

Telework Trends

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Abstract

This article describes the benefits of telework as determined through trials and the challenges facing telework expansion efforts.

1. Introduction

Telework is a broad term, but it can be divided into several categories: telecommuting (i.e., working from home), mobile telework (i.e., work done while in transit to or at one's destination), and satellite-office work (i.e., work done in facilities other than one's home base). Alongside advances in information technology (IT), telework gained in popularity throughout the 2000s. In particular, since 2005, telecommuting has been getting more popular.

Under a commission from the Ministry of Health, Labour and Welfare, the Japan Telework Association has been operating telework consultation centers—where telework implementation plans are discussed—since 1999. The number of companies participating in consultations at these centers has increased rapidly since 2000.

In this article, we describe some telework implementations, the effects of these implementations, and the challenges faced in these examples (along with their respective solutions).

2. Telework popularization

The results of a survey on the number of people teleworking carried out by the Japanese Ministry of Land, Infrastructure, Transport and Tourism are shown in **Fig. 1** [1]. It is clear from this graph that the proportion of teleworkers has increased since 2000. In particular, the number in 2010 was over ten million, which corresponds to 16.5% of the Japanese employed workforce. That figure is much higher than expected. It includes people who spend more than

eight hours per week continuing their work on personal computers (PCs) at home after returning from work and people who send and receive emails from smartphones while out of the office. With many people working in this manner, it seems that, to a certain extent, telework has become acceptable.

The change in the number of companies in discussion with the telework consultation centers is plotted in **Fig. 2** [2]. The number that consulted in 2010 was ten times that in 2002. In particular, since the publications of the “Guidelines for Teleworking” by the Ministry of Health, Labour and Welfare and the “Telework Security Guidelines” by the Ministry of Internal Affairs and Communications in 2005, the rate of yearly increase has risen. It is clear from these survey results that telework is rapidly becoming popular in Japan.

3. Telework implementation goals in companies

The goals of implementing telework in companies can be classified as follows.

(1) Improving work productivity

If telework were implemented in the sales field, then its effects would include dealing with enquires from customers more swiftly and increasing the time spent with customers by reducing time spent traveling. Moreover, if telework were implemented at a staff recruitment agency, work productivity would be improved because it would no longer be necessary to receive telephone calls and visitors or be interrupted by colleagues wanting to talk, so workers would be able to concentrate on their work.

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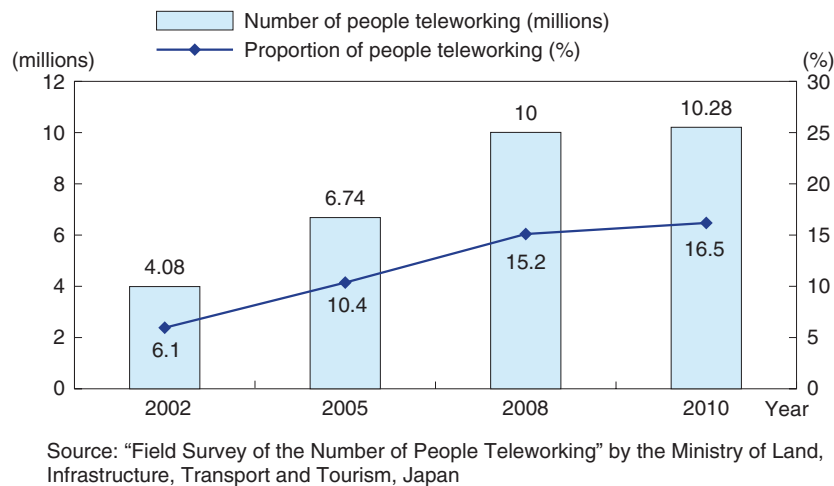


Fig. 1. Trend in the number of people teleworking.

