

# **Envisioning Agile Government: Learning from the Japanese Concept of Society 5.0 and the Challenge of Public Administration in Developing Countries**

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## **Abstract**

Technological developments have shaped changes in communication and the ways people aspire for public services. Rigid, flaccid and slow bureaucratic type of organizations are no longer compatible with the new challenges in the so-called "disruptive environment". This paper tries to elaborate on the emergence of disruptive environment in which changes occur very quickly while the decision makers might not have adequate time to discern and to gauge the impact of policy alternatives. Creating agile governments, therefore, is a fundamental requirement in almost all countries. On the government response to harness the disruptive environment and to create an agile government, the Japanese vision of Society 5.0 is an interesting example to be considered by decision makers in developing countries. Under this vision, the use of IoT, AI, and robotics in providing public services, means that all policy makers need to find new ways to transform towards intelligent societies. Not only that agile government and the new public administration would be able to protect people from digital divide, but also that it would create a humane environment in which all the technology-based public services would improve prosperity and well-being for all.

## **Keywords:**

agile government, society 5.0, public administration, disruption era

## **Introduction**

Businesses, governments and communities are invariably required to keep up their strategic management to the accelerating pace of technological, economic and social change. The Internet of Things (IoT), big data, Artificial Intelligence (AI), and robotics have made remarkable progress and brought about the Fourth Industrial Revolution. While the Industry 4.0 promises dramatic improvement in productivity and the creation of new business and service models, it has also created disruption in various field of industries (Christensen, 1997; Schwab, 2018). With the emergence of online businesses, many of the old-fashioned businesses have died while new areas of services and deliveries are introduced.

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Disruptions are also experienced by government agencies. Having been accustomed to understand that public policy ought to be decided by formal authorities in the government, most of policy makers did not see the need to involve elements of civil society and to accommodate participatory decision making. The general observation on less-substantive democracy, political elite captures, entrenched oligarchy and hierarchies of power, are among the themes of critical assessment on the current state of public administration in Indonesia and many developing countries (Robison & Hadiz, 2004). Many believe that the failures of public policies are because of its elitist nature, in which problematic formulation, ideas, concepts and models are dictated by the elites' vested interests and based on deductive rather than inductive, exclusive rather than inclusive, and authoritative rather than participatory approach of policy making (Fukuoka, 2012).

There have been cases of inadequate or inappropriate government policy under a disruptive environment. The government policy towards the "sharing-economy" businesses, for example, has sometimes turn out to be unproductive because of inadequate taxing while the impact on the formal sector are not expected appropriately. At the same time, the use of ICT, artificial intelligence, and robotics technology have resulted in a digital divide in the society, in which the poor and certain elements of the society are left unprotected (Wisskirchen et al., 2017).

This paper is aimed at explaining the common issues that are faced by nearly all countries: 1) the use of information technology for human values and 2) the demographic change that would also change the type of services demanded by the society. All these issues would finally determine the government policy and the public administration systems that are required. Then, it will discuss about the actual case of how the government has responded to the use of ICT in various businesses. The case at point is how the Indonesian government has responded toward the application-based transport system offered by Go-Jek, one of the most prominent unicorn start-up business since 2015. After describing the twists and turns of policy-making process on app-based transport companies in Indonesia, it will also explain the underlying issues of such policy changes, the essence of decision making process under the digital environment, the outcomes of the actual policy, and whether or not it would solve the long-term problem in the country.

In relations to the public policy making under digital environment and the long-term problem in the society, the paper will explore the futuristic concept of Society 5.0 that has been initiated by the Japanese government. It is particularly relevant to digital environment issues at the concept is designed to go beyond the Industry 4.0 and to ensure that the chaotic and drastic changes would leave the poor and the unfortunate elements of the society. Then, this paper will discuss about the need for agile government and new public administration system that would be more suitable and responsive to the digital environment.

## **Methods**

This study uses desk reviews and is basically aimed at answering the questions on how the government should cope with the new environment that is characterized by volatility, uncertainty, complexity, ambiguity (VUCA). Long distance interviews are conducted to the pertinent experts through various instruments (e-mailings, video-callings, personal chatting, and other social-media communications).

