

# Coronavirus Pandemic and Online Services in Japan: Urgent Need for Digitalization

WATANABE Hiroaki Richard

Despite relatively low rates of coronavirus infection and death in comparison with most countries, Japan has experienced social and economic disruptions (Watanabe, 2020a). One issue that has become prominent in Japan amid the pandemic is a lack of digitalization, which has deterred the online provision of several services such as governmental administrative services (by both central and local governments), medical services and educational services as well as the implementation of flexible work style such as “telework” (remote work or work from home). For example, it took more than a month or two in most cases before government handouts of 100,000 yen reached residents even when they applied online due to the fiascos related to the online applications (Kobayashi and Hatano, 2020). The government could not provide enough polymerase chain reaction (PCR) tests either due to the work overload in public health centers caused by the necessity to manually input the data received from doctors by “fax” (Ogiwara et al., 2020). Also, many workers had to go to the office despite the risk of getting infected with the coronavirus because of the necessity to place “*hanko*” - a traditional Japanese seal to be stamped on business contracts and government documents as a common custom - and meet their business customers in face-to-face meetings (Harding, 2020; Shigeta, 2020).

This article addresses the question of why it has been difficult for Japan to promote the provision of online services and flexible work style such as telework to cope with the coronavirus pandemic. The article discusses a relatively low level of digitalization as a

main reason for such a phenomenon by focusing on the “political” factors of bureaucratic regulations and interest group politics while recognizing other factors. In addition to the high consciousness of internet security and privacy risks among Japanese people and a lack of IT investment and literacy (or a lack of human resources with high IT skills, especially in non-IT sectors such as central and local governments and education) (Owada, 2020), bureaucratic regulations and interest group politics have also deterred digitalization necessary for coping with the coronavirus pandemic in Japan.

Rigid bureaucratic regulations have often undermined the efficiency of Japanese businesses and governmental administrative services. For example, the Ministry of Health, Labor and Welfare (MHLW) placed restriction on online provision of medical services by emphasizing the importance of providing face-to-face medical services before the ministry allowed it exceptionally on a temporary basis during the coronavirus pandemic. This MHLW restriction prevented innovative, efficiency-oriented doctors from expanding their online services and deprived them of greater business opportunities. It has also caused inconvenience to those patients who needed to receive medical services but were unwilling to go to the hospital due to greater risks of being infected with the coronavirus. Several interest groups have also sought political protection from the governing Liberal Democratic Party (LDP) and the relevant ministries to protect their economic interests in a way to prevent the digitalization of the Japanese economy and society

(Watanabe, 2020b). In the example above, the Japan Medical Association as an interest group approached LDP politicians and pressured the MHLW not to expand online provision of medical services, partly because they would receive lower medical fees for online services compared with face-to-face services (Nihon Keizai Shimbun, 2020a).

The LDP administration of former Prime Minister Abe attempted to reform work style in Japan by implementing several labor market reforms, most recently the Work-Style Reform in 2018. While the Work-style Reform introduced a few worker-protective measures, labor market reforms by the LDP administrations were mostly aimed at introducing more flexible work style to reduce labor costs and raise the efficiency of Japanese business (Watanabe, 2020c). Before the enactment of the Work-style Reform Law, greater use of “telework” was discussed in the Work-style Reform Council set up by Prime Minister Abe. Telework was considered to enable more flexible work style and achieve greater work-life balance, thus contributing to the increase in female labor market participation, labor productivity and economic growth (Work-style Reform Council, 2016). Work-style reform is part of “structural reform” of the economy, as are reforms of lifetime employment and working hour rules. Although former LDP administrations attempted to implement structural reforms, they were mostly insufficient due to bureaucratic resistance and interest group politics (Watanabe, 2020c). While some government interventions were aimed at enhancing the competitiveness of the Japanese economy, as in several cases of the implementation of the “industrial policy” by the Ministry of International Trade and Industry (currently the Ministry of Economy, Trade and Industry), others were aimed at protecting inefficient economic sectors from international competition, as in the case of the previous implementation of the “convoy” system by the Ministry of Finance, which was aimed at maintaining the stability of the financial system by protecting inefficient banks from bankruptcy (Amyx, 2004; Johnson, 1982). Bureaucrats were also

able to maintain their power by retaining government regulations. However, government regulations and bureaucratic resistance to reforms have undermined private sector’s efforts of innovation through digitalization.

