Assessing E-Leadership in the Public Sector during the COVID-19 Pandemic in ASEAN

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Abstract

The COVID-19 pandemic period is a challenge for leaders, which has spurred the implementation of e-leadership, especially in the public sector. This article discusses changes in public sector e- leadership practices in ASEAN countries. The research was based on a qualitative research design. Data analysis used NVivo application on secondary data from various recent scientific articles and World Bank data. The results show that the practice of e-leadership in the public sector has experienced a multiplicity of changes that have affected several aspects including organizational culture, time management, use of information technology in carrying out tasks, and meeting media. Digital literacy, transparency, and time hours indicators are important in assessing the condition of e-leadership before and during the Covid-19 pandemic. Multitasking remains a challenge during crises. Leadership ability and knowledge of leadership in digital technology is one of key factors that influence success.

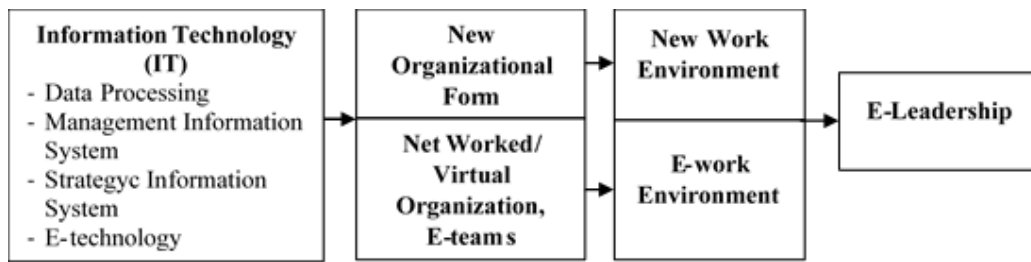**Keywords:** *ASEAN countries, COVID-19, e-leadership, public sector*

INTRODUCTION

Effective leadership is an integral part of organizational effectiveness. Effective leadership creates positive culture, strengthens motivation, clarifies organizational mission and goals, and directs an organization toward more productive and high-performing results. There is a lot of recent empirical evidence on the importance of leadership and its absence or limited prevalence in some public organizations (Larjovuori et al., 2018). Leadership contributes significantly to employee satisfaction, in two key ways, including utilizing employee skills and teamwork, and developing and maintaining effective team leadership.

E-leadership is the result of the E-work environment brought about by the development of information technology and its integration in organizational processes. Based on this conceptual framework, the use of information technology over the years has changed the way organizations run their business. As a result, a new form of organization-virtual organization/network organization has emerged (Mustajab et al., 2020). Face-to-face meetings between organizational leaders and their teams have changed. Meetings that prior to COVID-19 pandemic used to be almost entirely in-person, are today being held online using electronic technology (telephone, email, fax machine, or video conferencing). It is not surprising, therefore, that the change in the new work environment requires new leadership competencies, especially e-leadership.

E-leadership is defined as a process of social influence mediated by technology to produce changes in attitudes, feelings, thoughts, behaviour, and performance within individuals, groups, and organizations (Morrison-Smith et al., 2020). E-leadership can occur at any level of the hierarchy in an organization and can involve one-to-one and one-to-many interactions within and across large organizations; has roles and responsibilities that demand leaders to conduct communications with their employees even though they are not in the same office; and must understand new technology to meet employee needs and build relationships between employees (Mustajab et al., 2020).

Figure 1 shows the e-leadership framework of based on the OCAI (Organizational Culture Assessment Instrument). The framework comprises four competing organizational cultures that are influenced by four parameters including control versus flexibility and internal focus versus and external focus. Based on these four parameters, organizational culture is of four types clan culture, hierarchical culture, market culture, and adhocratic culture. A an adhocratic culture is more successful than a clan culture because the former is more

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┌─────────────────────────┐     ┌───────────────────┐     ┌──────────────────┐
│  Information Technology │     │       New         │     │   New Work       │
│          (IT)           │     │  Organizational   │ ──▶ │  Environment     │
│  - Data Processing      │ ──▶ │       Form        │     │                  │     ┌──────────────┐
│  - Management Information│     ├───────────────────┤     ├──────────────────┤ ──▶ │ E-Leadership │
│    System               │     │   Net Worked/     │     │   E-work         │     └──────────────┘
│  - Strategyc Information │     │     Virtual       │ ──▶ │  Environment     │
│    System               │     │  Organization,    │     │                  │
│  - E-technology         │     │     E-teams       │     │                  │
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Figure 1. Conceptual Framework for E-Leadership
Source: (Mustajab et al., 2020)
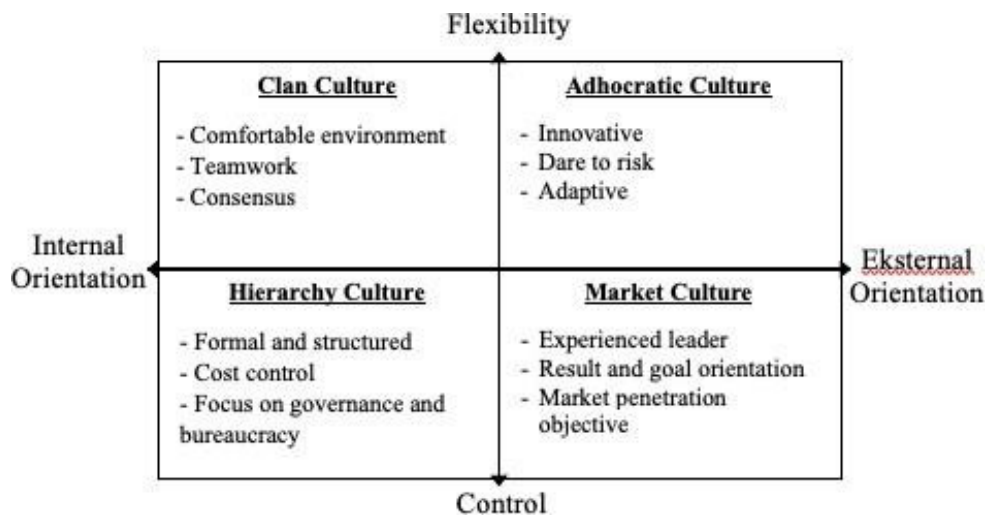
Figure 2. Types of E-leadership and Culture in the Digital Age
Source: (Mihardjo, 2020)