Reviews on previous research are carried out using the stock-taking and analysing verbatim articles available on the websites. Samples for the website addresses are obtained using topical purposive sampling (Pawson et al., 2004). Discussions with experts in Japan are also undertaken during several academic visits in Nagoya University, Kobe University and Ritsumeikan University at Osaka.

Internal discussions with are also conducted with the team at the IGPA (Institute of Governance and Public Affairs) at Magister Administrasi Publik, Gadjah Mada University. The discussions are conducted during the activities of developing research proposal for Sumitomo Foundations.

## **Common Issues in Our World: Disruption and Demographic Change**

In 1997, Clayton M. Christensen (2016) introduced a theory that later become well-known with the "theory of business disruption". It refers to a general notion of "a process by which a product or service takes root initially in simple applications at the bottom of a market and then relentlessly moves up market, eventually displacing established competitors". There have been many examples of this phenomena in developed as well as developing countries. In 2006, for example, the Indonesian telecommunication provider XL-Axiata that was

managed by CEO Hasnul Suhaemi was able to cut the tariff of telephone-call time from Rp 30 to only Rp 1 per second by introducing a "sharing-economy" approach. The Based Transceiver Stations (BTS) that were previously used exclusively by certain telecommunication company could then be used by several companies. Mr. Suhaemi has managed to change the direction of telecommunication businesses, to shift the fixed-costs to become variable-costs, and to revitalize the companies. The result was remarkable as the tariff of telephone-call could be reduced substantially.

At the international level, there are also many examples of disruptive innovations. The sharing-economy under the application created by Airbnb has been able to give values and benefits for anyone who has a room for rent, while the guests can acquired a room at the most convenience price without so much hustle (Luca, 2016). E-Bay has been abler to serve on-line demands for various goods, ranging from basic necessities, home appliances, to furniture and electronics. All these applications have created disruption in the businesses that were previously dominated by big companies (Solon, 2017).

Another common issues in developed as well as developing countries are those that are related to population changes. In Asia, Japan and Indonesia are facing changes in their demography, albeit different in nature, which is why there is serious need to undertake social-economic transformation. Japan faces an ageing population with 26.3 percent being over 65 years old. Reorganizing healthcare and enhancing the job mobility system in an ageing population through the use of smart and mobile technologies are some of the challenges Japan faces. Meanwhile, Indonesia has a critical opportunity in its "demographic dividend" as the productive ages (15 to 64) would reach its peak between 2020-2030. Based on experience, if the human resources capacity is well prepared, such demographic dividend should propel the country to become an industrialized one. On the contrary, if the human resource capacity of the productive age population is not out to good use, through appropriate development and management, Indonesia faces the potential danger of finding itself in a middle-income trap for too much long and may fail to become a prosperous country. Our current study (Kumorotomo & Kustulasari, 2019) revealed that the benefit of demographic dividend in Indonesia would depend on strategies for higher education in prominent universities, whether the universities will be able to produce skilled and creative human resources in leading industries.

Therefore, it is important that countries start to learn each other on how to tackle the demographic issues while optimizing the use of information technology. Under the vision of Society 5.0 and the elements thereof, Japanese government has vowed to go beyond the Industry 4.0 in order to be more accommodative to the digital and disruptive environments. On the education aspect, for example, the Japanese government has been trying to cut the barriers between subjects and disciplines as an important adjustment to prepare the super-smart future for Society 5.0 (Hayashi, 2019). In a techno-savvy culture and well-developed human resources in Japan, such reorientation should be relatively easy to undertake. Nevertheless, under a more traditional system of education in Indonesia, such strategies might not easy to be undertaken. The issue of how the Indonesian government responded to the digital environment may be well explained by understanding a case of Go-Jek, one of the outstanding start-up online transport business in the country.

