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# The Effects of Covid-19 on Digitalization in Southeast Asia: A Crisis Within a Crisis

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## ABSTRACT

Technological progress is enabling machines to complete many of the tasks that once required people. Preparing for the future of work is one of the defining business problems of our time, yet it is one that most organizations are not prepared for. This transition to a digitalized society has been greatly accelerated by the Covid-19 pandemic. While Covid-19 has accelerated the implementation of digitalization with regard to artificial intelligence in Southeast Asia, it has also emphasized the need for reform and structural change in many sectors, notably education, business, healthcare, communications and banking, and most importantly, has compressed the time frame for those reforms. This paper examines the transition to digitalization in both the public and private sectors in Southeast Asia before and during the Covid-19 acceleration period. It examines the crisis and its unique problems and also the opportunities to install change. Many of the problems will create domino effects which will have far-reaching consequences. The economies covered are Cambodia, China, Hong Kong, Indonesia, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. Many developing world leaders have focused on short-term needs and benefits without addressing the long-term implications. Institutions and governments are not only having to deal with the fallout from the pandemic and the economic hardships it has brought, but also with the likelihood that low-wage positions are most at risk from automation and digitalization. The greatest challenges caused by digitalization in the region are not technological but social.

## Keywords

Digitalization, Southeast Asia, ASEAN, Covid-19, technology, healthcare

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## 1. INTRODUCTION

Creativity is the ability to look at things we see all the time in different ways. A crisis forces us to do that, and thus serves as a unique opportunity to introduce innovation and change. It is easier to push through changes in times of crisis because people accept that a crisis is an extraordinary situation which requires action. One of the main reasons why people resist change is because they fear they may not possess the skills and behavior that the new situation will require.

A crisis either tends to increase a person's fears, often to the point of denial or immobilization, or helps a person overcome the fear and spurs one to action. We are limited in our ability to change and to accept change and some people are more limited than others (Kotter et al. 2008). Crises are stern tests of leadership and few if any of the world's government and business leaders were selected because of their expertise in crisis response and management. For almost all of them, it is an area in which they have little or no experience.

Crises are often perceived in business as a commonly occurring phenomenon which managers should be able to respond to and deal with (Kuzmanova et al. 2019, 255-60). If we consider that crises are not common occurrences but instead are uncommon phenomena, it helps to imagine solutions and responses which are better suited to the actual situations.

A crisis is an emergency situation. Most people treat it as a disruptive storm, a disturbance which will eventually pass. It is not. Elements in a crisis may appear normal, but the overall situation is abnormal. Perhaps it should be described as a warped normal or a parallel normal, and under Covid-19 the world has come to accept the term "new normal". Therefore, traditional thinking, procedures, and rules do not apply and normal solutions will more often than not be ineffectual.

The *Collins Dictionary* defines a crisis as a "crucial stage or turning point in the course of something, an unstable period, especially one of extreme trouble or danger in politics, economics, etc. or a sudden change for better or worse." The English word is originated from the late medieval and comes from the Latin and Greek for "decide", "separate" or "judge".

Covid-19 is an unprecedented crisis. It is a global health emergency which spawned a global economic catastrophe. The fact that the two crises are now linked makes it incredibly difficult to deal with. The health crisis by itself is unprecedented because of its scope and duration and because unlike other illnesses, many people who are infected feel and exhibit no symptoms and therefore do not realize the danger they pose to others. Prioritizing yourself and your wants, something which is done all the time, can make you a dangerous silent killer accomplice of this virus.

The crisis has created both benefits and problems for countries around the world, including in Southeast Asia. Some of the problems have focused attention on weaknesses in the social structures of countries. One of the glaring deficiencies that the pandemic has exposed has been the inability of nations to coordinate a unified response and to work together. It has put already beleaguered United Nations agencies, particularly the World Health Organization (WHO), under a spotlight and demonstrated once again that their powers are limited (McCarthy 2021).

## 2. THE ACCELERATION OF DIGITALIZATION

The Covid-19 crisis has accelerated the implementation of digitalization with regard to artificial intelligence (AI). Digitalization is the process of converting something into a digital form. It is about taking analog information and encoding it into zeroes and ones so that computers can store, process and transmit such information. It is the generic term for the digital transformation of society and the economy and refers to the transition from an industrial age represented by analogue technologies to an age of knowledge characterized by digital technologies (Bloomberg 2018).

While many have labeled digitalization on a positive way, for the countries of Southeast Asia (Ten 2020), it has also emphasized the need for reform and structural change in many sectors, notably education, business, healthcare, banking and credit, and most importantly has compressed the timeframe for those reforms. This unique crisis has opened a Pandora's Box, revealing serious challenges which governments in the region have been reluctant to deal with. Artificial Intelligence was always threatening to create social, ethical, economic, and political havoc (Blumberg et al. 2021). What has changed is the timeframe that governments and institutions believed they had to prepare for the changes and disruptions.

In just two months in 2020, digital adoption leapt five years forward because of the Covid-19 crisis (Blumberg et al. 2021). In the span of a few months in 2020, the Covid-19 crisis brought about years of change in the ways companies in all sectors and regions do business. According to a McKinsey Global Survey, companies in the Asia-Pacific region have accelerated the digitization of their customer and supply-chain interactions and their internal operations by three to four years, while their share of digital or digitally enabled products has been accelerated by seven years (LaBerge et al. 2020).

McKinsey's survey found that in the Asia-Pacific region the average share of digital customer interactions rose from 32 percent in December 2019 to 53 percent in July 2020, which McKinsey concluded to be the equivalent of an adoption acceleration of four years. They also found that the average share of products or services that are partially or fully digitalized rose, again in the Asia-Pacific region, from 33 percent in December 2019 to 54 percent in July 2020, which McKinsey concluded to be an adoption acceleration of 10 years (LaBerge et al. 2020).

Also in the same survey, McKinsey found that firms achieved increases in remote working in 10.5 days, which prior to Covid-19 had been estimated to need 454 days. McKinsey reckoned this to be an acceleration multiple of 43. They also found that firms on average were able to increase demand for online purchases and services from the previously estimated need of 585 days to just 21.9 days, which they calculated to be an acceleration multiple of 27. There was also an increase in the

use of advanced technologies in operations from pre-Covid-19 estimates of 672 days to 26.5 days, an acceleration multiple of 25 (LaBerge et al. 2020).

In August 2020, KPMG commissioned the market research firm Forrester Consulting to survey 780 digital transformation strategy leaders in 10 countries across 12 sectors (Hernandez-Kakol et al. 2021). The countries were: Australia, Brazil, Canada, China (including Hong Kong), France, Germany, India, Italy, the UK and the US. The sectors included healthcare, life sciences, government, human/social services, banking (retail, commercial, mortgage), insurance, asset management, consumer packaged goods (CPG), retail, industrial manufacturing, technology and telecom services. KPMG found that 67 percent of respondents said that they had accelerated their digital transformation strategies as a result of Covid-19, while 63 percent said that they had increased their digital transformation budgets as a result.