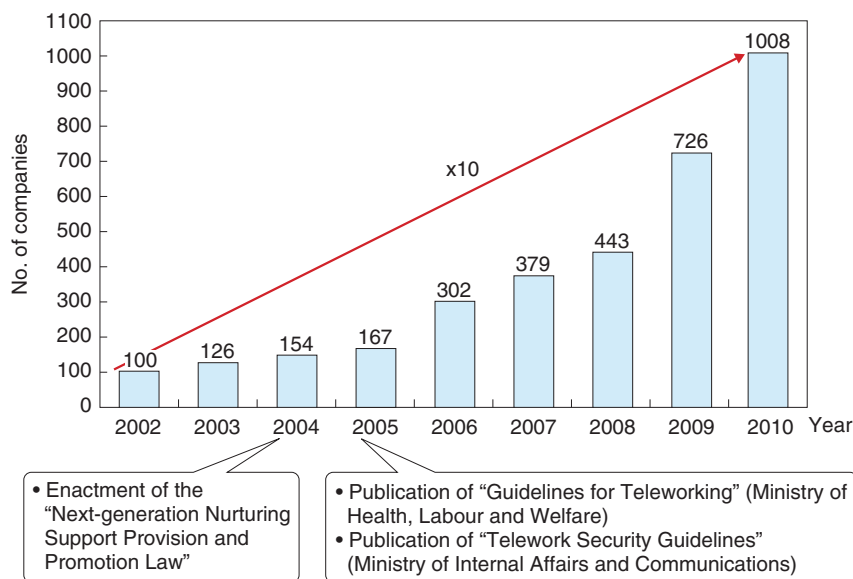


Fig. 2. Change of the number of companies in discussion with telework consultation centers.

(2) Transforming the consciousness of company employees

Transforming the way of working to one of being able to work anytime, anywhere is expected to, for example, *lighten the footwork of employees*, promote cooperation with other branches and other companies, and make it easier to get accurate information from frontline branches.

(3) Improving the work-life balance of company employees

By implementing telecommuting, a company can avoid valuable employees leaving to raise children or provide nursing care for elderly parents and it can employ people who have difficulty commuting by letting them work from home. From the viewpoint of ordinary company employees, telecommuting assures them of harmonious time with the family. Moreover, the creation of an environment in which it is easy to

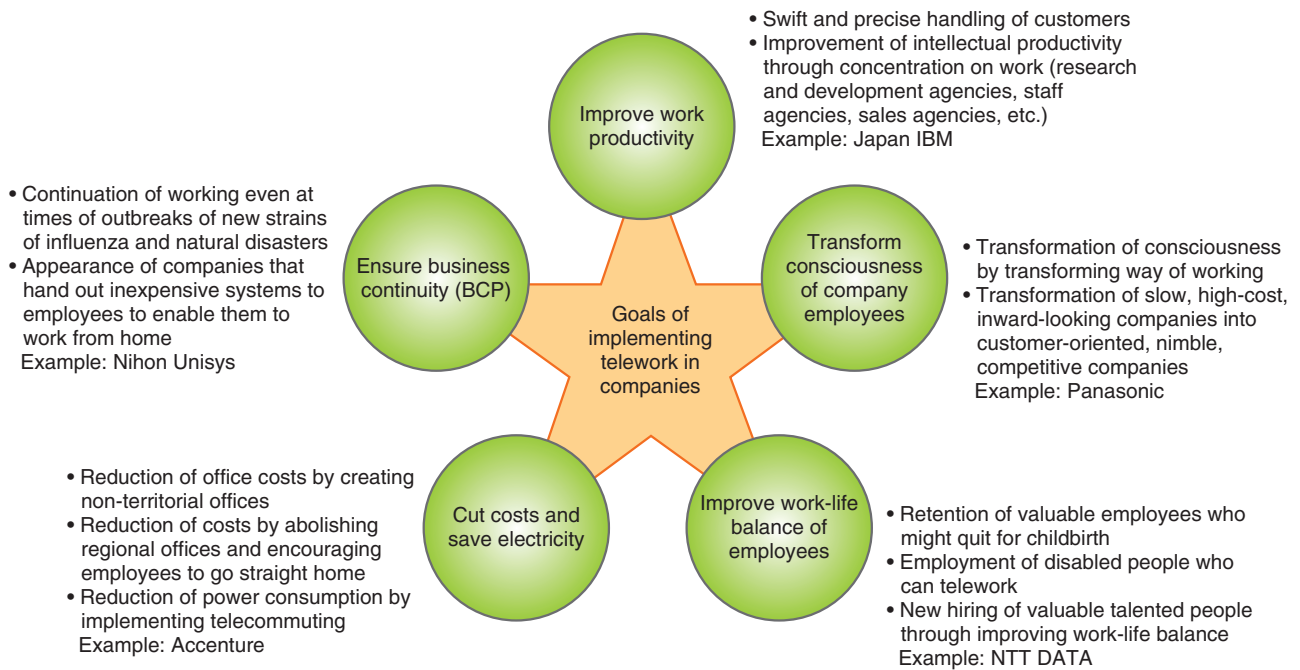


Fig. 3. Goals for implementing telework in companies.

work makes it easy to utilize valuable talented people.