flexible, more open to external influences than the latter which is more hierarchical, internally focused. A good organization manages competition between cultures by applying the values of the four cultures (Mihardjo, 2020).

The Clan culture, which is inclined towards group and clan interests; a hierarchical culture is influenced by internal orientation that prioritizes compliance and governance, which is typical of government agencies, state companies, and regional administrations. Meanwhile, a market-oriented culture is characterized by experienced leadership, focuses on market

penetration, and goal and results oriented. An adhocratic culture with e-leadership, creates an innovative environment, is willing to take risks, is entrepreneurial, and adaptive to change (Oswald et al., 2016).

E-leadership is increasingly being adopted in the business sector and the not for profit sector (Toleikienė et al., 2020). However, the adoption of ICT in e-democracy, electronic services, and digital leadership in the public sector in the provision of public goods and public services for internal organizational processes has received little attention. The adoption of e-leadership remains a big challenge for public

administration for structural reasons. This is because most organizations in the public sector, while show readiness to respond to new challenges (Bryson et al., 2014), face challenges in dealing crises the need to resume activities under any circumstances, and to ensure prompt decision-making. The use of ICT in public sector administration activities motivates team supervisors to apply e-leadership in the public administration bureaucracy and managerial team (Boin & Lodge, 2016). E-leadership requires more flexibility and creativity from leaders, come up with non-routine solutions, requires sensitivity to individual and group interests and conducting impromptu communication between leaders and team.

Moreover, e-leadership can pose additional challenges for supervisors and employees-leaders in public administration are expected to work openly, inspire individuals and teams to mobilize, concentrate on problems and results, guide rather than control, and concentrate on motivating rather than directing (Kapucu & Garayev, 2011). Supervisors should have a variety of competencies and skills, that may depend on competency development that is influenced by which, organizational policies. In any case, supervisors rely on institutional support, such as training, decision support systems, and simulations to improve their use of ICT and decision-making skills, especially during crisis situations. Thus, lack of

institutional support can be could be another challenge for digital leadership in crisis situations such as the COVID-19 pandemic.

Indonesia began to implement the COVID-19 protocol based on recommendations of the World Health Organization (WHO). The health protocols require people to wash hands regularly restriction of meetings or gatherings, enforcing a minimum physical distance of 1 meter between two persons in the same space; imposing restrictions on activities outside homes; implementing self-isolation measures for individuals diagnosed with asymptomatic COVID-19; and effecting lockdowns of communities, organizations, even entire cities (World Health Organization, 2021). Policies which the Indonesian government has adopted include imposition of social distancing measures, large-scale restrictions on people movements social economic and cultural activities, and requiring work from home for most employees and organizations. Consequently, many organizations, government offices, and private companies have implemented work from home requirement.

To lay the legal framework for social restrictions, the Indonesian government issued government regulation of the Republic of Indonesia No. 21 of 2020 concerning Large-Scale Social Restrictions in the Context of Accelerating the Handling of COVID-19. Large-Scale Social Restrictions

entail limitation of activities of residents in an area to prevent and control the spread of COVID-19. The criteria used for establishing Large-Scale Social Restrictions include among others, the number of people diagnosed with COVID-19, rapid increase in the number of deaths or rapid spread of the disease to surrounding areas. The policy on large-scale social restrictions affects sectors that include education with schools required to conduct remote learning activities, public and private sector organizations to implement working from home policy, restrictions on the conduct of religious activities in places of worship, and restrictions on activities in public places that involve large numbers of people.

METHODS

The research used both quantitative data (secondary data) and empirical results of previous qualitative research. Secondarydata was derived from previous studies of scientific journals, books, and news articles that covered the latest developments in e-leadership in Indonesia before and duringthe COVID-19 pandemic. The included theory, words, actions, and documentation, which were analysed based on three indicators of digital leadership in the public sector that were developed by the world bank. Data analysis was based on NVivo software that assessed the change in the adoption of e-leadership in the Indonesian public sector

before and during the COVID-19 pandemic. NVivo application can helping determining the logical pattern in content of qualitative research, thereby enhancing research process efficiency.

FINDINGS AND DISCUSSION
E-Leadership in The Public Sector Before The COVID-19 Pandemic

Lack of Electronic Systems in The Public Sector. Despite the fact that public sector organizations have been implemented various electronic systems prior to the pandemic, such as document management systems or strategic planning systems', which enable leaders to distribute tasks to employees, control and perform tasks and financial flow. there is still lack of electronic system that enable leaders to establish connections and links among all available information about planned activities, financial resources, and quality management system.