The same KPMG survey found that 79 percent of respondents said they were accelerating the creation of seamless digital experiences, while 64 percent were accelerating new digital models and revenue streams as a result of Covid-19. While 28 percent of respondents surveyed said that staying connected to market dynamics and digital signals had been a top digital transformation objective pre-pandemic, that number had risen to 44 percent. Creating a customer centric digital commerce system was cited as a top priority pre-Covid-19 by 32 percent of respondents. That rose to 58 percent with the coronavirus (Hernandez-Kakol et al. 2021).

Despite activities in the private sector, public-sector institutions have been slow to react. Few governments have begun to deal with the structural issues which digital adoption sets in motion. It is widely accepted today in business, however, that organizations that make only minor changes at the edges of their business model nearly always fall short of their goals (Blackburn et al. 2020). Change requires very hard decisions because everything is linked. Anything you do affects everything you do, and in many Southeast Asian countries the list of sensitive areas or issues has traditionally been long.

Though the drivers of the Covid-19 digital acceleration can be found in both the private and public sectors, traditionally it has been the private sector that has pushed digitalization and artificial intelligence, largely due to economics and profits. The problems related to the introduction of technology are often not technical but involve process complexity (Blumberg et al. 2021). More often than not, the problems are related to people who are trying to protect themselves and what they perceive to be their areas of weakness.

Technology is not one thing; it is a series of tools, which are used by people. They can also *not* be used. In promoting creativity and innovation stresses, what is not done or said may be as important as what is. People can use technology or avoid it,

and they usually make their choices according to what they perceive to be in their best interest.

## 2.1 UPSETTING CULTURAL NORMS

AI technologies and the human-machine interactions entailed are expected to bring numerous benefits in the form of higher productivity, GDP growth, improved corporate performance, and new prosperity. But they will also require a change of skills and that means large-scale retraining combined with the rethinking of established business models and procedures.

Covid-19 has brought a sense of urgency to the already budding but not widespread acceptance of remote work and has challenged longstanding cultural practices. In Southeast Asia, remote work prior to the pandemic was grudgingly accepted for senior management but was largely frowned upon for junior staff. The biggest problem for institutions in both the public and private sectors was the timeframe in which it all happened.

Institutions found that they needed to get their people and procedures functional from many remote points almost overnight. It was a problem of hardware, connectivity, systems and the lack of digitization, but it was also a failure of planning, organization and initiative (Vasel 2021). Prior to Covid-19, the accepted thinking was that “over the next 10 to 15 years, the adoption of automation and AI technologies will transform the workplace as people increasingly interact with ever more sophisticated machines.” (Bughin et al. 2018)

Ten to 15 years was the conventional time frame companies were planning on before Covid-19. Now, many leaders who had thought that their organizations had a lot of time to prepare are realizing that they do not have that luxury – and are alarmed.

Many companies know how to pilot new digital initiatives in normal times, but very few do so at the scale and speed suddenly prompted by the pandemic. As the crisis forces customers, employees, and supply chains into digital channels and new ways of working, now is the best time to advance a bold digital agenda (Blackburn et al. 2020).

Meetings, the main tool of doing business, have increased in length and frequency over the past 50 years to the point where executives now spend an average of nearly 23 hours a week in them, up from less than 10 hours in the 1960s (Perlow et al. 2017). That figure does not reflect all the spontaneous gatherings between people who bump into each other’s offices or who conduct business over meals and other gatherings or events.

With Covid-19, meetings suddenly became dangerous, and the prospect of any event becoming a “super-spreader” have kept corporate conference rooms and venue function spaces vacant. When being in the same room with colleagues even in a short period of time can land you in the hospital, the risks are deadly serious. The challenge for many companies was how to keep the business running while maintaining social distance. Before Covid-19, the focus of firms was on security. The “enemy” was not thought to be lurking in the office – they were competitors and outsiders who were not part of the organization.

## 2.2 OPEN INNOVATION

The concept of open innovation has been around for a long time but is still considered by most firms to be radical. It refers to working and sharing information with people who are not part of your firm. Open innovation means that firms can and should tap into not just internal but also external ideas, methods and expertise (Dahlander et al. 2020). Enterprises have long been obsessed with security, the threat of industrial espionage, and the need to protect sensitive information. In this context, open innovation was considered an unproven and risky approach.

With Covid-19, a new internal threat has come to the fore. Data security is the practice of protecting digital information from unauthorized access, corruption or theft throughout its lifecycle. It is a concept that encompasses every aspect of information security from the physical security of hardware and storage devices to administrative and access controls, as well as the logical security of software applications. It also includes organizational policies and procedures (Anant et al. 2020). The problems that Covid-19 posed revolved around how to adapt existing tools to a much larger landscape as quickly as possible.

The basis for cyber security is that the firm should be a fortress. Designers never imagined a scenario where the firm would have to continue to function from a series of remote, potentially insecure locations. In the initial stages of remote work deployment, the issues involved were more about revising established procedures, processes and clearances than the technology itself. As a result of Covid-19, firms found that many things that they previously took for granted about doing business could not be kept sacred or inviolate. These included equating work with the number of hours a person puts in, putting up with long meetings, and valuing presence over performance.

The "Internet of Things" (IoT) will change the way we work by saving time and resources and opening new opportunities for growth and innovation. Firms will have access to a flood of data that all these connected devices will generate (Angeles 2019). Already, it is possible to collect enormous quantities of information through sensors, devices and other machines that process or monitor transactions and

human interaction. The amount of data will only increase. The challenge is what to do with it (how to analyze it) and how to protect it.

Companies and other organizations have been collecting data just because they could. Not all have understood, let alone implemented, the systems for processing the information to gain insight. The crisis is prompting firms to re-examine their long-established business practices and to do more as quickly as possible to use technology and the data that is generated to make the lives of their customers and employees easier and better – and of course generate more profits or benefits for the enterprise (Morgan 2020).

## 2.3 UNCERTAINTY

One of the biggest problems Covid-19 has caused for businesses is uncertainty. In February and March 2020, many people believed that it would be over in a few months (Vasel 2021). But by mid-2021, there was yet no clear scenario for how and when the pandemic will end, or even how it will evolve. Complicating the situation has been the emergence of highly transmissible variants of the coronavirus, notably the Delta variant, that has caused caseloads again to a spike in many countries including those with high rates of vaccination. Indeed, there has been growing talk of Covid-19 becoming endemic, i.e., that this particular coronavirus would be around forever, but just not in as virulent a form.

Instead of dealing with structural change issues that Covid-19 brought on, many institutions have adopted a wait-and-see approach. In a crisis, however, hoping is not a strategy. In fact, few institutions and governments in Southeast Asia had up-to-date major-crisis-management strategies or teams, while those which did base their planning on short-term local emergencies or at best regional ones. No one anticipated anything on the scale of Covid-19.

At the beginning of the Covid-19 crisis, people went back to what they remembered – the SARS outbreak in 2003 and the H1N1 swine flu pandemic of 2009-10, both of which were relatively short-lived. Businesspeople and researchers have been trained to look for patterns in the past to predict the future. All our information is about the past but all decision-making is about the future. The basis of creativity is that any way of looking at something is only one of many possible approaches (Gogatz et al. 2005, 10). and that to be creative, you need to be able to forget the past and look at something as if you were encountering it for the very first time.

