc. Period of survey is from 2025.1.17 to 1.21

RESULTS

The results of those who answered that "the way we work has changed during the COVID-19 pandemic compared to before the pandemic" are shown in Table 1.

Table 1: How has the way you work changed during the COVID-19 pandemic compared to before the pandemic?

	n(Total)	No Change at All	Little Change	Neither	A Little Change	A Big Change
1) Changes in the social environment						
(a) Increasing co-working spaces	305	12.5%	12.8%	30.2%	29.2%	15.4%
(b) Improving Wi-Fi access in public	305	8.2%	21.0%	40.7%	25.9%	4.3%
spaces						
(c) Speeding up home networks	305	16.1%	25.2%	36.1%	17.4%	5.2%
2) Changes in the company's environment and systems						
(a) Advances in equipment	305	5.2%	16.7%	23.3%	39.3%	15.4%
(b) Advances in communication tools	305	4.6%	11.8%	18.7%	40.7%	24.3%
(c) Improvements in the internal environment (networks, etc.)	305	5.2%	15.4%	26.2%	36.7%	16.4%
(d) Changes in the attitudes of those around you (at work) towards teleworking	305	4.3%	9.2%	14.8%	33.8%	38.0%
3) Changes in the home environment and level of understanding						
(a) Improvements in home facilities and communication environments	305	13.1%	22.0%	32.1%	25.9%	6.9%
(b) Securing space at home	305	14.8%	22.3%	33.8%	23.0%	6.2%
(c) Understanding of telecommuting/ teleworking within the family	305	10.8%	15.4%	26.2%	30.2%	17.4%

The results show that the increase in co-working spaces and understanding of working from home within the home due to the COVID-19 pandemic are cited as factors for change, but in the current situation of forced restrictions on going out due to the COVID-19 pandemic, changes in company systems and the awareness of those around them are the most common, and accompanying this, a high proportion of people cited advances in tools and changes in the company environment as factors. Next, the results of those who answered that "compared to before COVID-19," their working style has "changed" since COVID-19 was classified as Category 5 (after the pandemic) are shown in Table 2.

Table 2: How has the way you work changed after the COVID-19 pandemic compared to before the pandemic?

	n(Total)	No Change at All	Little Change	Neither	A Little Change	A Big Change
1) Changes in the social environment						
(a) Increasing co-working spaces	177	10.7%	13.6%	32.8%	31.1%	11.9%
(b) Improving Wi-Fi access in public spaces	177	9.0%	16.9%	39.0%	28.8%	6.2%
(c) Speeding up home networks	177	16.4%	20.9%	36.2%	21.5%	5.1%
Changes in the company's environment and systems	1,,	101170	2019 70	00.270	21.0 70	0.170
(a) Advances in equipment	177	6.2%	11.9%	23.2%	42.4%	16.4%
(b) Advances in communication tools	177	4.0%	8.5%	21.5%	42.4%	23.7%
(c) Improvements in the internal environment (networks, etc.)	177	4.5%	10.2%	25.4%	40.1%	19.8%
(d) Changes in the attitudes of those around you (at work) towards teleworking	177	2.8%	4.5%	17.5%	40.1%	35.0%
3) Changes in the home environment and level of understanding						
(a) Improvements in home facilities and communication environments	177	11.3%	19.8%	31.1%	29.9%	7.9%
(b) Securing space at home	177	14.7%	18.1%	30.5%	28.2%	8.5%
(c) Understanding of telecommuting/ teleworking within the family	177	9.6%	14.1%	26.0%	31.6%	18.6%

These results show that the trend of change is the same as during the COVID-19 pandemic, but that awareness in the workplace and understanding at home have improved. This shows that after the transition to Category 5 (after the pandemic), some people return to the office and some do not, but regardless of which choice they make, the main factor is the increased understanding at work and at home.

DISCUSSION

Difference in Changes

Comparing the two tables shown in the previous chapter, the items with the most significant values for "changed greatly" and "changed slightly" (combined over 40%) are the same. Among these, we can see that "changes in the home environment and level of understanding/understanding of working from home/teleworking at home" have increased since the transition to after the pandemic. This is because people were still not used to it during the COVID-19 pandemic, but it is thought that this is largely due to the passage of time rather than the transition to after the pandemic. Other factors for "changes in the home environment and level of understanding" are not as significant, but the rate of change is higher after the transition to after the pandemic, and it can be seen that all of these are influenced by the experience during the COVID-19 pandemic. Looking at the in-house environment, we can see that the rate of change in the in-house system and the attitude of those around them was already high during the COVID-19 pandemic, but it has become even higher since the transition to after the pandemic. On the other hand, we can see that the improvement of networks, etc. has slightly decreased. This can be inferred from the fact that people are no longer satisfied with the in-house environment they have been using traditionally because new online work environments are being built in various places.

Indicating the Effects of ABW Implementation

In the previous report, we stated that when considering indicators for the effects of ABW implementation, it is necessary to take into account the differences in the positions of the management, supervisors, and employees, and that it is not appropriate to measure it uniformly only in terms of efficiency, such as productivity improvement (3: Fukuzumi, 2022). This survey was conducted on people who felt some kind of impact, as it was conducted on about 60% of the people who answered that there had been a change in the previous survey. Among them, the increase in co-working space and the improvement of the internal environment were also mentioned, but it can be considered that the high score on the item that is difficult to express in numbers, such as understanding within the company, ultimately leads to an increase (improvement) in communication and the ease of achieving work-life balance, and ultimately leads to improved performance.

CONCLUSION

In the spread of ABW, the issue of co-working space is of course important, but we found that the understanding of the workplace environment and home is even more important. This is essential for promoting ABW, and support is needed not only from the workers themselves, but also from those around them, and it can be said that an implementation plan based on this is necessary. As mentioned in the discussion, this also relates to the creation of indicators for the effects of introducing ABW, and this survey showed that one indicator should be "level of understanding at work/home," and that the effects should be measured based on this.

ACKNOWLEDGMENT

This study was conducted as part of the project "FY 2024 Ministry of Economy, Trade and In-dustry (METI) International Rulemaking and Market-Creation-Oriented Standardization Promo-tion Project (Strategic International Standardization Acceleration Project: International Standard Development Activities in the Industrial Infrastructure Sector) – International Standardization of Ergonomics for ABW to Achieve Well-being."

The authors gratefully acknowledge the financial support received from the Ministry of Economy, Trade and Industry (METI). The authors declare no conflicts of interest. The authors would like to acknowledge.

REFERENCES

Fukuzumi, S., Kasamatsu, K., Sawada, S. and Obayashi, F.: Indexing of Activity Based Working introduction effect, 63rd congress on Japan Human Factors and Ergonomics Society, 2022 (in Japanese).

Japan Human Factors and Ergonomics Society (JES): Seven Practical Human Factors and Ergonomics (HF/E) Tips for Teleworking/Home-learning using Tablet/Smartphone Devices, Ebara, T. and Yoshiake, R. (ed.), The IEA Press, 2020.

Fukuzumi and Kasamatsu

6

Kasamatsu, K. and Fukuzumi, S.: Considerations for Activity Based Working before and after COVID-19, HCI International 2025, 2025.

Veldhoven + Company: Activity Based Working: A Research on Measurable Outcomes and Key Differentiators, 2020.