Individual Initiatives to Use ICT. Before the pandemic, the awareness and readiness of leaders in the public sector to take individual initiatives to promote and increase the use of ICT was still low. This was especially so for advanced age leaders who tend to practice conventional leadership that does neither encourage nor incentivise employees to learn to use information technology such as providing training in digitalization adoption and deployment. Lack

of useful training oriented towards digitization is considered an obstacle that discouraged the learning and using new ICTs.

Teleworking. Before the crisis, teleworking was rarely used in the public sector, as it was limited to leaders or employees who are involved in doing tasks and services in remote areas. Moreover, employees who used to do their work remotely had to attend workgroups in-person, at which they were expected to on the same day at the pre-determined time. Therefore, prior to the pandemic, teleworking was not widely permitted, and not popular among employees in places that were not remote.

E-Leadership in the Public Sector During the COVID-19 Pandemic

Organizational Culture. The characteristics of an organization serve as guidelines that influence the goals culture that should be achieved. To prevent the collapse of organizations during the current pandemic condition, many organizations have been forced to adjust and modify rules for achieving organizational goals. Many organizations are adapting by repurposing labour, customer management, and even leadership. To Increase work productivity, leaders are expected to be adept at have adaptation in short time, which may not achieve outcomes that are needed. That said, leaders must make modifications and adaptation of such fundamental aspects of an organization as business processes, working

tasks and activities, even if that is done temporarily until the COVID-19 pandemic ends or until the situations registers improvement. In a research conducted in mid-2019 on 368 samples of Information and Communication Technology (ICT) companies in Indonesia. Mihardjo (2020) identified 11 digital culture components are the influence the creation of operational capabilities that differentiate good performers from laggards.

One of the obstacles faced in adapting e-leadership in organizational culture during a pandemic is the gap between leaders and employees. While leaders in the public sector implement digital working culture in the organization, employees tend to resist such business (Curran et al., 2011). The problem is attributable to the failure of leaders to become role models by providing examples in using digital media. On the contrary, leaders often use directives and orders and tasks to employees, which hampers the process of creating a work environment that is conducive to implementing digital transformation, innovation, and collaboration. In command style organizations, making mistakes and risk taking is punishable, hence not tolerated. To that end, employees are not willing to take risks, which drive innovations and commercialization of new services. To e-leaders, public sector leadership mustengage in strategic communications with both

Organizational employees and external stakeholders to promote and support digitalization andcreating a working environment that promotes new ideas with respect to organizational products and services and business process. To acquire communications skills that are relevant in today's operational environment, leaders must be knowledgeable in electronic equipment and median such as computers, the internet, and underlying ICT. Moreover, leaders must be cognizant of the difference in impact on audience between direct and online communications. While virtual and digital communications is reduces the trustworthiness of the message to the recipients (message decoding and noise problems, liable manipulation by third parties who have access to the message transmission medium; message intent may differ between what the sender conveys and what the recipient understands); direct communication is more trusted because of the in-person experience, opportunity for direct bidirectional exchange between the conveyor and recipient of the information, respect is observed during the communication process.

Communication Media. Currently, leaders have a wide choice of communication media they can use in managing and coordinating their organization. However, communication using social media such as Facebook, Twitter, WhatsApp Messenger, and Zoom Meetings must comply with applicable communication ethics and rules. Communication through social media is certainly different from direct communication where leaders know characteristics of the audience which they use to determine the wording and intonation of the messages they deliver. Communicating through social media involves dealing with, on many people with diverse interests, education and knowledge capacity, and area drawn from various social, economic and cultural backgrounds. Moreover, leaders while communicating through social media must use sentences that are more orderly, shorter but easy to understand, as well as limited non-verbal cues to convey aims and objectives. Thus, in managing their organizations during the implementation of social distancing and physical distance restrictions due to the COVID-19 pandemic, leaders have had to respond to the challenge of improving their communication skills to meet social media requirements.

In addition to communication skills, digital leaders during the COVID-19 pandemic must have adequate skills in information technology applications. The fitting example in this case are Micro, Small, and Medium Enterprises (MSMEs) entrepreneurs who must adopt and become adept to the use of digital technology to survive during the COVID-19 pandemic. Nonetheless, based on data from the Ministry of Cooperatives and SMEs, currently only

6.4 percent of the 59.2 million MSMEs in Indonesia have the capacity to market their products using online (e-commerce) channels (Yuliani, 2017). Most of the MSME leaders, acknowledge the need to learn a lot about online production and sales support applications. This is because, currently there are still many small and medium business actors in Indonesia who have not exploited the potential of e-commerce in production, management and marketing their products and services. That said, based on finding of one study, female MSME leaders showed higher information technology skills adroitness that their male counterparts. This may be attributable to the fact that female MSME actors tend to more frequently interact more frequently with information technology media such as gadgets, iPods, tablets, and computers than male leaders, which equips them with the opportunity to become more familiar and knowledgeable about using information technology and applications.