In early 2020, many indicators pointed to a disease that could be contained, especially if you compared it to recent past outbreaks. There were indications to the contrary but those were not confirmed or recognized, and therefore many institutions chose to ignore the more negative predictions over ones which offered less

disruptive scenarios. In mid-March 2020, the WHO was still comparing Covid-19 to seasonal influenza, publishing an analysis on its website that concluded that the flu could spread faster than the novel coronavirus (WHO website 2021).

What Covid-19 has done to institutions and firms in both the public and private sectors is immobilize them. Robert Walters, a Thailand-based professional headhunting and recruitment group, found that 67 percent of the 400 organizations in Southeast Asia it surveyed in the middle of 2020 said they had imposed head-count freezes, with companies preferring to stop hiring for the time being. Twenty-six percent of companies said they were allowing voluntary annual leave, and 24 percent said they had terminated temporary and fixed-term contracts. And while 12 percent of businesses surveyed had let some staff go, 35 percent said they had not made any staff changes yet because they were waiting to see how the situation developed (Kuentak 2020). The uncertainty of when and how the crisis will end has been and continues to be a significant factor throughout the region.

### 3. THE TRADITIONAL BUSINESS MODEL

The business model which has been used worldwide for centuries was built on security and certainty. It features detailed linear planning, playing not to lose, and avoiding risks. If you had to describe it in a single word, that would be “certainty”. Business executives are trained to bide time and to measure and collect data before making important decisions. Crisis-management experts know that, in an emergency, decisions need to be made quickly and almost always with incomplete data. With Covid-19, managers are confronted with a prolonged crisis in which evolution and outcome are still uncertain. Firms worldwide will have to grapple with that and make adjustments for some time to come.

#### 3.1 UNPRECEDENTED NEED FOR REMOTE WORK

Institutions across Southeast Asia found that many of their established practices could not be done remotely and that the long-established preoccupation with maintaining secure systems was causing problems. Technical issues plagued virtual meetings and an abrupt suspension of business travel meant that distance meetings needed to work. Supply chains were disrupted. For most of 2020, maintaining business as usual was an adventure.

While the virus broke through cultural and technological barriers that prevented substantial remote work from occurring in the past, the ability to work from home was generally looked upon as something that would be temporary and would only apply to some sectors. The consensus was that two thirds of the workforces in Southeast Asia have little or no opportunity for remote work (Bughin et al. 2018). The rationale was that the possibility for remote work was highly concentrated among highly skilled, highly educated workers in a handful of industries, occupations and locations.

It is estimated that 78 percent of the population in Thailand will have access to the internet by the end of 2021 (Statista.com 2021). The figures in 2019 were 70 percent for Vietnam, 48 percent for Indonesia, and 31 percent for Myanmar (World Bank 2020). In Southeast Asia, the uptake of digital services has kept pace with other areas around the globe, and the rapid diffusion of broadband, in particular mobile, is enabling more and more people to connect to communication networks. At the end of 2017, around 286 million, or approximately 44 percent of the 650 million people in the region, were using the internet (OECD 2019, 16).

Two of the initial difficulties firms faced under Covid were connectivity and hardware. Most people in the region access the internet via their mobile phones, not with computers. This means that many employees who suddenly needed to do work from home did not have the technical means, support and equipment to do so.

Hardware was an issue even in countries such as the US. At the business review website company Yelp, the IT department had to scramble to find nearly 3,000 laptops for workers, primarily sales employees, when it went remote in March 2020. They always had a few spare laptops on hand, but never as many as 3,000 (Vasel 2021). US-based artificial intelligence software company, Coveo, with a workforce of 600 employees, estimates the change to remote working cost the company over US\$1 million (Vasel 2021).

The Covid-19 crisis caught institutions worldwide largely unprepared. As country after country went into imposed lockdowns, many firms faced a stark choice, shut down their operations or find ways to allow employees to work from home. Remote working, sometimes referred to as telecommuting, is far from a new concept. What changed was the need for it practically overnight (GMO Asia Research 2020). The WHO declared the coronavirus outbreak a pandemic on March 11, 2020. In a matter of days, companies across the globe were shutting down their offices and many had little to no time to prepare their employees for getting work done entirely outside their premises (Vasel 2021).

The situation in Southeast Asia was chaotic. Many governments left lockdown decisions to regional governors or to the firms themselves. The result was that many employees had little choice but to go to their offices as usual and risk getting sick. For many employers, continuing to use the offices was the least disruptive and cheapest option.

Schools in many countries in the region were unilaterally shut down and education shifted to remote learning. While university students generally have portable computers, primary and secondary students in many Asian countries often do not. The problems most regional schools faced were hardware first, then connectivity, after that they had to deal with the availability of education platforms and training for teachers to be able to use those platforms. There were, naturally, huge differences between schools in urban and rural areas. Students in rural areas had more difficulty keeping up with their work than their counterparts in the larger cities.

Before Covid-19, remote working was a concept that was embraced more by the West than in Asia. But there had been a worldwide stigma to working from home – remote workers were perceived to be less productive and career focused (Vasel 2021).

Living spaces in Asia are usually smaller than in the West, and many adults, especially those who live in large cities, look forward to going to their offices, which often afford them more room to work, as well as convenient amenities. Students may be eager to avail of on-campus facilities that are better than what they have at home and to study together and socialize with classmates. Under Covid-19, this was all thrown into disarray. People were told to stay home, but for many, the office or

university was more comfortable than their homes. When you eat, sleep, entertain and work in the same, often shared, room or rooms day after day, it can become very tedious.

In Indonesia, employees struggled with the remote working arrangements due to several factors: Most of the apartments in cities like Jakarta are small and extended family often shares the space, making it difficult to concentrate and to avoid background noise in meetings (Fachriansyah 2020). The biggest issue was poor internet connectivity and technological infrastructure.

Only 33.5 percent of businesses in Malaysia were able to arrange for their employees to work remotely during its Movement Control Order (MCO), while 35.6 percent opted to provide fully paid leave to their employees (Department of Statistics Malaysia 2021). Providing paid leave can only be sustained for a period of time. It is not a permanent solution and showed that many firms viewed Covid-19 as a storm that would pass, leaving things the way they were. In Malaysia, for those working from home, the big issue was also internet stability, as patchy online connections resulted in the inability to conduct meetings effectively and to complete work smoothly (Department of Statistics Malaysia 2021).

### **3.2 LONG-TERM ASPECTS OF REMOTE WORKING**

The concept of working from home is tied to the idea that firms engage employees by blocks of time and then monitor what those employees are doing to ensure they do indeed work. Remote working requires a shift from engagement by blocks of time to engagement by the attainment of tasks and goals. One of the departments that has traditionally opposed the work-from-home concept is human resources, in part because it required changes in their established systems for monitoring and evaluating staff. While the work-from-home process has been marked by technical issues, some managers point out that productivity and efficiency do not seem to be a big problem, in part because working from home can keep workers happy (Hicks 2020). Unfortunately, firms have not always equated employee happiness to productivity.

Companies will also likely need less office space in the future. The CEO of the American firm Coveo expects his company to use about 70 percent of the surface area that it did pre-pandemic (Vasel 2021). Most firms will reduce but not eliminate their physical offices. Some companies are still reluctant to invest in sufficient hardware to facilitate large-scale remote working, considering the need to be an extended but temporary one. And even if they have the hardware, many often do not yet have a cloud computing system.