### **Wobbling Government: The Case of Indonesian Go-Jek**

With the spreading use of ICT, the disruptive environment was also experienced in Indonesia. Many online business startups have been able to attract consumers as well as investors within unprecedentedly short time. In Indonesia, there are at least four startups that are valued more than US\$ 1 billion after establishing business for less than five years, i.e. Go-Jek, Bukalapak, Traveloka, and Tokopedia. Yet while the technological frontier will create positive changes, it would also bring about negative changes that might not be easy to tackle. Other than the fact that the share of benefits would not be equal among the people, such startups might cause anxiety for job losses, uneven job opportunities, and unequal prosperity among the workers due to a digital divide (Wisskirchen et al., 2017).

Government is the only institution that has all the legitimate power, the authority, and the resources to balance the benefits of new business models so that it would result in robust, equal, and sustainable growth and prosperity for the society. The problem is that government and its apparatus are invariably too slow to make necessary response to the quickly changing policy environment. With the increasing number of smart-phone users and the rising popularity of social media, many startup businesses have proven to be successful and many young entrepreneurs are joining in Indonesia's technology boom, and new niches for online businesses are created. Since 2011, more than 700 startups already online and about seven

have been launched every week. Nevertheless, the problem is inadequate number of real entrepreneurs. Of the Indonesian workforce, only 0.2 percent are entrepreneurs, compared to 11.5 percent in the United States and 7.2 percent in Singapore (Asia News Monitor, 29/07/2011). Therefore, without enough support from the government and more conducive business environment, many of the new ventures would not be able to gain appropriate attention from the market.

Unfortunately, the government responses to the alternative transportation facilities has been wobbling around due to lack of vision and inadequate understanding on new challenges in digital environment and direct participation. Following massive strikes and defensive reactions from the old players in public transportation in early 2015, the government banned the app-based transportation companies and vowed, albeit precariously, to reinforce Law No.22/2009 on road traffic and transportation and the Transportation Ministerial Regulation No.32/2016 on taxi businesses. Nevertheless, within a few months there were furious criticisms from the experts, enthusiastic customers, young entrepreneurs, and the public at large. Given the fact that the app-based transportation facilities brought about new job opportunities and economic wealth and partly solved the hassles that previously faced by customers, the government then drastically changed the course of policy by allowing Go-Jek and Grab to operate in many Indonesian cities (Azzuhri et al., 2018). In May 2018, the government even backed the Go-Jek, with more than 1.2 million drivers and 18 app-based on-demand services, to expand its investment to Vietnam, Bangladesh and the Philippines.

In order to understand the nature of online business, government and the policy makers have to be able to analyze the economic, social and environmental implications of the sharing economy. Understanding how the operators and users are framing the concept of sharing economy is fundamental. Most importantly, however, is understanding that the nature of sharing economy phenomena are varied according to the operators, the consumers, platform types, and the level of technology being used in the platforms. For example, the sharing economy for accommodation is not built on desperation, unlike what can be observed in the case of drivers and consumers on car sharing platforms (Palgan et al, 2017:80). This notion explains why the Indonesian consumers were willing to strongly defended the app-based transport services with the #SaveGojek movement in early 2016.

An online study on user's behavior of Go-Jek revealed that the intention to use Go-Jek is affected by both internal as well as external factors. The main internal factor is the ease of use, whereas the external factors include: compatibility, perceived enjoyment, and variety of services. Surprisingly, innovativeness, trust, and perceived usefulness do not affect user's behavior intention to use Go-Jek (Septiani et al, 2017:511). It appears that consumers see Go-Jek as a good alternative that gives them convenience and practicality in the absence of reliable and efficient public transports in Indonesia. Frustrated with traffic jams and unavailability of public transports, many consumers find that ordering Go-Jek for various purposes on their finger-tips of cellular phones screens is really an easy and enjoyable experience. Also, it might not really important to have online or off-line services, but what matter are that they would like to get services in time, their needs are satisfied and there is not so much hassle to get all of the services.

With regards to app-based transport workers, there have been convincing facts that a growing digital sector is creating new jobs and improving the lives of ordinary Indonesians. Of the 127 million people who are working, about a third are underemployed (working less than 35 hours a week), including more than 30 million who have no choice but to accept part-timer jobs (Biro Pusat Statistik; Bloomberg, 07/08/2018). As a huge number of people find it difficult to have full-timer jobs due to a decline in retail and manufacturing, a part-timer job as Go-Jek driver is a good and manageable alternative for many. As informal workers find it easy to join Go-Jek and get some extra income, albeit some issues of exploitation and job insecurity unlike in formal industrial relations, many young workers are welcoming the online transport providers. Go-Jek business expansion in Indonesian big cities makes it impossible for the government to simply rebuff the online providers and to crack down those who have been comfortable with the new business models.