Organizational Management Strategy. Many Micro, Small and Medium Enterprises (MSME) leaders during the COVID-19 pandemic experienced difficulties in making decision about their appropriate business management strategies. This was principally because of limitations imposed on economic and social activities. Consequently, MSME actors had to devise new ways to manage their businesses by

shifting from using direct and in-person channels to sending and receiving online orders. There however, for some consumers who despite expecting adherence to safety protocol requirements that are in place to control the COVID-19 pandemic, still feel the need to see products in-person prior to buying to ensure product quality and attributes are in line with their expectations. Dealing with such customers, thus, demands MSME actors to devise new ways of managing the conduct of their business operations

In nutshell, e-leaders are expected to devise ways and procedures to manage their businesses and services during the COVID-19 pandemic, despite limitation of time, space, channels of conducting transactions and interaction with customers. Making use of the advantages of information technology can reduce even overcome problems that barriers that restrictions imposed on in-person interaction, time of operations, and social distancing requirements create for businesses.

Hours of Work. Time management is another problem, which leaders of several organizations found difficult to handle. The problem arises from the implementation of government policies on Large-Scale Social Restrictions which among other requirements, compelled employees to work from home. Consequently, leaders of public sector organizations are expected and

impelled to coordinate the management of their organizations, including employees using remote means. One of the consequences of the policy is the requirement for management to develop work shifts for employees in a fair and equitable manner. Nonetheless, it is not always easy for management to develop shifts that all employees find fair in accordance with their preferences and personal interests. Meanwhile, for leaders' educational organizations, the challenge of managing working time while at the same time rescheduling routine work that includes arranging teaching schedules for teachers, conducting performance evaluations, and working at irregular times, has become even more formidable.

Use of Computer Information Technology (ICT). Leaders of educational organizations have insistently encouraged teachers and lecturers to use information technology in carrying out their duties and responsibilities. However, the challenge such leaders face is that some teachers or lecturers do not have the requisite skills to use ICT devices to conduct their teaching and learning exercises. The implication is that there is need for reskilling teachers or lectures who do not yet have adequate skills to use ICT applications in their work. In compliance with requirements of social distance restrictions that are currently in place, such courses must be conducted online

to prevent the spread of COVID-19. The benefits such short courses have for teachers /lectures are not limited to equipping teachers and lecturers with knowledge and skills to use information technology applications in the world of education, but also help teachers acquire other competencies such as management skills, leadership, and motivation Moreover, short courses are also increasingly being used to provide management skills, leadership experience, and motivation to students, which are crucial skills they need to become not only skilled employees in future but also responsible and well- informed members of community.

Another challenge for leadership during COVID-19 conditions relates to trust between leaders and teachers. Leaders consider leveraging e-leadership in education as one of the ways of maintaining trust between leaders and teachers. Leaders of educational organizations are of the view that maintaining trust is aimed at maintaining job satisfaction and teacher productivity by supporting and encouraging motivation and observance of the rights of teachers. Nonetheless, while leaders consider ICT important in strengthening teacher ability and job performance, for some teachers, the deployment of ICT is perceived as endangering their rights by being constantly under the surveillance of their leaders. For teachers, lecturers, and instructors, a leader should be a flexible and complex human

being, who conducts work and activities free from the intervention of an invasive information system. In fact, many decry information systems for diminishing trust among organizational members.

Social and Environmental Learning. One of the advantages of implementing e-leadership in a pandemic is social learning. Social learning concerns the impact of the exposure of an individual to the changes in the environment has on behaviour and needs. that. Most people learn through selective observation and remembering the behaviour of other people, imitating behaviour that they deem suits their behaviour and personal goals. Through social learning, leaders acquire new experiences from people who are pioneers in developing solutions to problems, which skills and knowledge are learned and transferred to relevant contexts by developing strategies in the future when and if similar problems emerge. Social learning, however has another advantage. This relates to the flexibility it affords the organizational leader the opportunity to leverage the authority vested in leadership to regulate and control the organization in accordance with organization.

Organizational vision, strategy, and mission, constitute the common unifying factor between expectations of leadership and other members of the organization. Such opportunity creates space for the reduction of e conflicts in the organization because of the

harmony that occurs among members of the organization by pursuing similar organizational objectives.

Time Flexibility. Implementing e-leadership gives leaders the opportunity of having flexibility of time. E-management affords leadership the opportunity to manage the organization anytime and anywhere. Nonetheless, despite the fact that the leader is vested with the authority to use his discretion and perspectives, obtaining seek approval of all members of the organization is always required in managing the organization effectively. Several e-leaders interviewed acknowledged the fact that they generally determine the working hours and methods of work as well as the division of work, after obtaining approval of everyone in the organization through online forums. In addition, organizational leaders also corroborated the notion that the pandemic condition has allowed them to take advantage of quality time with their families, are able to work from home and control the organization while sharing family duties with their partners, thereby achieving work-life balance.

Rampant Inequality in e-technology across Regions. One of the significant challenges in using e-leadership in managing public organizations in Indonesia is that its availability is not equally distributed in all regions of the country. Thus, using e-leadership is constrained by the

unavailability of quality and strong signals in some regions in Indonesia. Some areas in Indonesia still face difficulties in accessing communication signals due to the existence of blank spots. Blank spots are areas which are not covered by communication network signals. Such areas include Pacitan, Sumenep, and Trenggalek. In one study, a total of 52 islands in Sumenep were identified as facing the problem of blank spots (Salsabila, 2020). There is little doubt that blank spots in communication signals have created obstacles in implementing e-leadership in public organizations that are located in such areas.