In addition to bureaucratic regulations, interest group politics also hindered structural reforms of the economy through digitalization. With the deceleration of economic growth and a smaller amount of economic benefits to distribute in the 1970s, the LDP politicians called “*zoku*” (policy tribes), who were specialized in specific policy areas such as agriculture and construction, began to play a greater role in the distribution of economic benefits and enhanced their power in policymaking (Inoguchi and Iwai, 1987; Scheiner, 2006). Interest groups that were not competitive in their business approached LDP *zoku* politicians (and the relevant government ministries) and sought to protect their business from international competition. In return, LDP *zoku* politicians received votes and political donations. The LDP, which developed extensive networks of patronage with interest groups during the long period of its dominance in Japanese politics, could hardly ignore policy requests from interest groups due to its electoral concerns. However, interest group politics also discouraged some Japanese companies from becoming competitive by innovation through digitalization, as in the case of bureaucratic regulations. In the current context of the coronavirus pandemic, bureaucratic regulations and interest group politics have worked as political impediments to the promotion of online services and telework in Japan by discouraging the governments and businesses from promoting digitalization, at least until the outbreak of the coronavirus pandemic.

The structure of this article is as follows. The next section describes the situation of the coronavirus pandemic in Japan in comparison with other selected countries as well as the Japanese government’s response to the pandemic, including its struggles to promote the provision of online services and telework to cope with the pandemic. The following section analyzes

why it has been difficult for the Japanese government to promote online provision of administrative, medical and educational services as well as telework by examining the causes for the lack of digitalization from the perspective of political factors of bureaucratic regulations and interest group politics. After briefly mentioning the current Suga administration's attempts to promote digitalization, the article summarizes its arguments and considers the implications of the coronavirus pandemic and politics under one-party dominance for digitalization and the provision of customer-oriented online services.

### Coronavirus pandemic and government responses

The coronavirus situation in Japan has been better than

situations in many countries. As of late November 2020, the total cases of infection were around 130,000 and the total cases of death were around 2,000. In comparison, the “daily” infection case in the US on one day alone (November 27, 2020) was more than 200,000, which was more than the “total” infection cases in Japan. When we compare Japanese cases of infection and death with other countries' cases based on the ratio among 1 million people, the cases in Japan were much fewer than most countries in Europe and Americas although they were more than several countries in East Asia and the Oceania, such as South Korea and New Zealand (see Figures 1 and 2 for the comparison of Japan with selected countries of the US, the UK, Brazil, Germany, South Korea and New Zealand in the total, accumulated cases of the coronavirus infection and death per million as of November 21, 2020).

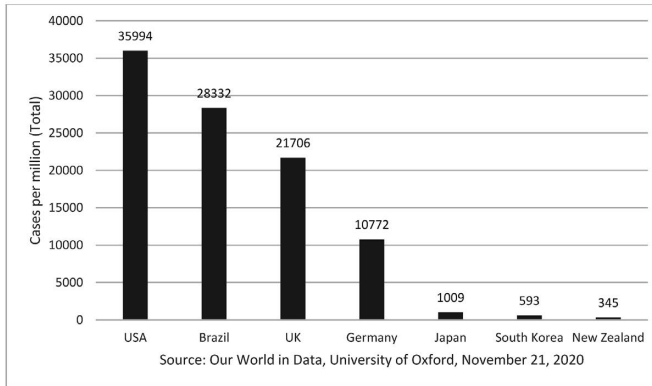


Figure 1: Coronavirus cases of infection per million (Total)