Therefore, given the fact that Go-Jek and other online transport companies have already disrupted and fundamentally changed the way providers undertake transport businesses, the strategic policy to be envisioned by the government is not to avoid changes. On the contrary, the government and all the stakeholders must be better prepared to embrace disruptive changes, which require courage, agility and shrewd vision. A study on technology-powered growth at regional level estimated that ASEAN countries could experience 30 percent growth with the online businesses, but the grim side of it is that about 40 percent of

the existing companies might not survive under the current form (Stern et al., 2018). The Indonesian government is aware of such possibility by taking a serious commitment for closing the digital divide in the society.

In 2017, there are 132.7 million internet users and 92 million smart-phone users out of its 262 million population in Indonesia. President Joko Widodo has affirmed the importance of adding Palapa Ring optical fiber length and widening the frequency spectrum to provide affordable digital access to the increasing demand of internet users in the country (Asia News Monitor, 19/11/2018). The objective of expanding telecommunication infrastructures is to overcome digital inequality. The government is also preparing a policy roadmap for internet of things and providing digital marketing platforms for micro, small and medium enterprises (MSMEs), all of those have been making business breakthrough with the Tokopedia, Qlapa, Blibli, etc. The role of the government is fundamental to ensure that under digital environment the economic growth remains inclusive so that the benefits of online businesses can be enjoyed by everyone.

To ensure that the business expansion of Go-Jek and other app-based transport services is benefiting the whole economy and majority of the people, the government needs to consider the supply as well as the demand side of such businesses. On the supply side, Go-Jek is by all means a unicorn startup that has been able to attract investors, expand its businesses with broad diversification, and inspire many online entrepreneurs about the importance of embracing with updated technology. Go-Jek has been transforming itself into a service platform for almost all basic needs including culinary, cleaning, hospitality, finance, logistics, health, entertainment, auto workshops, and many others. This transformation showed Go-Jek's ability to maximize strategic alliances with so many individuals and crowd micro-entrepreneurs using its well-developed multi-sided platforms (Santoso & Wahyuni, 2018, p. 40). Recently, the company has also been able to establish business partnerships with more formal institutions such as BCA, Mandiri, and BNI banks to provide financial technology services for digital payment as these prominent banks have agreed to support its Go-Pay application. As Go-Jek also initiated international partnerships with Get in Thailand, Pathao in Bangladesh and Go-Viet in Vietnam, new frontier for global alliances is sought.



**Table 1.**  
**Policy multiple-rationalities on App-Based Transport Services**

No.	Criteria	Remarks
1.	Technical	It is ubiquitous, government cannot simply crack them down (As of 2018, Go-Jek has 1.2 million drivers in 50 Indonesian cities). Smart-phone users, and access to app-based transports, increased substantially.
2.	Economic	It creates new job opportunities. GDP growth is strongly supported by tech investments. Sharing economy and peer-to-peer businesses are the inevitable models at present and in the future.
3.	Legal	It is not in line with conventional industrial relations. The regulatory frameworks cannot keep up with rapidly changing business alliances. Policy directions must be comprehensive and anticipative to advanced technology applications.
4.	Social	Consumers are seeking the most user-friendly applications. Public opinions are quickly changed with the social media; government must be responsive in all fronts. The government have to protect the disrupted workers, new business must be inclusive.
5.	Substantive	App-based transport services do not necessarily solve stubborn issues of traffic congestions in big cities. It is fundamental to prevent monopoly and to create equal and fair policy on various modes of transportation.