Many executives are starting to point out that a problem with remote work will come later, when the pandemic eases and people need to choose between home and the office. That model, often referred to as “hybrid”, will cause problems for management due to imbalances (Vasel 2021). In 2020, remote work was acceptable because everyone was working from home and had equal access to information and promotions. Everyone was in the same boat. That will change under the hybrid model and perceived differences between remote and in-office workers will become an issue among hybrid workforces. People in the office have more contact and get more face time with the boss and colleagues, which can lead to better relationships, increased access to information, and better assignments.

"Many companies succeeded working remotely in 2020 largely because everyone was doing it, there was no built-in preference for office workers or stigma against remote workers," said Andrew Hewitt, senior analyst at Forrester. "Hybrid is going to make managing this difference harder." (Vasel 2021) He expects that in the US after Covid, about 60 percent of companies will offer a hybrid work model, while 30 percent of companies will be back in the office and 10 percent will be fully remote. In Southeast Asia, the percentages may well show preferences for the office, but that may depend on how much longer the pandemic lasts and also on the severity levels of the virus (the emerging variants) within each country. The vaccines are here, but the virus is not yet defeated. The uncertainty factor is still present.

### **3.3 PUBLIC AND PRIVATE SECTORS**

In most Southeast Asian countries, there are stark differences between the public and private sectors. The private sector is more positive about remote work and AI in general, while the public sector struggles to integrate it. The issue in the public sector in terms of remote work is one of trust, and trust is not something that can be instilled in people overnight. The attitude among many public-sector managers who have been raised under the traditional business model is that if a worker is not here where the boss can see him or her, then that employee is not working. For remote working to succeed, firms need to make a shift from the traditional compensation-for-time format to a results-based system.

The private sector has more of a vested interest in AI than the public sector, which will face greater challenges in implementing digitalization. Incentives in the public sector involve being able to show that public officials are working to improve the lives of constituents, and this extends to “smart city” programs. If growth is well managed, smart cities can be a force for progress in human development. But if it is not, many social ills may take root, diminishing the quality of life and the environment along with it (McKinsey Discussion Paper 2018). Southeast Asia has a window of opportunity to set its smaller cities on a more sustainable development path and to address the

growing pains of its largest cities before they become intractable problems. Smart solutions will not provide an easy fix for all of these problems, but they can give cities a set of powerful and cost-effective tools.

The public sector in developing countries usually employs more people than are needed. People opt for public-sector jobs because of the security they afford, the early retirement and benefits, and typically, the low level of pressure to produce (Roberts 2019). In some developing countries, civil service also offers opportunities for financial gain due to networks of corruption.

In Indonesia, positions in the civil service are subject to hidden market transactions. The demand for stable sources of income is high, and a lack of transparency enables corruption. Jobs and promotions are not based on merit but are often “sold” by government officials in core positions (Kristiansen et al. 2006, 207). The same is true in other Southeast Asian countries. In Thailand, the practice is well known, especially in the police force. The hiring process functions in a manner very similar to an auction. Many applicants offer substantial bribes of differing sizes to the individuals responsible for making hiring decisions. Some applicants use political connections to influence hiring (Weaver 2018). When the public hiring and promotion process becomes corrupt, leadership will endeavor to maintain that system and structural reform will be difficult to achieve.

### **3.4 HEALTHCARE**

Under Covid-19, healthcare systems in Europe and North America have seen years of digital evolution take place within weeks. In the UK in 2019, less than 1 percent of medical consultations took place via video link. With Covid-19, private doctors have been assessing the vast majority of their patients by phone, with only about 7 percent of those cases in the UK proceeding to face-to-face consultations (Agrawal et al. 2020).

Without Covid-19, the widespread acceptance of virtual medical consultations would have been impossible to achieve. It worked because people in the medical, healthcare and pharmaceutical professions came to view virtual consultation as something which was to their collective benefit rather than detriment.

During Covid-19, researchers have combined the proliferation of smart watches and other wearable health devices that measure a person’s temperature, heart rate, level of activity and other biometrics. The pandemic offered an unprecedented opportunity to study real-time infectious disease detection. Wearables can detect symptoms of Covid-19 or other illnesses before symptoms are noticeable. Since wearable tech is expensive, the research community and society as a whole must simultaneously address the disparities that exist (Fuller et al. 2021).

In Indonesia, where according to the World Bank, there are four doctors per 10,000 people (compared with 42 per 10,000 in Germany), tele-health firms have long been trying to close the gap to get medications prescribed and delivered (Agrawal et al. 2020). The coronavirus crisis should have been a big enabler.

People in other countries, however, often fail to realize that developing countries have systems and there are reasons why those systems exist. In most developing countries, you do not need a prescription to purchase medicine. When people feel sick, they usually first visit a pharmacy. The pharmacist functions like a primary physician and dispenses medicine for the condition the person describes. If that does not alleviate the problem, or for anything serious, people go directly to the hospitals or smaller private clinics. Lower-income people go to the public hospitals which are affordable, while middle- to upper-income people go to the private hospitals which provide full service.

Tele-health firms then have been struggling to establish a market. People are reluctant to use them because they do not want to pay for consultation services which are free in the pharmacies, or which they feel are better at the hospitals. The existing system works because of the overall social system. Any change to one system thus requires a change to a larger system. This is the heart of the problem with artificial intelligence and digitalization in Southeast Asia. Multiple sectors would need to undergo transformational change once AI takes hold and that is the most difficult challenge associated with digitalization.

## 4. COVID-19 BROUGHT CHANGE

The crisis is forcing companies to rethink the direction of their operational strategies, changing both the business issues they want to address and the Industry-4.0 technologies they want and had envisioned implementing eventually. Given the unique circumstances of the pandemic, agility and flexibility in operations have emerged as top strategic priorities – above raising productivity and minimizing cost, which used to be the primary objectives (Tokunaga 2020). Long-term sustainability and growth will depend on secured information management and agile digital services and workflows.

Two areas linked to digitalization that have been pushed by regional governments under Covid-19 are contact tracing and cashless society applications. There are several reasons for that. Both are easier to accomplish than remote working and learning because both only require that participants have mobile phones. Neither also threaten the perks held sacred by leadership. The amount of mobile-phone usage in Southeast Asia has been growing rapidly.

People in Southeast Asia spend most of their time accessing information through the internet with their mobile devices. Southeast Asia leads the world in mobile internet use. Thais use mobile internet more than five hours a day, compared with over four hours on average in Indonesia, the Philippines and Malaysia, and three hours globally, according to Google (Nguyen 2019). That means users in the region spend more time on the internet via their mobile phones than their global peers.

### 4.1 CONTACT-TRACING APPLICATIONS

Governments have been keen to get people to download mobile contact-tracing apps because it is a way of keeping track of where people have been to check the spread of the virus. It also helps police and government agencies monitor people's movements. Mobile applications are important tools to contain Covid-19 mainly because the disease is so infectious. The use of contact-tracing apps are compulsory in some countries, though it may be difficult to ensure that people actually use them correctly (For example, while some may log in to gain entry to a venue, they may immediately log out). This leads to larger issues: What safeguards should be built into the technology, who should have access to the data, and what is the role of the tech companies in the process?