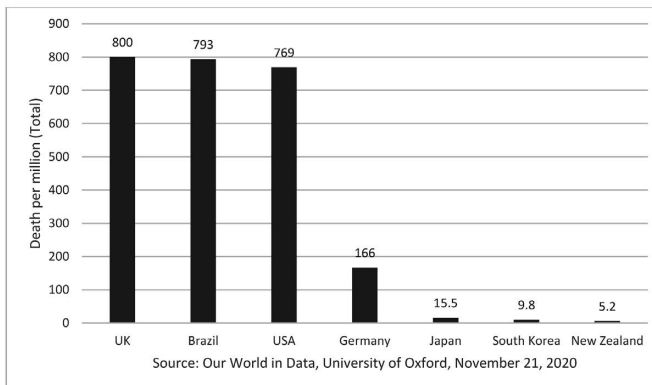


Figure 2: Coronavirus cases of death per million (Total)

As seen in Figure 1, the US, Brazil, and the UK suffered more than 20,000 accumulated cases of infection per million (35,994, 28,332 and 21,706 respectively) as of November 21, 2020. They were followed by German cases (10,772), which were about a half of the British cases. Japanese cases were much fewer (1,009), even compared to German cases (about 10 percent) but were more than the cases in South Korea and New Zealand (593 and 345 respectively). As for the accumulated cases of death per million (see Figure 2), the three countries with large numbers of cases of infection also suffered much larger cases of death, with the UK suffering the largest number (800), even compared with Brazil and the US (793 and 769 respectively). German cases (166) were much fewer than these three countries, but Japanese cases were even fewer (15.5). However, South Korea and New Zealand performed better than Japan again (9.8 and 5.2 respectively).

We can identify several factors that have contributed to the large number of cases of the three worst performers (the US, the UK and Brazil). What is common in these countries are that their administrations (Trump, Johnson and Bolsonaro) have not had effective, consistent, or rational policy responses to cope with the coronavirus pandemic. Also, many citizens in these countries have not been cooperative with the central / federal or local / state governments' health advise on mask wearing and social distancing. In the US, the Trump administration has downplayed the danger of the coronavirus and misinformed the public. Since having lost in the presidential election, President Trump has been more interested in reversing the election results than leading the government in its engagement in the pandemic to protect citizens. Many people, mostly Republicans and Trump supporters, have ignored the federal or state governments advise to wear a mask and maintain social distance by demanding "freedom" from a tyrannical authority. In Brazil, President Bolsonaro, an admirer of President Trump, has also downplayed the health risk from the coronavirus and obstructed the efforts by several states

to cope with the pandemic. As in the US, there have been numerous cases of the violation of government-imposed rules of social distancing. In the UK, Prime Minister Johnson, another admirer of President Trump, was initially doubtful of the danger of the coronavirus and delayed the introduction of (partial) lockdown measures as his administration was initially flirting with the idea of "herd immunity", a measure proposed by the government's Chief Scientific Adviser Patrick Vallance (although the administration has denied this measure since discarding it). Although the Jonson administration has been more serious about coping with the coronavirus than the Trump and Bolsonaro administrations, its strategies have been inconsistent and ineffective, as seen in the fiasco about the "world-beating" test and tracing system, which the government once boasted. These three countries also share a commonality in that their leaders tested positive and class and racial divides exist in terms of the percentages of infection and death due to the coronavirus pandemic (Staunton, 2020).

In comparison with these three countries, the performance of other countries (Germany, Japan, South Korea, and New Zealand) in coping with the coronavirus pandemic has been much better. Although Germany has suffered more cases than many East Asian countries, New Zealand and Australia, partly due to the relaxation of social distancing rules aimed at economic recovery during summer, it has avoided worse cases seen in the UK, Italy and Spain. South Korea is well known for its rapid expansion of testing, including the implementation of drive-through PCR tests, and its use of high-tech tracing system from the beginning. As a result, Korean cases of infection and death per million were even fewer than Japanese cases (Power, 2020). New Zealand has also taken effective drastic measures to cope with the pandemic, including its strict immigration control similar to Australia.