Conducting Work that relates to Operations. Another challenge in implementing e-leadership in public organizations is that not all activities can be done and controlled from the comfort of the home. Based on research by (Makarius et al., 2017), finds that using the leader's home to conduct supervision and monitoring of the work of every employee in their respective homes, is extremely difficult. Consequently, leaders encounter difficulties in controlling and supervising every working process of employee duty, leading to miscommunication problems that eventually hamper or outcomes to fall short of expectations. It is also argued that the implementation of online coordination between leaders of organizations, companies, or agencies on one hand and their

subordinates, on the other, has the potential to reduce work motivation. To mitigate such a problem, leaders should build trust through quality communication to maintain work motivation of e their subordinates.

Work Productivity. The implementation of e-leadership has the potential to increase work productivity, both for leaders and employees. There are many cases where the in-person work environment is too crowded, thus inimical to work and leader productivity. Too many activities that are conducted in confined space can interfere with work concentration and reduce employee enthusiasm and increase stress. Working from home, on the contrary, offers employees working condition that is more comfortable, calm, and conducive, less distraction, which leads to more concentration on work at hand. What is true for employees are also equally true for leaders. Leaders by working from home, can be more productive due to the with a comfortable working environment that suits their preferences, which gives them the opportunity to determine the strategies, ideas, and actions.

Changes in Public Sector E-Leadership during the COVID-19 Pandemic Period

A comparison of the mode of conducting activities before and during the crisis period highlights several changes that have occurred.

Table 1. The Changes of *E-leadership* Before and During the COVID-19 Pandemic

Aspects	Before the COVID-19	Pandemic During the COVID-19 Pandemic
Use of ICT	Lower level of Provision of office hardware,	An increase in the Use of ICT
Teleworking	Rarely used	Teleworking became both a necessity and imperative as it was only through teleworking using meetings that activities were carried out
E-Tools	Phone, email and Messenger	Google Teams, Zoom, live conferences and groups Facebook
Time Management	Regular, rigid	Flexible, work-life balance, longer working hours
Communication	Slow, and fraught with miss-communication	Fast response
Task execution	Focus on one task	Multitasking

Before the pandemic, the quality of computer hardware and software that city governments used, was considered adequate to meet organizational performance goals at the time. Nonetheless, the suitability of computer equipment for teleworking has become one of the top priorities in planning a public procurement for computer hardware and software. Another features of working environment before the pandemic relates to Individual learning about using ICT tools, which was a common practice by leaders and employees in city administrations. In fact, the increase in the adoption and deployment of e-government in the public sector is based on provisions of the Presidential Regulation of the Republic of Indonesia No. 95 of 2018 concerning Electronic Based Government Systems. An electronic based government system is needed to realize clean, effective, transparent, and reliable governance. Besides, the application of electronic based

government system in the internal aspects of government management, using an electronic based government system also has a major impact on the community using the services. One such impact is the increase in innovations in both service delivery process and quality of new services and improvement in the conduct of existing services. First, using information technology in public service delivery enhances access and ease of access to services by users. The public no longer has to spend a lot of valuable time, efforts and money to go government agencies rather instead simply accesses government managed websites, and social media. Obtain services they need; the public only fills out basic information about the services they need on application forms that are provided. To increase access to e- government services during the crisis, however, the need to learn to use and master virtual gatherings and the application of

SPBE in community-based community services has never been higher.

Supervisors are initiators and consultants on the use of new e-tools before and during a crisis. of the increasing importance of e-leadership induced by COVID-19 pandemic situation quarantine conditions have led to the institutionalization and recognition of teleworking at all levels and positions of city government administration. Before the crisis, officials and leaders in the public sector rarely used teleworking opportunities, while during the crisis, teleworking has become both legal and mandatory for all city employees. Consequently, the perception of top leadership about the role and importance of e-government has shifted from reluctance to embracing teleworking as the best way to complete tasks and achieve organizational goals. Besides, during the pandemic, the scope of communication (modes, channels, and tools) has also changed. In-person communication, especially bilateral, has to a large extent been replaced by virtual /remote (team) multilateral communication.

While ICT tools such as phone calls, e-mail, and Messenger were already being used in communications between leaders, employees, and public service providers and users before the pandemic, it is only during the COVID-19 pandemic an in its aftermath that the adoption and use of virtual meeting software, such as Google Teams, Zoom, live conferencing, and Facebook groups begun and has become common today. Based on a report in Kompas.com, the number of active Microsoft Teams users by the end of April 2020 had increased to more than 75 million per day, which represents 70 percent change from the March 2020 (Salsabila, 2020). The same report goes further to note that Microsoft Teams by the time the report was written had 200 million meeting attendees a day. Meanwhile, Zoom, which is another online video conferencing platform, had more than 300 million online meetings a day. Thus, based on the above information, it is apparent that since the onset of the COVID-19 pandemic employees have taken on working at home and conducting virtual meetings with video conferencing applications.

Nonetheless, effective management during conditions that are characterized by remote working and supervision, time management is of the essence. Thus, it is imperative that leaders and employees learn better time planning to take full advantage of extremely flexible and intensive schedules to handle the increase in the number of virtual meetings that can be held at any time. Some of the advantages of teleworking include, the elimination of the need to travel to meeting places, with time virtual meetings, online conferences, and even phone calls have become shorter, more structured, andclearer, increasing time effectiveness. Moreover, the

onset of the pandemic has led to the change in the focus of the leader toward more emphasis on delivering tasks. There is also ease in time management between work and personal matters, which has led to an improvement in the quality of work-life balance for both leaders and employees.