In the context of infectious disease control, contact-tracing has been an important means of control: identifying infected individuals and informing people they have been in contact with that they are at risk, through a meticulous process of retracing where an infected person was and with whom they had been in proximity (Lucivero et al. 2020). At the same time, there is increasing concern that digital surveillance

could lead to a more permanent suspension of rights and liberties and could have some unintended consequences.

Given the recent protest events in Thailand and the military coup in Myanmar and subsequent suppression of internet services in both countries to quell dissent, many people in the region are reluctant to give their governments data on where they have been for fear it could be used against them.

Cambodia recently announced that it was establishing a China-style internet gateway for all online traffic. The 11-page decree released on February 17, 2021, gives internet service providers 12 months to reroute their services through a National Internet Gateway. Human-rights groups immediately criticized the move, saying that it would be a new tool for long-time leader Hun Sen to suppress any opposition.

"Prime Minister Hun Sen struck a dangerous blow against internet freedom and e-commerce in Cambodia by expanding the government's control over the country's internet," Phil Robertson, deputy Asia director at Human Rights Watch, said (Johnson 2021). "Cambodia's National Internet Gateway is the missing tool in the government's toolbox for online repression." The government, for its part, argued that it needed to control the disorder of the internet in the country and that the regulations were less intrusive than those in place in other nations such as the US and UK (Johnson 2021).

## **4.2 DIGITAL PAYMENT SYSTEMS AND CURRENCIES**

The People's Bank of China has been conducting experiments and tests on its sovereign digital currency for more than five years. The development of the digital yuan is causing other countries to worry that they could fall behind in the race for financial technology innovation (Yeung 2021).

In Singapore, digital payment services are fast becoming the norm. Three in five merchants accept e-payments, and there are plans to turn the country check-free by 2025. Even so, some Singaporeans are still reluctant to adopt cashless payments (Naishtein 2018). The number of payment options available may serve as an impediment as it tends to confuse people, especially the elderly.

Changing a nation's collective mindset to be more receptive to the need to integrate new technologies to prevent a digital divide between the young and the old is easier said than done. Many older people tend to steer clear of mobile banking and online shopping. This is true throughout Southeast Asia. Many would rather spend time queueing at bank branches to carry out simple transactions than to learn how to use mobile or internet banking. Their reluctance stems from a fear of being scammed or accidentally racking up exorbitant purchases as they are unfamiliar with using apps

or websites. Likewise, they are not comfortable with ride-hailing apps such as Uber and Grab. Most seniors use public transport as it is cheaper and they are used to it. When the need arises, their children usually help them book rides using the apps (Toh 2017).

This reluctance to embrace technology happens less in Europe and North America, where seniors tend to be more independent than their Asian counterparts. This is due to two factors. Seniors in the West tend to live apart from their children and most seniors in Western countries can drive. In Southeast Asia, children who are usually tech savvy tend to help parents with technology issues. The result is that many Asian seniors do not learn how to handle new technology. The children mean well, but the attitude of “they’re too old to learn” impedes the elderly from adopting an independent lifestyle.

As people age, they need to try to do more, not less. Dementia in Asia is a growing problem. The Asia-Pacific region is home to nearly half of the world’s 50 million people with dementia, according to Alzheimer’s Disease International (ADI), a global federation of Alzheimer’s associations around the world. It estimates that in the Asia-Pacific alone some 71 million people will have dementia by 2050 (Jha 2019).

One of the major lessons from this pandemic is the need for and importance of lifelong learning. Traditionally the average adult stops learning after they finish their education, be that high school or university. After a certain age, we do not learn new things, but repeat what has worked for us in the past. Companies do the same.

The world is now more unpredictable and moving faster than before and artificial intelligence is contributing to this because procedures for such services as banking, communications, healthcare and transportation are changing. This means we need to restructure education so that people are able to keep up. AI is anticipated to drive as big a transformation to the economy and society as the industrial revolution 250 years ago (Barber 2018). We need greater emphasis on and promotion of programs which help people be truly adaptable and equip them to upgrade their skills in step with rapid change.

Digitalization can thus be a positive development if Asian societies can change their way of thinking towards seniors and recognize that growing old does not necessarily mean slowing down physically and mentally. Covid-19 has focused the attention on seniors since the virus is more lethal in older adults than it is in young adults and children. This has served to shelter seniors inside away from their peers and has led to more early retirements and to a potential increase in cases of dementia. The structure of most societies in Southeast Asia, however, does not provide for senior citizen re-education and dementia is one of the most difficult conditions for families to manage.

### 4.3 DIGITALIZATION TRENDS FORECAST TO CONTINUE

Various countries in Southeast Asia were moving towards becoming cashless prior to Covid-19, as consumers opted for greater convenience. Many of these programs have been backed by government-sponsored money transfer stimulus programs during the pandemic with a view to encouraging cashless transactions. Early in the pandemic, it was feared that the virus could thrive on paper money, but as the crisis continued it became clear that human-to-human contact was the main danger. Therefore, the threat was proven to be not so much from contaminated money as from an infected person who handed the money to you.

In Thailand, registrations on PromptPay, the government-initiated money transfer platform under the national e-payment scheme launched in early 2017, increased to 55.6 million by the end of September 2020, growing 11.4 percent from 49.9 million at year-end 2019, according to Bank of Thailand data (Koetsier 2020). For the first nine months of 2020, PromptPay transactions hit 3.6 billion, with the amount tallying 14.6 trillion baht, compared with 2.6 billion transactions worth 13.2 trillion baht in 2019.

Online purchasing trends shaped and driven during the pandemic may be adopted permanently. Some pre-pandemic niche delivery schemes are fast becoming methods of choice as consumers become more familiar and experienced with the systems and appreciate their ease and convenience (Koetsier 2020).

Once people take to something it becomes difficult to roll it back and take it away. Depending on how much longer the pandemic lasts and what happens between now and then, many new habits will become entrenched. Digitalization is being pushed by technology and by business because it is in the interest of the people involved in both sectors to do so. Political leaders, especially in developing countries, are looking at digitalization and artificial intelligence in different ways and with different purposes in mind.

## 5. THE CHALLENGES

Across different sectors and regardless of organization size, companies are converting their workplaces into digital workplaces. Many jobs now involve extensive use of technology and require the ability to use it quickly. Yet, digitalization is being perceived both as a global job destroyer and creator, causing firms to rethink job requirements (Cortellazzo et al. 2019). As a result, leaders need to invest in upskilling employees in an effort to support and motivate them in the face of steep learning curves and highly demanding challenges.

### 5.1 UNEMPLOYMENT

The impact of the crisis in Southeast Asia has been far reaching, with unemployment and underemployment surging as millions of workers were forced to work reduced hours or were laid off. In nearly all economies with available quarterly data for 2020, employment levels contracted compared to 2019 (Sullivan 2020). Some sectors, notably hospitality, tourism, restaurants and entertainment have been hit particularly hard.