While Japanese cases are much fewer than those in Europe and Americas, it may be possible that the fewer infection cases are due to a lack of testing (Watanabe, 2020a). Initially, the Ministry of Health,

Labor and Welfare (MHLW) permitted PCR tests only through public health centers. Even after numerous criticisms and despite former Prime Minister Abe's intention, PCR testing in Japan has been insufficient. The initial focus on identifying coronavirus clusters by the National Institute of Infectious Diseases may be blamed partly but even now the Japanese government lacks the capacity to implement PCR tests speedily and sufficiently in comparison with several other countries partly due to the lack of digitalization. For example, public health centers had to spend a lot of time engaging in administrative work such as the manual input of data on new Covid-19 cases sent by doctors through "fax" instead of dealing with people who were seeking help in taking PCR tests more efficiently (Daizuikuta, 2020; Watanabe, 2020b).

As in other countries, the promotion of telework has been considered important to cope with the coronavirus pandemic. Indeed, even before the outbreak of the coronavirus, the former Abe administration discussed the promotion of telework in the Work-style Reform Council. In the meetings of the Council, telework was considered as flexible work style that would contribute to better work-life balance and greater participation in the labor market by female workers, thus contributing to economic growth, as mentioned above (Work-style Reform Council, 2016). However, while companies and governments in other countries swiftly shifted to telework to cope with the spread of the coronavirus, many Japanese companies and government offices have been struggling and unable to adapt to the "new normal".

Japan's low-level of digitalization has been a significant impediment to implementing telework. According to a survey conducted by the MHLW, only 26.83 percent of office employees in Japan worked from home during the voluntary lockdown between April and May 2020 (Tomita, 2020). Japanese IT research group ITR also reported that only 28 percent of surveyed companies had an online system that allowed staff to work remotely (Lewis, 2020). In addition, business transactions and government administration in Japan

tend to be carried out through paperwork in face-to-face meetings. A survey conducted by the Japan Institute for Promotion of Digital Economy and Community showed that only just over 40 percent of Japanese companies were able to cope with the digitalization of paper documents (Shigeta, 2020). Moreover, a survey conducted by the Japan Association for Chief Financial Officers revealed that 77 percent of companies did not introduce telework due to the difficulty in digitalizing paper documents (Matsumoto, 2020).

Indeed, there was a legal requirement that doctors complete paperwork on new Covid-19 cases by hand and fax them to public health centers until May 2020. As mentioned above, this caused a lot of work for public health centers and prevented speedy and sufficient PCR testing. As in the case of fax, the use of *hanko* seals was popular in Japan. As a result, some businesspeople and government officials were not able to avoid commuting to the office as they had to stamp a *hanko* on business contracts and government documents (Shigeta, 2020). According to the Annual Report on the Japanese Economy and Public Finance ("Economic White Paper") published by the Cabinet Office of Japan, only 0.5 percent of IT personnel were in the government sector while only 27.7 percent of IT personnel were in non-IT sectors in total (with 8.8 percent in manufacturing) (Cabinet Office of Japan, 2020; Gen, 2020). Also, according to an OECD survey, the percentage of online administrative services provided by the government was only 7.3 percent in Japan, the lowest among 30 countries surveyed (Cabinet Office of Japan, 2020).

The lack of digitalization is evident in Japan, as shown by the low percentages of provision of online services and difficulty to do telework due to the inflexible and outdated work style based on paperwork and face-to-face meetings. In the next section, this article examines the causes for the lack of digitalization in Japan, which has made it difficult to promote provision of online services and telework sufficiently.

## Causes for the lack of digitalization and insufficient online services in Japan

There are several causes for the lack of digitalization and insufficient online services in Japan. As mentioned above, the high consciousness of internet security and privacy risk among Japanese people and the lack of IT investment and literacy (or a lack of human resources with high IT skills, especially in non-IT sectors such as government administrative services, medical services and educational services) are some of the causes (Owada, 2020). However, we can also identify the political causes of bureaucratic regulations and interest group politics as the factors that have contributed to the lack of digitalization, which has resulted in insufficient online services and the relatively low use of telework to cope with the coronavirus pandemic.