(4) Saving electricity and reducing costs

In conjunction with telework implementations, reductions in office-related costs such as office rental fees and electricity bills become possible if offices are turned into non-territorial offices* and, in turn, electricity can be saved. Moreover, at times of power-supply shortages, working from home enables significant power savings to be achieved by telecommuting implemented on the basis of entire building floors or company departments. According to a calculation by the Japan Telework Society, a power saving of 1 kW per person can be achieved by implementing telecommuting. In other words, the power-saving effect of one million people becoming telecommuters is equivalent to one whole nuclear power station.

(5) Ensuring business continuity

In the event of a natural disaster or pandemic outbreak (such as new strains of influenza), telecommuting is also effective. If people work from home on a

* A non-territorial office (also known as a non-territorial workspace) is one in which workers do not have their own particular desk or office space but share all the workspaces with their co-workers.

regular basis, it becomes possible to comply with business continuity plans (BCPs), which ensure that business continues even at times of emergencies, through telecommuting. Thanks to many companies implementing teleworking, business continued without major difficulties even after the Great East Japan Earthquake in 2011.

4. Telework implementation examples

Every year, the Japan Telework Association publicly recognizes leading companies involved in telework with their Telework Promotion Award. Telework implementations at five of the companies that have received this award are described below as examples (Fig. 3).

(1) Implementation aimed at improving work productivity: Japan IBM

Aiming to increase the amount of time available for interviews with customers, Japan IBM has been introducing mobile offices—targeting salespersons and systems engineers—since 1997 and increasing the movement efficiency of sales departments. Furthermore, since 2005, a system called on-demand work style has been expanded to cover 5000 people. A base office is an organization that sets up a non-

territorial office while creating an environment in which telework is possible anytime anywhere by means of implementing satellite offices and telecommuting. As for the effects of these implementations, the following results have been reported: (i) customer-consultation time increased by 30% (by decreasing transit time and the time taken to get to the office to do paperwork), (ii) the time needed for information processing decreased by 50% (through timely information sharing), and (iii) office space costs decreased by 30%.

(2) Implementation aimed at transforming consciousness of company employees: Panasonic

Panasonic implemented a system called e-Work on a test basis in 2006 and has been expanding this system (which now covers 30,000 employees) on a full-time basis since 2007. This telework implementation was aimed at transforming the company from an inward-looking, sluggish, and high-cost one into a customer-oriented, nimble, and competitive one. The system features telecommuting, mobile work, *spot offices*, and non-territorial offices.

At Panasonic, to get this system up and running, a body called the e-Work Promotion Office, which played the role of coordinating e-Work throughout the whole company, was set up, and an e-Work Promotion Committee was established. Moreover, the company's senior management fully supported telework through e-Work, and under direct control of the chief executive, the e-Work Promotion Office assigned a director in charge of e-Work. At present, e-Work is widely utilized (i.e., 5500 people per month use it for telecommuting and 9000 people per month use the spot-office function), and it is successfully meeting the desired aim.

(3) Implementation aimed at improving work-life balance of company employees: NTT DATA

At NTT DATA, as one of a number of working groups established to transform the behavior of employees, a working group focused on improving the work-life balance of female employees with young children was set up in 2005. The group's activities, which were approved by senior management, led to telework being implemented from the bottom up. Teleworking for female employees was introduced as an experiment in 2005, telework trials started in 2006, and full implementation officially started in 2008. The target of this telework, which covered almost all of the company's staff (both male and female workers), was to eliminate one section.

Among the achievements attributed to telework, it was reported that the sense of burden concerning childcare for women was reduced by 82% and that their autonomous, self-managed way of working was improved by 77%. Moreover, earnest voices saying that "Without this system, I would have had to quit the company" were heard from female employees with childcare responsibilities. After the Great East Japan Earthquake, the number of people teleworking from home increased threefold.

(4) Implementation aimed at cutting costs: Accenture Japan, Ltd.