The pandemic has highlighted the weak foundations of Southeast Asian labor systems. From rising income inequalities to what is now a gaping digital divide, Covid-19 has exposed weaknesses in governance and social protection programs. Low levels of social-security coverage and limited institutional capacity in many countries mean that many unemployed workers have little financial help (Khanna et al. 2021). This is especially true for the millions of informal workers who have become newly unemployed or underemployed because of Covid-19.

The informal employment rate in the accommodation and food services sector ranged from 81 percent to 99 percent in Vietnam, Myanmar, Laos, and Cambodia before the pandemic. In the same four countries, informal employment rates ranged from 70 percent to 97 percent in the wholesale and retail trades, and from 90 percent to 99 percent in construction (Khanna et al. 2021).

A poll in Thailand conducted in mid-March 2021 by Suan Dusit Rajabhat University found that 56 percent of respondents want the government to provide occupational training and promote supplementary jobs; 48 percent said it should provide more skills training; 47 percent want it to create jobs for the unemployed; and 46 percent said it should run supplementary employment programs, pending permanent employment. (Suan Dusit Poll as reported *Bangkok Post* 2021). Pressures on regional governments to do more to alleviate the economic hardships caused by unemployment due to Covid-19 have been mounting.

How to enact change, and especially structural change that threatens established systems, which many ranking individuals in both the public and private sectors do

not want altered, is a multi-level challenge. It is akin to changing a tablecloth without upsetting the food already on it or those who are in the process of dining. Political leaders in Southeast Asia, most notably in Thailand, Cambodia, Laos, Malaysia, Indonesia and the Philippines share several things in common. Their power is centered on a small segment of the society, backed to varying degrees by a powerful military. Keeping all the supporting factions happy while remaining in power during this prolonged and multi-faceted crisis is the main challenge for many Southeast Asian leaders.

China is today the most dominant and important player in East Asia. With influence and power also comes responsibility. How will China act in the years ahead? Will it act in its own interest, or more specifically in the interests of its leaders, or will it evolve into a global model for progressive social and economic change? In AI, China is quickly closing the once formidable lead the US maintained in research. Chinese researchers now publish more papers on AI and secure more patents than American researchers do (Li et al. 2021). In terms of education, the number of Chinese students engaging in overseas study has been steadily increasing. According to data from China's Ministry of Education, 662,100 Chinese students went abroad in 2018, an 8.83 percent increase compared to the year before (Cao 2020). Many are studying in ASEAN countries. The shadow of China looms large over ASEAN, with its influence felt in many ways by all the 10 member states of the grouping.

## **5.2 CURRENT EDUCATIONAL SYSTEMS**

With the coming of artificial intelligence, one of the sectors that will require the most structural change is education. AI promises to usher in an era where the machines we create will eventually be smarter, faster, and more powerful than those who created them. This has profound implications for the field of education, which has traditionally been slow to change. Teaching and learning requirements may be substantially re-ordered and the dynamic of learning versus teaching in an AI-based system of education may be very different from what we have had. This will raise important questions about teacher preparation and curriculum. A key question will be: Are the teachers of today ready to develop the leaders we will need tomorrow? (Allen 2019)

The purpose of education traditionally has been twofold, to find and absorb information, data and skills, and then apply that knowledge and expertise to a certain professional role. This entails that data and the access to it are limited. We used to be information starved, and our access routes to that limited data were always severely restricted. Now, we are inundated by information and data. The task today is not to collect data, but how to analyze, link them in a methodical way, and apply what has been learned. Today, it is important not only to be able to know what

something is but also what it means. People used to say that information is power but that is no longer the case. Power today is in the analysis of the data (Hunter 2018).

Our education systems teach us what to analyze but not how to analyze. Many, especially in the West, encourage judgment – “What do you think about that?” – but this is not analysis. And it does not prompt students to find links between what they are studying and other subjects, events and experiences. Schools, especially in Asia, traditionally focus on getting students to absorb information and to obey and conform rather than inspire them to question and challenge what they find. Teachers in Southeast Asia rarely ask students for their opinions, much less ask them to analyze, link and think. In a 2018 column, Thai journalist Suthichai Yoon posed some pointed questions: “Can our university students think? Or, to be more precise, are they being taught to think? Even more important, can their teachers and instructors think?” (Yoon 2018).

What good will all the data the internet of things eventually provides if we do not have people who can analyze it? Technology is running, but people are not keeping up. Technology is always ahead of people (Angeles 2019). The great danger is that it gets too far ahead.

All ASEAN countries maintain elitist educational systems, which will require structural changes if digitalization comes into full bloom. The business of private education in Asia has created a two-tiered education system. Many families are making immense financial sacrifices to get their children into private schools (Ward 2017). The market for private, international schools has exploded across Southeast Asia in the last decade. Parents are looking to foreign curricula and private schooling to deliver more opportunities and higher educational standards. In Malaysia, an average of about 11 schools are opening every year. Thailand now has 172 international curriculum schools, up from fewer than 12 a decade ago. Malaysia has 142 and Singapore around 63 (Ward 2017). China doubled its number of private schools between 2010 and 2015. China is now home to 567 international schools, second in the world after the United Arab Emirates (UAE).

In China, 60 million children attending rural schools are being left behind. There is a widening education gap where only urban families have access to good teaching and adequate school equipment. This has opened the door to corruption. Access to the top schools in Beijing is usually only granted once a “voluntary donation” has been made to the school (Ward 2017). These donations can reach sums of over US\$100,000, ensuring only the wealthiest families access the best schools. These problems have prompted the government to regulate the sector.

Creating a level playing field which promotes progressive education and excellence, without excluding lower-income families is essential to avoid the marginalization of poorer communities in every country. Industrialized countries have educational

systems that provide a wide range of opportunities, while most developing countries do not.

Arinya Talerngsri, chief capability officer and managing director of the Southeast Asia Center (SEAC), remarked in 2018 that, with Thailand depending on its human capital to propel the nation into the next phase of economic development, it is time for the country to change attitudes that once associated life success only with high academic degrees. She went on to say: “The problem is that, while the world itself is changing and the business landscape is evolving, our learning and educational systems are outdated and have failed to adapt effectively. The education system we have today is producing a workforce of people who are skilled for an era that is ending or already over” (Mala 2018).

This problem is not unique to Thailand. It affects all the countries in Southeast Asia, which rely on two-tiered educational systems. The top tier consists of networks of private international primary and secondary schools leading to better universities and lower-tier public schools leading to lower-ranking schools or directly and hopefully to employment. Artificial intelligence and digitalization are threatening to change that picture by creating disruption and instability, primarily in the lower tier.

Artificial intelligence will widen the gap between knowledge workers and others and will further intensify the new inequality based on access to information. People with access to information and technology will have a clear advantage over those who do not (Mimran 2017). It is quite difficult to predict whether the impact in some industries will be mitigated by retraining programs, or if displaced workers will be able to find work in other sectors.