The percentages of administrative services by the central government that can be completed online are very low in Japan and only around 7.3 percent, as mentioned above. Even in the cases of the Ministry of Economy, Trade and Industry and the Ministry of Internal Affairs and Communications, which have been in charge of promoting digitalization of government administrative services, such percentages are 7.8 percent and 8 percent respectively (Nihon Keizai Shimbun, 2020b). Local governments such as prefecture and city offices also provide very low percentages of online administrative services (issuing of residential certificates and family registers to the residents for example). Online payment for administrative service fees is hardly available either. The bureaucrats in the central government and the officials in local governments are well-known for the lack of customer-oriented services and a tendency to stick to rules and precedents inflexibly, partly because the discretion and capacities to make and implement those rules are their power resources (Miyachi, 2020). It seems that most bureaucrats hardly have incentives to promote digitalization and online services, as these new practices do not fit the precedents of bureaucratic services based on paperwork and they cannot necessarily identify

new sources of power in digitalization. In relation to the coronavirus pandemic, inconvenient bureaucratic rules that do not allow users of the government-issued “My Number” ID cards to change passwords online by themselves when they forgot passwords made it difficult for them to continue applying for the 100,000 yen government handout online. This forced them to go to the city office just to change passwords and created huge crowds of people who requested new passwords in city offices despite the government’s intention to provide more convenient services with My Number ID cards. This was a real nightmare amid the coronavirus pandemic. Also, as mentioned above, the government regulation requiring doctors to use “fax” to report the number of Covid-19 positive cases forced public health centers to spend a significant amount of time merely inputting the data manually into databases and reduced their capacities to engage in more important work such as referring possible patients to hospitals (Kobayashi and Hatano, 2020; Ogiwara et al., 2020).

Some readers of this article may recognize that Japan’s central government is ranked 14th in the “2020 United Nations E-Government Survey” in the degree of e-government development. However, its methodology is problematic and inappropriate in many respects. The Survey’s method of e-government development is based on a “holistic” view of e-government and it assesses the degree of e-government development based on three indexes of “Telecommunication Infrastructure Index (TII)”, “Human Capital Index (HCI)” and “Online Service Index (OSI)”, with each being equally weighted (1/3 each). The TII is composed of four indicators of internet users, mobile subscribers, mobile and fixed broadband subscriptions, and the HCI is composed of four indicators of adult literacy rate, school and university enrolment ratio, and expected and average years of schooling. It is obvious that these TII and HCI indicators are hardly relevant to the central government’s online service delivery. The OSI is based on surveys covering a little more than 100 areas but those relevant to government online service delivery is only around 25 percent. This means that less than

10 percent of the indicators of the UN E-Government Survey are relevant to the degree of government online service delivery. While the local or city version of OSI has 80 indicators in the four criteria of “Technology”, “Content provision”, “Services provision” and “Participation and Engagement”, which are different from the national OSI, only around 10 indicators out of 25 indicators of the Services provision criterion are relevant to local government online services delivery (United Nations, 2020).

Bureaucratic regulations and interest group politics also contributed to the lack of online services in medicine. Due to political pressure from the Japan Medical Association (JMA) - a powerful interest group with a close link to the LDP *zoku* politicians, the MHLW has been reluctant to promote the use of online medical services by implementing deregulation in this area (Obayashi, 2020). Amid the coronavirus pandemic, the MHLW permitted the provision of online medical services, including those for first diagnosis, but only as a temporary measure during the pandemic. The JMA has been reluctant to provide online medical services partly because of lower government-authorized fees for such services in comparison with face-to-face services, as mentioned above. The JMA has also been eager to protect doctors who are not capable of providing online services and those who are in rural areas. In addition, the MHLW prefers face-to-face services as they are afraid that greater use of flexible online medical services through deregulation may disrupt the status quo in the medical industry. This would cause difficulty for the ministry to monitor and manage the industry and maintain outdated “analogue” regulations as their power resources.