*Source: Adapted from literatures and the analysis*

As Go-Jek has disrupted the business of traditional taxi companies, the government must encourage that new technology-supported platforms are also adopted by traditional companies such as Bluebird, Express, Jas, and others. Instead of pitting the companies each other, the government facilitation to negotiate strategic alliances and open up new business opportunities is crucial. There are tips, principles and compass for navigating the sharing economy business models that have been offered by experts. For instance, a compass for helping to elucidate the multiple and innovative forms of sharing economy businesses was provided by Munoz and Cohen (2018, pp. 114-147), which aims at enabling entrepreneurs, investors, incubators and incumbents to create, present, and evolve the business model. Unfortunately, such compass is only appropriately useful for entrepreneurs, businessmen or private sector rather than the government or public sector.

For the government or public policy makers, therefore, a model that is accommodated from literatures of policy analysis written by Dunn (1981), Weimer & Vining (1992), and Fischer et al. (2007) need to be developed. In general, such literatures talk about multi-criteria

to analyze the best policy direction to be chosen among available alternatives. As concisely described in Table 1, the government policy direction on app-based transport services must be based on multiple and comprehensive criteria in order to give its benefits for all, and it appears that a level of playing field for all the taxi operators is the key. The government must be able to address issues on monopoly and ethical standard in order to create equal treatments for all. Complexities surrounding ownership and cash flows of Go-Jek drivers, for example, could result in dwindling tax revenues for the state (Klynge & Rehnberg, 2016). The pattern of tech businesses on the global level is a combination of disruption and gradual evolution. The application technology in smart-phones, which easily connect people at the global scale, is undoubtedly brings about opportunities. Any competitive businesses will have to be ready for rapid changes, all that need courage and agility. But the government must ensure that nobody is left behind under such rapid changes and fierce competitions.

On the demand side, consumer interests must be protected by the government policy. In general, the Indonesian consumers are welcoming Go-Jek and all the app-based transport services due to inadequate and inefficient public transports. At the same time, the earlier section has explained that the main concern of local authorities with Go-Jek and Grab is the fact that not all of their partners are professional drivers with appropriate licenses, who comply with safety standards, traffic regulation and are capable of working with long hours under the severely congested traffics. Therefore, the government policy has to ensure that the app-based transport services follow standardized quality assurance on road safety, fair tariff, complaint handling, and other criteria that will protect its consumers.

The government should also consider the effect of ride-hailing motorcycles to the issues of public transport and the national economy at the macro level. In general, the consumers see that riding a Go-Ride is an easy escape from traffic congestion and inadequate public transports. Frustrated with traffic congestions and unreliable public transports while Go-Jek offers more efficient and cheaper ways to move people, goods and other daily services are all the converging factors that explain why Go-Jek could grow and beat all its traditional competitors within an astonishingly short time. However, the government should consider that the fundamental problem in fast urbanizing Indonesian cities are the traffic congestions and the inefficient public transports. Definitely, motorcycles and private cars are not the solution.

For commuter workers in Jakarta, Go-Ride would help their mobility and productivity. But Go-Ride ubiquity may not necessarily means reducing traffic congestion (Mead, 2016). In fact, on the spot observation would explain that the nature of lawlessness of Go-Ride drivers would exacerbate traffic congestion during office check out hours. Go-Ride motorcyclists have a habit of staying in restricted area while waiting for their customers, taking refuge from torrential rain under the bridge that causing massive traffic jam, recklessly riding through the traffic congestions upon the request of a rush customer, and other risky road manoeuvres. On the issue of congestions in Jakarta, a traffic analyst of Go-Jek even admitted that, while noting that 45 percent of the city area is unreachable by public transportation stops, the only long-term solution of Jakarta urban mobility is improving public transportation (Nugraha, 2018). As provided in developed countries, Jakarta needs high density development where the first option is walking or cycling, and for longer journeys one can use the bus, metro, and other public transport facilities. The government is currently targeting to increase the share of trips on public transport from 23% to 60% by 2030. It may seem a long way from the current reality in Jakarta and other cities in Indonesia, and of course much stronger commitment is required to reach such targets.