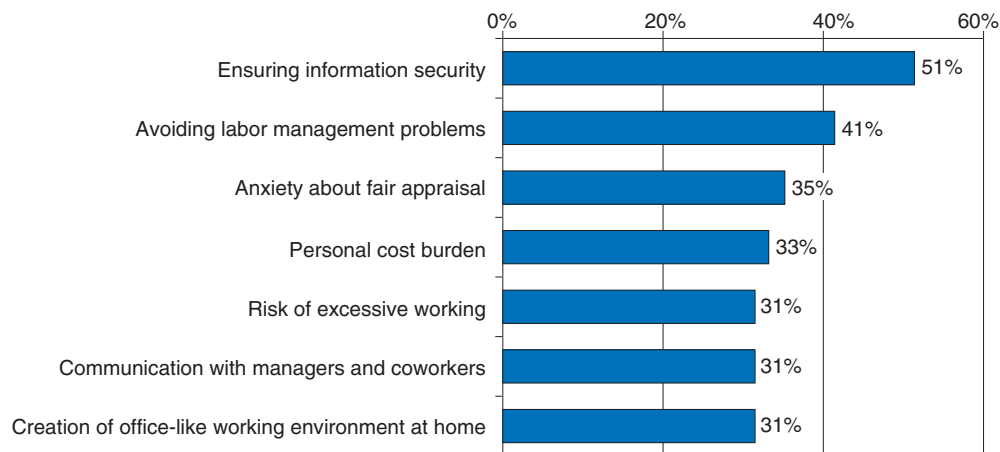
Accenture Japan Ltd. developed a telework program aimed at cutting costs and creating a new way of working for the next generation. The program's target was about 400 members of the administration staff working at the head office. The trigger for the program was relocation from the Aoyama office in Tokyo to the Minato-Mirai office in Yokohama. Employees living in the Tokyo, Chiba prefecture, and Saitama prefecture faced longer commuting times, so in response, it was decided to let those employees telework from home on one or two days per week. As a result, the core office space taken up by those employees was reduced, and non-territorial offices were set up.

The results of this telework program are summarized as follows. Space was saved in anticipation that the users telecommuting from home would be 50% of the targeted employees; this led to annual savings of about 1.5 million yen. Furthermore, a comparison of overtime before and after the implementation of the telework system showed that overtime was cut by 8.5 hours per person per week (on average). One factor resulting in this cut in overtime is thought to be teleworkers being able to work without distraction.

(5) Implementation with secondary aim of ensuring business continuity: Nihon Unisys, Ltd.

In 2007, Nihon Unisys, Ltd. implemented a telecommuting system aimed at improving work productivity and giving workers a good work-life balance. In 2008, as part of the company's BCP measures, a system (called SASTIK) for creating a thin-client environment for transferring screen images was distributed to all company employees. As a BCP measure implemented by Nihon Unisys, Ltd. after the Great East Japan Earthquake, telecommuting brought the following three benefits.

- 1) Company employees working at home on the day the earthquake struck were greatly relieved



Source: "Report on Survey about Trial Implementation of Sharing System" by the Ministry of Health Labour and Welfare, Japan

Fig. 4. Challenges facing telework implementation.

because they could pick up their children from kindergartens and schools.

- 2) After confirming the safety of their homes after the earthquake, these employees were able to continue working.
- 3) In the week following the earthquake, many employees were able to work at their regular time via SASTIK.

In addition to the above benefits, utilizing SASTIK served as an energy-saving measure: in the non-territorial offices, although alternate rows of ceiling lights were switched off, workers moved nearer to windows or under switched-on lights.

5. Challenges facing telework implementation

Although telework has brought the broad range of benefits described above, telework implementation faces seven remaining challenges. The results of a questionnaire concerning trials of a collaborative-use telework system given by the Ministry of Internal Affairs and Communications and the Ministry of Health, Labour and Welfare are shown graphically in Fig. 4 [3].

The first challenge is to ensure information security. Since enforcement of the Personal Information Protection Law in 2005, many companies have experienced losing PCs, and as a result, taking PCs outside the company has become prohibited. At present, however, cloud systems as well as inexpensive systems enabling work in a virtual thin-client environment have become widespread. Consequently, the chal-

lenges facing information-security measures have constantly evolved, so new ones have had to be overcome.