Moreover, while before the pandemic, the delivery of timely responses to tasks that were extraordinary could only be done privately, often over the phone or virtually (via email or Messenger), the advent of the pandemic has brought to the fore an increase in teleworking and communication as the most effective way for employees to do tasks and leaders to manage organizational operations, including supervising workers.

Nonetheless, the quick pace of information delivery, often led to misunderstanding with respect to message content During a crisis, when leaders use virtual channels to convey information, the often the focus on is rarely put on the clarity of requests submitted rather the need for rapid responses within 15 minutes or less. Meanwhile, working in an office where meetings are in-person employees often have to wait for the leader to have some free time in his busy schedule to hold meetings. This is not to mention in the event, uncertain there are impromptu assignments, which need carrying out. Such assignments are prone to miscommunication between leaders and employees. On the contrary, online assignments provide employees the opportunity to seek clarity from leaders at any time and receive responses quickly as well.

Another development that characterizes the working environment during the pandemic is the increase in multitasking. Multitasking in a crisis is non unexpected because the leader acts as a mediator between those who need information and providers of the information, both of which are heterogeneous stakeholders. To enhance effectiveness in multitasking, leaders must develop or adopt the right management style that creates a list of work/task priority, time scheduling and task assigning that take into account contingencies due to uncertainties affecting workers during their tasks from their homes.

Case study of E-leadership During COVID-19 in ASEAN Countries

The results are based on findings of studies study compared the application of e-leadership in the public sector in ASEAN countries (World Bank, 2021; The ASEAN Post, 2020; Kusumastuti & Nuryani, 2020). The study used indicators e-leadership practices in the public sector which included digital literacy, voice and accountability, and average hours worked hours in a week by leaders in public sector during the pandemic. Digital literacy is an indicator of the quality of leaders in the public sector, which

Table 2. Indicator of E-leaders in ASEAN Countries

Countries	Voice and accountability	Digital literacy level	Average worked hours in a week
Singapore	41,38	24,6	43
Thailand	21,18	24,00	43
Indonesia	50,74	20,5	39
Vietnam	10,84	20,4	40
Myanmar	23,65	19,9	48
Philippines	48,77	19,80	42
Malaysia	34,48	19,20	46
Cambodia	15,76	15,6	43

Source: World Bank, 2021; The ASEAN Post, 2020; Kusumastuti & Nuryani, 2020
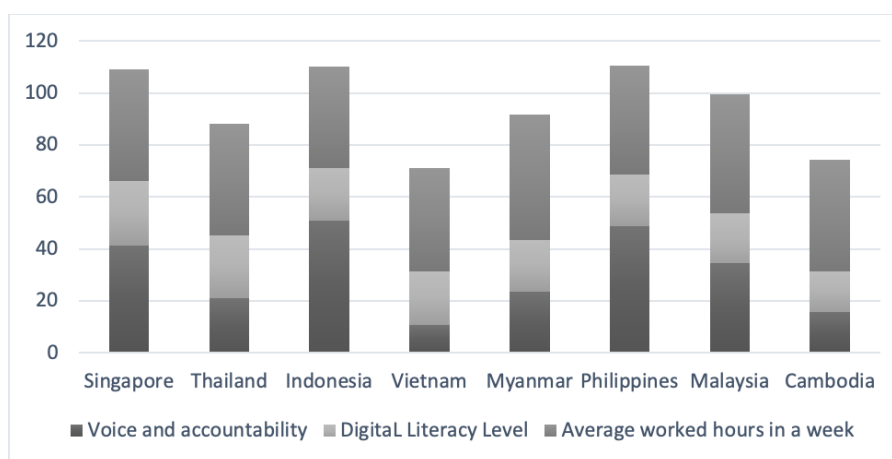
Figure 3. Graph of E-leader Indicators in ASEAN Countries

Source: World Bank, 2021; Kusumastuti & Nuryani, 2020 ; The ASEAN Post, 2020

is related to personal abilities in reading, searching for, identifying and using digital information. Thus, digital literacy does not gauge the ability to read information in digital media, but also the ability to search, identify, evaluate, and use the information obtained. A leader is considered to have good digital literacy skills if he or she can read and process information from various media on the internet, smartphones, and other digital sources. Table 2 and Figure 3 present the level of digital literacy in ASEAN countries. The level of digital literacy among ASEAN countries, while does not vary very much across countries, mean score ranks show that

Singapore (24.6) and Thailand (24.0) are digital literacy leaders; followed by Indonesia (20.5) and Vietnam (20.4), Myanmar (19. 90), Philippines (19.80), and Malaysia (19.20); and Cambodia (15.6).