The World Economic Forum in its 2020 *The Future of Jobs* report looked at some potential disruptions. It predicted that the pace of technology adoption was expected to continue and may accelerate in some areas. It also maintained that the adoption of cloud computing, big data and e-commerce would remain high priorities for business. The report signaled that there would be significantly more interest in encryption, non-humanoid robots and artificial intelligence (Whiting 2020). The Forum’s report went on to say: “Automation, in tandem with the Covid-19 recession, is creating a double-disruption scenario for workers. In addition to the current disruption from the pandemic-induced lockdowns and economic contraction, technological adoption by companies will transform tasks, jobs and skills by 2025. By 2025, the time spent on current tasks at work by humans and machines will be equal.” (Whiting 2020; World Economic Forum 2020)

Forty-three percent of businesses surveyed indicate that they are set to reduce their workforce due to technology integration, 41 percent plan to expand their use of contractors for task-specialized work, and 34 percent plan to expand their workforce due to technology integration (Whiting 2020). The report found that a significant

share of companies also expects to make changes to locations, their value chains, and the size of their workforces in the next five years.

Skills gaps will continue to be high as in-demand skills across jobs change. The top skills and skill groups which employers see as rising in prominence in the lead up to 2025 include critical thinking and analysis, as well as problem-solving and the self-management abilities such as active learning, resilience, stress tolerance and flexibility (Whiting 2020; World Economic Forum 2020).

Most of the skills in demand will be the so-called soft skills, all the skills machines will struggle to duplicate. They include creativity and ideation, making sense of data and choosing the proper action (analytics), complex problem solving and leadership, emotional intelligence, ethics and decision-making (Reed 2019). They also include creative software design (including coding expertise), advanced mathematics and statistics.

On average, according to the World Economic Forum, companies estimate that between 40 percent and 50 percent of workers will require reskilling of six months or less by 2025, as adoption of technology increases. One of the problems is that the vast majority of firms vastly underestimate the amount of time and resources it will take to retrain workers when mindset changes are required (Talerngsri 2021). With creativity, critical thinking and other in-demand skills, it cannot be done in a few days or even weeks. It takes much longer.

### **5.3 CHANGING THE WAY PEOPLE THINK**

The World Economic Forum lists the following skills in its 2020 report as being the most important for the next five to 10 years. They are complex problem solving, analytical thinking and innovation, creativity and originality, critical thinking and analysis, leadership, technology design and use, active learning and learning strategies, resilience and flexibility, and ideation (Whiting 2020).

These skills cannot be acquired in traditional short training sessions. Instead, they require highly skilled professional trainers and more time than the average firm is willing to devote. Creativity, a basic human skill, is an example. The problem is that while 90 percent of children are considered highly creative, only 2 percent of adults are. The reality is that most adults lose their natural creativity as they go through adolescence (Gogatz et al. 2005, 4). Unfortunately, many people still believe that people never lose their creativity and that it can still be accessed, given the right stimuli or conditions (Valgeirsdottir et al. 2017).

Reacquiring lost creativity requires a change of mindset and that is a transformational change (Gogatz et al. 2005, 10). There is often a lack of understanding of what transformational change entails. Change refers to our

response to external influences that cause us to modify our actions. Transformational change goes much deeper as it involves modifying core beliefs and long-term behavior (Talerngsri 2021).

Many firms try to achieve transformational change while designating that certain things are off-limits and cannot be touched – company culture, for instance. The organization’s shared values, beliefs and characteristics are what make up its culture, but an organization is nothing but the collection of the people who work there, and transformational change always involves modifying core beliefs. If a firm is not willing to change everything, it will change nothing.

Udom Kachinthorn, then deputy education minister for Thailand, warned in early 2018 that Thai universities needed urgent reform. He cautioned that if they did not adapt and build workforces with future proof skills, the country would have to cope with the largest rate of unemployment in its history (Yoon 2018).

That was in 2018. Three years later, leaders in Thailand have yet to address this problem and make changes to the existing educational system. At issue is the question of whether regional governments want to try to create a more balanced educational system – or do they want to try preserve the current one and with it the framework for the existing social system?

Bangkok University president Petch Osathanugrah suggested that without genuine and thorough educational reform, Thailand was heading towards a major disaster. Osathanugrah, who is also chairman and chief executive officer for Osotspa Public Company Ltd and chairman for Shiseido Thailand Ltd, offered these insights this in 2017, years before Covid-19 accelerated the need for change: “In this digital age, things are changing very rapidly. I am in the business world myself. I can tell you that during interviews for new recruits, we don’t even bother to ask what university the interviewee went to – or whether he or she had graduated with honors or not. I don’t even know what courses my staff members took in college. What we really care about is the kind of experience they have. The most important question is: Can they think?” (Yoon 2018)

Accompanying the adoption of advanced technologies in the workplace will be an increase in the need for workers with finely tuned social and emotional skills, the skills that machines are a long way from mastering. This will affect education and training and put enormous pressure on the existing two-tiered system, which prioritizes the upper classes. The skills highlighted by the World Economic Forum are essential, yet almost all are not currently taught in schools in the region.

## 5.4 PEOPLE WHO THINK, QUESTION AND CHALLENGE

Do political leaders across Southeast Asia really want their populations and especially the younger tech-savvy elements in it, to think, question and challenge? If we look at recent events in Hong Kong, Myanmar, Thailand, Cambodia, the Philippines, Malaysia and China, the answer may be that even current levels of questioning and dissent are too much for those who wish to maintain the status quo. It should be noted that those at the top have the most to gain by preserving the systems in place because they benefit the most from substantial advantages.

The Communist Party of China (CPC) today rules over a population that arguably no longer really believes in communism. The regime's main justification is that it delivers economic growth (Hiatt 2017). Yet, as the economy becomes larger and more complex, growth becomes more and more dependent on people being free to think, read, challenge and compete. The CPC government is caught in this paradox and must continue on its path of controlling information even though it will eventually pose problems for the Chinese economy.

Since the 1990s, the Chinese government has used its “Great Firewall” to regulate access to websites and social media that it objected to. These include Google, Facebook, Twitter, YouTube and many Western news outlets. The website of the *South China Morning Post* newspaper in Hong Kong is also blocked on the mainland (Cai 2021). The government saw a need to control the flow of information, both incoming and outgoing.

After breaking with tradition and opting not to set targets for the next five years, the success of China’s goal of achieving productivity growth higher than the overall economy hinges on rural education and innovation (Leng et al. 2021). Beijing is aware that it needs to find new sources of growth, as the old model, which was driven by investment, has begun to falter.

Street protests are a regular feature of Thai politics, but the 2020 gatherings were different from earlier rounds of collective protest action in two ways. First, students and young people, who were largely absent from the Red Shirt and Yellow Shirt movements that disrupted the country between 2006 and 2014, are the driving force of the recent mobilization (Wheeler 2020). The youth accused the current government of being no different from the military junta that ruled between 2014 and 2019, and charge that it was only maintained in power by the 2017 Constitution and a rigged general election in March 2019. They have insisted on the resignation of the government and in particular the prime minister and former head of the army, Prayuth Chan-o-Cha. Other demands include the dissolution of parliament and a new constitution drafted after public debate. Most striking is the call by activists for

reform of the monarchy, something which was previously thought to be impossible to discuss much less question.

After decades of poverty, sanctions, and political isolation, Myanmar enjoyed a decade of democracy. Now, under renewed military junta rule, many are feeling like they are back to square one (Yu 2021). Although Aung San Suu Kyi has been arrested, tried and convicted of certain crimes and protesters lack identifiable leaders, the protest movement against the junta continues. This prolonged and widespread resistance must worry other regimes in the region. An ASEAN meeting in Jakarta in April 2021 which addressed the situation turned out to be yet another demonstration of the weakness of the grouping and demonstrated how each member state adheres to policies of self-interest.