In education too, the lack of digitalization is evident in Japan in comparison with other countries. For example, only 29 percent of public elementary and junior high schools used digital e-textbooks and only 5 percent implemented synchronous online teaching as of mid-April 2020 according to the survey by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). The percentage of children

who used digital devices such as personal computers was only 3 percent in comparison with 22 percent on average among OECD countries (Nishimura, et al., 2020). According to the OECD’s PISA Results 2018, the percentages of students in schools whose principal agreed or strongly agreed with the following statements: “The number of digital devices connected to the Internet is sufficient” and “Teachers have the necessary technical and pedagogical skills to integrate digital devices in instruction” were 36.5 percent and 27.3 percent respectively in Japan in comparison with OECD averages of 67.2 percent and 64.6 percent. Japan was the third worst in the first criterion and the worst in the second criterion (OECD, 2018). Indeed, only 0.3 percent of IT personnel are in educational sector in Japan according to the Annual Report on the Japanese Economy and Public Finance (Cabinet Office of Japan, 2020). The use of digital e-textbooks was not permitted until the School Education Law was amended in 2019. Also, several local governments prohibit linking students’ IDs to school IDs with their ordinances for privacy protection. This has made it impossible for students to access e-textbooks on a cloud server (Miyasaka, 2020). The MEXT’s regulation in relation to the School Education Law that does not permit credits in high schools without face-to-face teaching has also deterred online education in high schools.

As for telework, the former Minister for Science and Technology Policy responsible for promoting the digitalization of government administration procedures, Naokazu Takemoto, was also the chairman of the “LDP group for protecting Japan’s *hanko* culture” during the Abe administration. *Hanko* companies as an interest group demanded that the government refrain from promoting digitalization at the cost of their business. For this reason, Takemoto was reluctant to promote digitalization until when government guidelines for telework to prevent the spread of the coronavirus forced him to change his attitude and resign as the chairman of the LDP’s *hanko* group. Although Cabinet councils such as the Council for Regulatory Reform discussed digitalizing paper documents and abolishing *hanko*

stamps and the Abe administration enacted the “Digital First Law” in 2019 (Benett), it was ineffective because local governments were only “encouraged” to promote digitalization.

The current Suga administration of the LDP has been more enthusiastic about promoting digitalization than the previous Abe administration. Prime Minister Suga announced the establishment of the Digital Agency, which will be in charge of leading the government’s efforts to promote digitalization by acquiring the relevant financial resources from other ministries and hiring people with digital skills from the private sector. The Minister of Regulatory Reform, Taro Kono, announced the government’s plan to abolish the use of *hanko* seals in most administrative procedures of the central government and pressured local governments to follow so that the online provision of government administrative services would be promoted. The Suga administration also intends to make online provision of medical services a permanent measure despite the resistance from the relevant interest group JMA and the bureaucratic reluctance from the MHLW.

## Conclusion

This article has examined why Japan has been struggling to promote digitalization and expand the provision of online services and telework to cope with the coronavirus pandemic. While identifying several relevant factors, such as the high consciousness of internet security and privacy risk among Japanese people and the lack of IT investment and literacy, the article has focused on the analysis of rigid bureaucratic regulations and interest group politics. The article claims that these political factors have deterred digitalization by empowering bureaucrats and interest groups as “veto players” at the cost of Japanese people. As a result, they have suffered insufficient provision of online services and fewer opportunities for teleworking.

However, the long period of the coronavirus pandemic has made digitalization an urgent issue in Japan. The coronavirus pandemic may push Japan

towards greater provision of online services and work-style flexibility through digitalization. However, unless we can remove the obstacles to digitalization mentioned above, there would be no improvement in online service delivery and the use of telework. To mitigate the negative impact on digitalization of the political deterrents of bureaucratic regulations and interest group politics, Japan may need a more competitive political system that is not based on one-party dominance. That would make it easier to promote digitalization and provide customer-oriented online services in Japan.

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