The wobbling and evidently incoherent policy on Go-Jek, Grab and other app-based transport services are not only because of its tendency for using formalistic and regulatory approach, but also because of insensitivity to new digital and disruptive business environment. Having been explaining the twists and turns of the Indonesian government policy making, the new phenomena of sharing economy, and the challenges of governance 4.0 environment, it is crucial that all decision makers must be able to use more comprehensive and anticipative criteria in order to make the best policy directions in the future. The pattern of technology-supported transport system will be a combination of disruption and gradual evolution. While it needs to ensure the inclusiveness of app-based transport services, the government must be able to adapt with future technology, which will for sure much more complex than at present. It is important for developing countries, therefore, to learn from the experience of how developed economies are changing their strategies in coping with uncertain and disruptive environment. As culturally Indonesia has similar oriental culture like most of Asian countries, it is definitely relevant to learn from Japan, in which a new

concept of Society 5.0 is being developed for ensuring that the society would be able to reap the benefit of ICT and to prevent the negative impact of disruptive environment.

### **Learning from Society 5.0: “Kotozukuri” and Human-Centered Technology**

Japan looks beyond Industry 4.0 toward Society 5.0, which conceptually aims to create "a human-centered society in which products and services will be readily provided to satisfy various potential needs as well as to reduce economic and social gaps such as regional, generational, gender, and linguistic ones so that all people live in a comfortable and vigorous life" (Fukuda, 2019). The vision of Society 5.0 seeks to solve the problem of Japanese's long-term decline in household consumption and the shift in demand from goods and services. Since 2000s, the country has been experiencing a new paradigm shift in production from "making things" (*monozukuri*) to "making stories" (*kotozukuri*). The relationship between consumer and producer changed as the usage and adaptation of the Internet by businesses and consumers intensified. Any consumer can become a content creator in collaboration with other consumers and producers while hitherto they had been only viewers of content that is produced by other producers (Cormode and Krishnamurthy, 2008; Fukuda, 2019). This change required producers to seek new models of value-added creation to become more customer oriented.

In Indonesia, the infrastructure development with the Palapa Ring satellites and the acceleration of Internet access from less than half to more than 56% (268.2 million) of its population have expanded the use of Social Media, e-commerce, and other online activities (Data Books, 2019). With the development of e-commerce, fin-tech, and big data analytics, McKinsey (2017) predicted that the Indonesian digital economy would reach more than USD 150 billion in 2025. It remains to be seen, however, whether the Indonesian people will be able to reap the benefit of such businesses by becoming efficient producers or only becoming dependable consumers.

The elements of change that are envisioned by the Japanese Society 5.0 can be described as follows:

1. Drone technology to tackle labor shortage;

One example is through drone delivery service, which the government plans to roll out as soon as next year. "Our goal is to be able to deliver packages in the mountain areas by drone

next year," says the Growth Strategy document. "We also aim to engage in safe delivery of packages in the urban areas on a full-fledged basis in the 2020s."

#### 2. Rethinking healthcare for the aging society;

Robotics, long used in industrial settings, are now being tested in healthcare to serve the country's aging population. Researchers are exploring the use of robots and sensors at nursing care to reduce the burden of caretakers as well as lower the cost of medical treatment and care.

#### 3. Unlocking the treasure trove of big data;

Big data is behind many emerging technologies such as machine learning. The government is encouraging businesses to share big data and promoting cooperation to drive innovation.

#### 4. An unprecedented demographic shift;

As highlighted in Japan's official Population Census released in 2016, the country has over 33.4 million people or 27.3% of the population aged 65 or above. And the elderly population is expected to exceed 40% by 2050.

In order to materialize the vision of Society 5.0, the Japanese government has been trying to overcome the hurdles for changes. Of the most important hurdles are those that are attributed to the "walls" in moving to the vision: 1) the wall of the ministries and agencies, 2) the wall of the legal system, 3) the wall of technologies, 4) the wall of human resources, and 5) the wall of social acceptance. A formulation of national strategies and integration of government promotion is being sought in the country. The laws are also being revamped to implement advanced techniques, including all regulatory reforms that will push the administrative digitization. The "knowledge foundation" is being formulated with the vision as it is clear that actionable data plays a foundational role together with all the technologies and areas to protect and leverage it, from cyber-security to robotics, nano, bio, and systems technology. On human resources, the Japanese government is working on educational reform, IT literacy, broadening the available human resources with specializations in advanced digital skills. The government also considers the need of a social consensus as well as a thorough look at social implications and ethical issues. Some subtle but serious issues on man-machine relation and philosophical matters such as defining what individual happiness and humanity means are also being considered.