Implementing e-leadership in companies, organizations, education, and the government increases cost savings and transparency and accountability. Data on Voice and accountability shows that for employees have freedom of express towards leaders and public officials who have accountability. As regards, digital literacy level, voice and accountability among ASEAN countries shows significant

difference among ASEAN member states. Based on Voice and accountability-based data obtained from the World Bank (2021), Singapore (41.38), Thailand (21.18), Indonesia (50.74), Vietnam (10.84), Myanmar (23.65), Philippines (48.77), Malaysia (34.48) and Cambodia (15.76). Thus, Indonesia and the Philippines, have higher Voice accountability than other ASEAN member states, other countries, while the Vietnam and Cambodia have the lowest ranks. Implementing e-government by ASEAN governments can help in repurposing spending on such organizational management activities as face-to-face meetings to other pressing uses. Moreover, adoption of e-government enhances transparency and accountability. This is because database operations and management are carried out online, which increases the ease and timeliness of e-leaders to monitor work developments and performance that increases the ability to detect any anomalies that occur. Nonetheless, the above benefits can occur if the e-leader has strong commitment to supporting electronic-based process and activities.

The COVID-19 pandemic has significantly changed the way corporate leaders work. One of the important implications of this crisis was the emergence of remote leadership in various public sectors. The impact of WFH activities in ASEAN countries can be gauged by changes in working hours. Working time and hours that are not only becoming more flexible but shorter. With 48 hours, Myanmar leads the way with the ASEAN's longest average working week, while Malaysia on 46 hours is second. Public servants in the other three ASEAN countries, Thailand, Singapore and Cambodia, spend 43 hours at work on average. The other nations, the Philippines and Vietnam, meanwhile, have less than 43 hours.

The latest ILO forecasts show a much larger decline in global working hours in the first half of 2020, which is higher than previously estimated. This reflects a worsening situation in many parts of the world in recent weeks (International Labour Organization, 2020). In addition, since the fifth edition of ILO Monitoring, new national labour force surveys and economic data covering the first and second quarters of 2020 have become available and have been incorporated into the ILO "nowcasting" (International Labour Organization, 2020b). The new data shows that workers in developing countries, especially those working in the informal sector, have been more affected than in in past crises. For instance, in Southeast Asia, the estimated total working hours lost for the second quarter of 2020 is 13.5 percent, or 235 million SPPW jobs, up from the previous estimate of 10 percent.

Working hours have an effect on efficiency and the quality of life. Ernst Abbe, head of the Zeiss lens factory in Germany, discovered more than a century ago that shortening working hours from nine to eight hours a day contributed to an increase in demand (Britannica.com, 2020). Since then, countless studies have shown that Abbe's results still hold true, and there is a point at which overall effective production will decline as additional hours are worked, typically at around 40-50 hours per week. In other words, beyond a certain threshold, increasing effort is harmful to production. Thus, based on previous research on the relationship between hours worked and productivity, many managers seem to adhere to the belief that adding workers and technology used in production is more effective in increasing productivity than increasing the number of work hours per employee.

Solutions of E-leadership in the Public Sector during the COVID-19 Pandemic in the Public Sector

One of the key solutions to problems that leaders in the public sector face in managing organizations under conditions of high uncertainty during the COVID-19 pandemic is the formation of a Task Force Team. Despite the benefits that are associated with a task force in problem solving, there are not many government agencies, companies,

or organizations that have used it as one of the ways to enhance organizational effectiveness and efficiency in creating solutions to problems especially during times of high uncertainty. A Task Force Team network consists of several groups that come together, adapt, and collaborate as a team. The main purpose of creating a Task Force Team during the COVID-19 pandemic is to act as an overseer of the implementation of health protocols in various activities, including the activities of the leader as the coordinator of the team.

Various public sectors, such as ministerial offices have established Task Force Team. One example is the Ministry of Marine Affairs and Fisheries. Based on the Decree of the Minister of Maritime Affairs and Fisheries No. 27 / KEPMEN-KP / 2020 (Kementerian Kelautan dan Perikanan, 2020), the former Minister of Marine Affairs and Fisheries, Edhy Prabowo, formed a Task Force that had the goal of Preventing and Controlling the Spread of COVID-19 through. The Task Force consisted of a director, chairperson, and members who worked together to prevent and cope with the spread of COVID-19 within the Ministry of Marine Affairs and Fisheries. Besides, helping Ministers in executing duties that fell under their remit, task forces are also created in local government and the private sector. One good example, in that respect is the Karawang Regency Government that with

the collaboration of the COVID-19 Task Force is currently working on improving internal management. To expedite the process, Karawang Regency Government has instructed company leaders to form an internal task force that will be charged with monitoring developments, evaluating, and making and submitting reports to the Karawang Regency Task Force (Kementerian Komunikasi dan Informatika, 2019). Besides, in accordance with the Ministry of Health guidelines, company leaders, and heads of sub-districts that have industrial estates also participate in monitoring the implementation of health protocols and making SOPs for preventing the spread of Covid-19 in the workplace.

Strengthening the E-Leader Character. Times of crisis require strong leadership. E-leaders must have the strength of character to face the multiplicity of problems that a crisis create. In an emergency, experience is the most valuable aspect of leadership. However, in a large-scale crisis like the COVID-19 pandemic, the character of an e-leader is even more important. e-leaders must have crisis response capability that enables them to coordinate team members and activities, as well as initiative and steer the formulation of questions the team uses to solutions to problems. Crisis management leaders have several characteristics including being deliberate and calm: which is the ability to

overcome anxiety and think clearly about how to control the situation. While calculating calmness is often found in inexperienced and humble individuals, that by no means mean helplessness such traits are useless in management. Another important character is an attitude of realistic optimism or "bounded optimism" or a confident attitude based on reality. If in the early days of the crisis e-leaders showed excessive self-confidence, rapid change on events that weren't within their control would most likely have contributed to their loss of credibility. Optimism is better shown by finding a solution to a problem that arises because of a crisis by conducting research to get a lot of information. Self-confidence does not create solutions during crises and emergencies, while e-leader innovations does. Thus, e-leaders are required and expected to improve their use of ICT in the team, which increases their capacity to devise innovative ways and improvise solutions to urgent problems.