As Covid-19 nears the start of its third year, Southeast Asia sees the army in power in Myanmar, strongmen in power in Thailand and Cambodia, single political parties in power in Laos and Vietnam, and democracy being eroded in Hong Kong, the Philippines, Indonesia and Malaysia (Jaipragas 2021).

## **5.5 A UNIQUE CRISIS THAT REQUIRES REGIONAL COOPERATION**

The ability of the virus to mutate means that unless enough people are vaccinated worldwide, there is always the threat that the virus will mutate to a form that helps it evade the vaccines (Gonsalves 2021). The Omicron variant has proved to be more easily transmissible than the previous Delta, but with less virulence. Left to their own means, nations have prioritized their own interests, and leaders have sought to cast blame as to the virus origins because the blame game plays well with domestic audiences. The absence of plans to vaccinate people outside of the rich countries of the world is a recipe for disaster. This is discouraging and reveals that the world has lacked a true global response to the pandemic. Gregg Gonsalves, who is an assistant professor of epidemiology at the Yale School of Public Health in the US, recently warned: “We will be chasing variants across the globe for many years at this rate, all because we cannot raise our heads above the parapets of our own countries to see that all of us are inextricably linked together in viral destiny.” (Gonsalves 2021)

## 6. POLICY RECOMMENDATIONS

Globalization has linked people to each other through business, communications, trade and tourism, but it has not done much to get people to accept and tolerate each other. We still cling to bias based on nationality, ethnic origin, race, language and culture. A crisis brings out the best or worst in individuals and nations. It either unites or divides them. Covid-19 is a healthcare crisis which caused an economic crisis. It is also a leadership crisis. Many world leaders have failed to deal with it adequately. Those who have fared the worst are those who have put their nation's interests – even their own interests in terms of staying in power – ahead of their country's national collective interest.

The severity of the Covid-19 pandemic could have been averted by a proper global response, The Independent Panel for Pandemic Preparedness & Response, which is backed by the WHO, recently concluded (Guenot 2021). It noted that the resources and knowhow to control the coronavirus existed all along but world leaders failed to use them properly. For months after the WHO declared the coronavirus outbreak an emergency, too many countries adopted a wait-and-see approach, which seemed less costly, instead of aggressively containing the virus.

The panel's report found that countries that recognized the threat of Covid-19 early did much better than those that waited: "The Independent Panel has found weak links at every point in the chain of preparedness and response. Preparation was inconsistent and underfunded. The alert system was too slow—and too meek. The World Health Organization was under-powered. The response has exacerbated inequalities. Global political leadership was absent." (The Independent Panel for Pandemic Preparedness & Response 2021).

ASEAN countries need to work together to combat this prolonged multifaceted crisis. No country in Southeast Asia is able to do it alone and no leader is able to go it alone either. The true test of a leader is in the quality and diversity of the teams he or she chooses to rely on. The strategy should be to reach out for advice and guidance rather than hunker down. No current world leader was elected or installed because he or she was good at crisis management. ASEAN leaders need to bring in people who are. Instead, we have seen numerous instances of healthcare workers lobbying for more lockdowns, while business leaders push for keeping things open. National leaders are caught in between. ASEAN governments need to form crisis management and response teams made up of individuals who are specialists and who do not represent or have any allegiance to special groups or interests. These teams must be given the power to make and shape policy. They should not just be convened for public relations purposes. ASEAN leaders need to recognize when they need help and to ask for it, doing so not out of weakness but out of strength and wisdom.

Leaders need to remember that these are still not normal times and their strategies and decisions must be right for these extraordinary circumstances. The pandemic has revealed serious gaps in public health facilities and preparedness as well as a lack of coordination and communication among government agencies in many countries (Caballero-Anthony 2021). When representatives of sectors within a country turn on each other, it requires holistic thinking from its central leadership and intelligent decision-making.

Good communication is one of the keys to managing through a crisis, yet communications and cooperation have not been strong points for many ASEAN leaders. Countries within southeast Asia have also not collaborated on vaccines. Success at holding back the virus in 2020 and into 2021 gave some ASEAN leaders, including those in Cambodia, Laos, Thailand and Vietnam hope that they could delay having to vaccinate large numbers of their populations to achieve herd immunity. It was a failure in planning and in communicating to the public the safety of the new vaccines and the need for them.

World health agencies have also been slow to highlight the increased dangers from some of the new virus variants and this has led to short-sighted strategies. Leaders need to equip themselves with the latest information and not rely on hope as a strategy. Here, the tendency to rely principally on information in only one language can be a handicap. Leaders need advisors who are capable of understanding and accessing news from a variety of sources and in a variety of languages. The recovery of one country depends on the recovery of all countries, yet even though this is accepted, on issue after issue countries revert to looking after only their own citizens.

Covid-19 should not be looked upon as a small event or disruption. It has changed and will continue to change the way we live and act, and ASEAN leaders need to adopt strategies which encompass not only dealing with the crisis today but with the effects that the virus will have in the years ahead. Covid-19 has brought and will bring profound structural change to the areas of business, human resources, healthcare, banking and finance, education, transportation and security. Policy needs to be shaped not only to deal with the crises but also more importantly with the lasting effects of the crises.

## 7. FINAL REFLECTIONS

The question that all firms and institutions want answered is what will happen after Covid-19 finally starts to fade on a global level. The answer is that we do not know and we need to accept that. Covid-19 has been a life-altering event which changed global civilization in many ways. One of the principal lessons to be learned is that nothing is certain and that the business model which we have used for centuries which is based on linear planning, control and certainty is now becoming outdated.

The new model is about opportunity, agility, flexibility and innovation. Covid-19 has taught us that we need to be ready for anything and that institutions and leaders who are not prepared will suffer. This crisis should not be looked upon as a storm which, after it passes, will allow us to return to the way everything was before. Covid-19 has and will continue to bring profound changes to the way we think, act and function. It is bringing us out of our individual and collective comfort zones and forcing us to confront things we previously preferred to overlook.

We can no longer be complacent, no longer assume that our education and experiences are sufficient for tomorrow's problems. We need to be prepared for whatever the future might bring and that begins with the desire to learn new things. This crisis has shown us not what we know, but rather what we do not know.

The challenges for Southeast Asia from the accelerated pace of digitalization caused by Covid-19 are formidable and will ultimately affect the public sector more than the private sector, though they will disrupt both significantly.

The number of structurally unemployed people (workers who are unemployed due to permanent shifts in the economy, often driven by processes such as technological change and exacerbated by the mismatch between the skills that the unemployed have and the skills which firms need) has been rising due to Covid-19 changes such as remote work and the shift to online retail (Chapman et al. 2021). This trend will continue.

Expect disruptions in education, communications, social services, healthcare, language, human resources and hiring, immigration and migration, law enforcement and security, and civil services. Governments in the region will be called upon to provide the expertise and willpower necessary to meet this complex challenge effectively. Digitalization is creating divisions in society that will only grow more pronounced. The longer Covid-19 continues, the more the time frame for reform will be compressed and the deeper the divisions will be.

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