## Agile Government and The New Public Administration

While uncertainties that are brought about by disruptive innovations have demanded deep and quick management changes, the public sector has been generally too slow to adapt. Many developing economies are currently faced by serious threat of the imminent global recession due to a trade war between two economic superpowers, the USA and China (Kumagai et al., 2019). Nevertheless, the public sector in Indonesia in general does not anticipate the negative impacts of the trade war while the symptoms of global economic slow-down can be obviously observed. The Indonesian rank in the global Ease of Doing Business has been climbed up from 109 to 73, but it has not been able to put the country in the international radar for investment.

The irony is that the failures to achieve higher rank on the ease of doing business are very much depended on the performance of public organizations. The average of Indonesian standard procedures for acquiring a business license, for example, has been too complicated in comparison to those in the OECD countries or the other East Asian countries. In Singapore, that has always been at the top rank in ASEAN, a license for investment can be finished within 7 working days. In Jakarta, on the contrary, such license can only be finished after 90 working days or about three months.

Therefore, to meet the challenge of improving competitiveness and efficiency in public organizations, there has been new discourses on the so-called "agile government", the general prescription for creating more professional, fast, and responsive public agencies. President Joko Widodo, after being inaugurated recently, has clearly stated that one of the priorities of the government in the next five years is to slash unnecessary procedures and complicated structures in the Indonesian bureaucracy (Detik News, 2019). The only viable strategy for staying competitive within the disruptive environment is to envision the agile government. This concept is basically inspired by management systems that are developed in most private organizations, emphasizing the needs to create smart, swift and responsive organizations that are equipped with all the required information technology.

The management recipes for adopting private management systems in public organizations are not entirely new. In 1980s, a new paradigm for public administration has tried to incorporate private sector spirits within the public organizations. Bill Smith of the USA based Motorola company initiated the so-called *Six Sigma* ( $6\sigma$ ), which then later also

adopted by Japanese companies. The Six Sigma concept was one of the fundamentals for the *Total Quality Control* (TQC) in manufacturing production systems of the industrialised countries. TQC demands that all the production phases are supported with maximum efforts to improve the outputs by meticulously identifying the cause of any defects. Statistical analysis are applied to identify variabilities in every steps of production and the management should be able to minimize such variabilities from the designing, engineering, moulding, to the assembling process. Organizational performance improvement should be carried out in a holistic way with regards to the production process, time consumed, operational costs, waste minimization, and the improvement of customers' satisfaction.

In 1990s, the Total Quality Management systems in the private business organizations were recommended for public organization under the new paradigm for "banishing bureaucracy". Among the popular dominating literatures were written by Osborne and Gaebler (1993), and Plastrik (1994) with the formulae of "*how the entrepreneurial spirit is transforming the public sector*". Many government leaders were strongly influenced by the entrepreneurial spirits contained in the public administration paradigm. The US president Bill Clinton, for example, was broadcasted as telling all the high-rank public officials in his administration to read the books and to implement the recommended strategies accordingly. The keywords of "reinventing government" or "rowing than steering the bureaucracy" were attractive not only among academicians but also among the top decision makers in the public organizations.

The spirit of incorporating private enterprise management in the public organizations was also come up in 2000s with the introduction of NPM (*New Public Management*) paradigm. Unfortunately, although many of public organizations were admittedly performed better by undertaking the NPM strategies, there have been failures and disappointments. The government of New Zealand, for example, finally aborted the NPM strategy after five years of implementation in public enterprises due to the fact that it resulted in higher costs of public transports and housings. In some European countries such as Germany and Switzerland, there were contra-arguments against the use of NPM with the introduction of the Neo-Weberian, the NPS (*New Public Services*), and the *Whole Government* models, which were fundamentally objected to privatization efforts of the public agencies and proposed to go back to the essential mission of the government agencies in public services.