The second challenge is labor management. In 2005, "Guidelines for Teleworking" by the Ministry of Health, Labour and Welfare were published, and several points to keep in mind regarding labor management of teleworkers became explicit. These guidelines clearly state ways of handling labor management issues. In the case of mobile work, it is considered that labor management can be applied to employees working away from the office.

The third challenge concerns appraisal systems. Although circumstances are different if a worker is working at home every day, telecommuting systems in Japan are mostly designed for telework on one or two days a week. In that case, existing appraisal systems can be applied without any problems. Since mobile work is the main work style in the sales and systems engineering fields, there is no need to change their systems.

The fourth challenge is the personal cost burden. Although each company handles the matter differently, the cost of heating and lighting the home while a teleworker is working there can be something of a burden. However, workers perform their telework knowing that they can file a claim for business expenses to cover those costs. Although it is not really a merit for such teleworkers, people who telework for only one or two days a week should find that the burden is not too much to bear.

The fifth challenge is the possibility of being caught

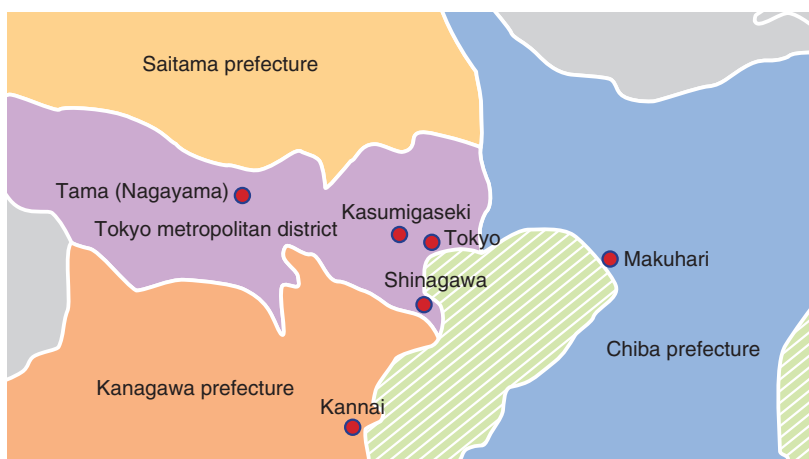


Fig. 5. Locations of telework centers.

up in working excessively. However, a number of past business cases demonstrate that working without interruption makes it possible to complete work in a shorter time and that the trend in working hours is downward. If starting and finishing times for telework are set in advance, prolonged working will probably not become a major problem.

The sixth challenge is communication with the manager and co-workers. This challenge will probably not become a significant problem in the case of telework on one or two days a week. However, it is hoped that burdens such as a teleworker having to take calls from people at the office can be alleviated by means such as automatic call transfer.

The seventh challenge is to create an office-like environment in the home. Although it is hoped that telework can be done, as much as possible, in a private room, there are likely to be many problems because of the cramped housing in the Tokyo metropolitan area. It is thus necessary to get the rest of the family to understand that they should do their best to refrain from interrupting the teleworker.

As described above, most of the challenges associated with telework have been addressed. As for the seventh challenge (concerning an office-like environment in the home), however, there are cases in which solutions are difficult despite all efforts. Some of the successful solutions are described below.

6. Public trials at telework centers

As part of a project from the Ministry of Land, Infrastructure, Transport and Tourism, the Japan Telework Association has established telework centers at six locations in the Tokyo metropolitan area and is presently conducting telework trials. The aim of these trials is to understand the necessary conditions for expanding the telework centers across Japan. As shown in **Fig. 5**, functioning as facilities for mobile work in the city, telework centers have been set up in three locations in the city (Tokyo, Kasumigaseki, and Shinagawa), and functioning as facilities for supplementing telecommuting in the suburbs, telework centers have been set up in three locations in the suburbs of Tokyo (Tama (Nagayama), Kannai, and Makuhari). These telework centers were opened between October 2011 and the end of January 2012. The targets of these telework centers—which do not charge any usage fees—are SOHO (small office, home office) workers and employees of companies that have already implemented teleworking or are conducting telework trials. It is hoped that everyone will make good use of the telework centers and evaluate them in terms of convenience.

References

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- [2] Japan Telework Association, “The Implementation Report on the Telework Consulting Center,” 2011 (in Japanese).
- [3] The Ministry of Health, Labour and Welfare, “The Implementation Report on the Trail of Telework Sharing System,” 2009 (in Japanese).



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