Optimizing the use of ICT. Recognizing the importance of e-government in public service delivery and administration, local government leaders must be equipped with e-leadership skills to conduct their functions and responsibilities effectively. It is leaders who are knowledgeable and versed in the importance of information and communication technology which is crucial for e-government

services that can foster the creation of future public organizations that are responsive, effective, efficient, accountable, transparent, and easily accessible by all communities. By creating an enabling environment that is conducive for digital technology based public services, adeptness in e-leadership will help in enhancing the effectiveness and efficiency of government business process enabling providers to deliver services to all sections of society.

There is another good example of the impact that the adoption of information and communication technology (digital) in the public sector can have on the effectiveness and responsiveness of public service delivery. This is the case of 40 villages in Banyuwangi, which thanks to the implementation of the public service delivery smart program, have been able to reduce bureaucratic formalisms which has contributed to quicker and easily accessible public services. Rural communities no longer have to travel long distances to sub-districts or cities, and spend a lot of time and energy to access public services. One example is the process of poverty status verification certificate, which today only requires the applicant to complete the entire process at the village level rather than processing the documents right from citizen association to district/city administration level. Moreover, according to the Head of Banyuwangi District Health Office, Wiji Lestariono, the

implementation of the smart villages program has enhanced the effectiveness of the management of the risk of spreading COVID-19. Consequently, the local government has been able to control the adverse effects of the pandemic on society (Pemerintah Kabupaten Banyuwangi, 2020). The smart village application, sends a daily report from the Banyuwangi district health center directly to the Ministry of Communication and Information. Meanwhile, government officials make use of an online registration system are able to process important citizen documents. This includes processing the poverty status verification letter, which is entirely online. Operators from all the 40 villages are trained to manage the online system which has enhanced their ability to quickly serve residents. There is evidence that thanks to the implementation of the smart village program in the 40 villages in Banyuwangi to become of the most successful districts in managing and controlling COVID-19 pandemic in East Java province. This is despite the fact that Banyuwangi is crisscrossed by many access points to other regions including Bali.

Development of Broadband Internet Infrastructure. Meanwhile, to increase the penetration of information and communication technology, the government continues to encourage the development of broadband infrastructure. The government continues to support the

implementation of the Palapa Ring fiber optic project. The digital telecommunications infrastructure includes fiber optic and cables terrestrial on land, submarine cables at sea, and satellites in the air. The implementation of the program is aimed at stimulating and supporting the emergency of a competitive digital society, which is in line with the government's vision of including infrastructure development as one of the five current priority areas.

Long before COVID-19, Commission I of House of Representative of the Republic Indonesia together with the government had tried to improve internet access in the community through telecommunications infrastructure development programs under the sustainable Indonesia Signal Freedom program. The Palapa Ring program was completed in October 2019 and is expected to provide internet broadband access to 440 city districts throughout Indonesia (Kementerian Komunikasi dan Informatika, 2019). Nonetheless, the impact of the completion of Palapa Ring program on society will only become visible in the next 2-3 years. As of September 2020, 166,343 kilometer of fiber optic had been connected from Sabang to Merauke, more than 34 thousand towers have strengthened telecommunication access on land, and increased international communication access, Three satellites, namely Telkom 2, Telkom 3S, and Merah

Putih are now operational with a total of 133 transponders to reach the Frontier, Outermost and Remote areas that have not been reached by optical fiber (CNN Indonesia, 2020).

CONCLUSION

E-leadership practices in the public sector have changed during the COVID-19 pandemic. This is evidenced by many government agencies that have implemented digital leadership using ICT, such as online meetings through applications and remote management. Increased e-leadership in several ASEAN countries can also be seen from indicators of voice and accountability, digital literacy, and changes in working hours during the COVID-19 pandemic.

Although the implementation of e-leadership in an organization takes a lot of time and there is guarantee that it can have positive impact on increasing productivity, to support a well-functioning organization challenges leader to modify and adjust its adoption in with organization and societal context. Moreover, leaders must adapt organizational culture, time management, and communication that requires quick and fast conveying of messages and giving responses. In other words, leaders mush acquire and use agility management and leadership in times of high uncertainty to enable organizations they lead to become adaptive and quick to identity and respond to threats that occur in an increasingly

unpredictable manner and frequency if they are to not only survive but also become leaders in performance in public service delivery. On the other hand, the application of e-leadership generates opportunities in terms of flexibility and work-life balance. Some of the recommended ways of increasing organizational capacity to adapt to change during COVID-19 pandemic, include forming a task force to support coordination, identification of cross cutting issues and galvanizing requisite resources and action; strengthening e-leadership character and increasing communication effectiveness.

Nonetheless, findings of this article have limitations. This research discusses e-leadership in the public sector in a very broad manner, and in some way has not conducted a complete analysis of all relevant issues. The research assessed e-leadership practices in the public sector in a broad sense in the public sector in ASEAN. Thus, future research on the same topic should conduct a specific case study that focuses on an agency or organization in one country. The research did not use all e-leadership indicators, which is a research gap that future research should help to fill.

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