Currently, there is emerging spirit for incorporating private systems of management to the public organizations within the concept of *agile government*. The difference between agile government and the previous concepts is that the spirit is not only to create a public management system that is agile and responsive with an adaptive organizational structures, but also to adapt with the challenges and opportunities in Industry 4.0 (World Economic Forum, 2018). Therefore, public organizations are expected to have a new system of management that is more efficient with eloquent use of seamless information technology such as big data analytics, IoT and AI, in the new disruptive environment. Many countries are keen on creating public service delivery systems that are efficient, cheap, and fast, but also humane and responsive to the people's quality of life. The Japanese concept of *Society 5.0* that is geared to *super-smart public services*, with the extensive use of robotic, IoT and AI, is actually in line with the preposition of human-centered technology. Then, how will the Indonesian government and developing economies be able to create an *agile government* and what do we need to achieve its objectives?

It is a bit unfortunate that policy makers and public managers in Indonesia have not been generally aware of the needs for changing the public administration paradigm under a disruptive environment. Although many scholars and public officials have been talking about the need for agile government, the comprehensive approach at the national level to formulate the adequate strategies, to link it with the actual performance in public organizations and to improve the national competitiveness has not been put in place. The above explained example of the government policy on Go-Jek as the outstanding unicorn company proved that many of the government top decision makers did not really understand the new disruptive environment within which public agencies have to respond. The wobbling policies against Go-Jek is a relevant case to understand the issues of public policy and administration in the country. Other than this, there are also new challenges for public management strategies in manufacturing industry, transport, tourism, and other areas of public services.

The challenges and opportunities to improve global competitiveness for Indonesia remain equally open for Indonesia as 65 percent of the population would be resided in urban areas while the proportion of working ages would be at its highest level in the next two decades. However, the government must also aware that there are also newly emerging global issues that must be tackled with concerted actions, such as global economic recession, climate



change, and terrorism. With the agile government and the development of people-centered technology such that has been conceptualized in Society 5.0 there are still opened opportunities to tackled such problem at the national as well as the global level.

In order to create an agile government, scholars of public administration must be able to incorporate theories of visionary leadership in recent literatures (Nanus, 1996) under a fast changing world that is characterized by VUCA (Volatility, Uncertainty, Complexity, Ambiguity) with so much disruptive innovation (Elkington et al, 2017; Schwab, 2018). The Society 5.0 can be considered as a model for envisaging necessary changes in the leadership. Following the model, the digitalization and social transformation are actually aimed at taking down five walls, inter alia, walls of ministries and agencies, legal system, technologies, of human resources, and of social acceptance.

Therefore, the needs to create agile government and more responsive public administration systems should not only involve the Ministry of Administrative Reform (*Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi*) but also all the politicians, the government agencies, think-tanks, university experts and the public at large. Intensive and prolific discussions among the public administration experts will be a good start to work with other elements of the society. The importance of connecting technology under the concept of human-centric "super-smart society" must be understood, not only at the conceptual level but also at the practical levels within and outside the government.

## Conclusion

Public policy complexity under a more democratized Indonesia and the new challenges in ubiquitous technology-supported public services are presented in this paper. The wobbling and evidently incoherent policy on Go-Jek, Grab and other app-based transport services are not only because of its tendency for using formalistic and regulatory approach, but also because of insensitivity to new digital and disruptive business environment. Having been explaining the twists and turns of the Indonesian government policy making, the new phenomena of sharing economy, and the challenges of governance 4.0 environment, it is crucial that all decision makers must be able to use more comprehensive and anticipative criteria in order to make the best policy directions in the future. The pattern of technology-supported public service systems will be a combination of disruption and gradual evolution.

In order to ensure that the government would be able to adapt with future technology, it is important to think about alternative approach toward the man-machine relations in the future. In this regards, learning from the Japanese concept of Society 5.0 would be important for developing countries as at the end of the day it is human who will be the end user of the technology. Instead of being dragged around by the technology, it is important to envision the "super-smart society" in which all the technology should be applied according to the need of the society and to ensure that technology would bring about the optimum benefit for all the elements of the society. The concept of agile government and the new public administration should be able to tackle the negative impact of disruptive innovation, to protect the people from the digital divide, and to create a humane environment in which all the technology-based public services should be able to improve prosperity and well-being for all.

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