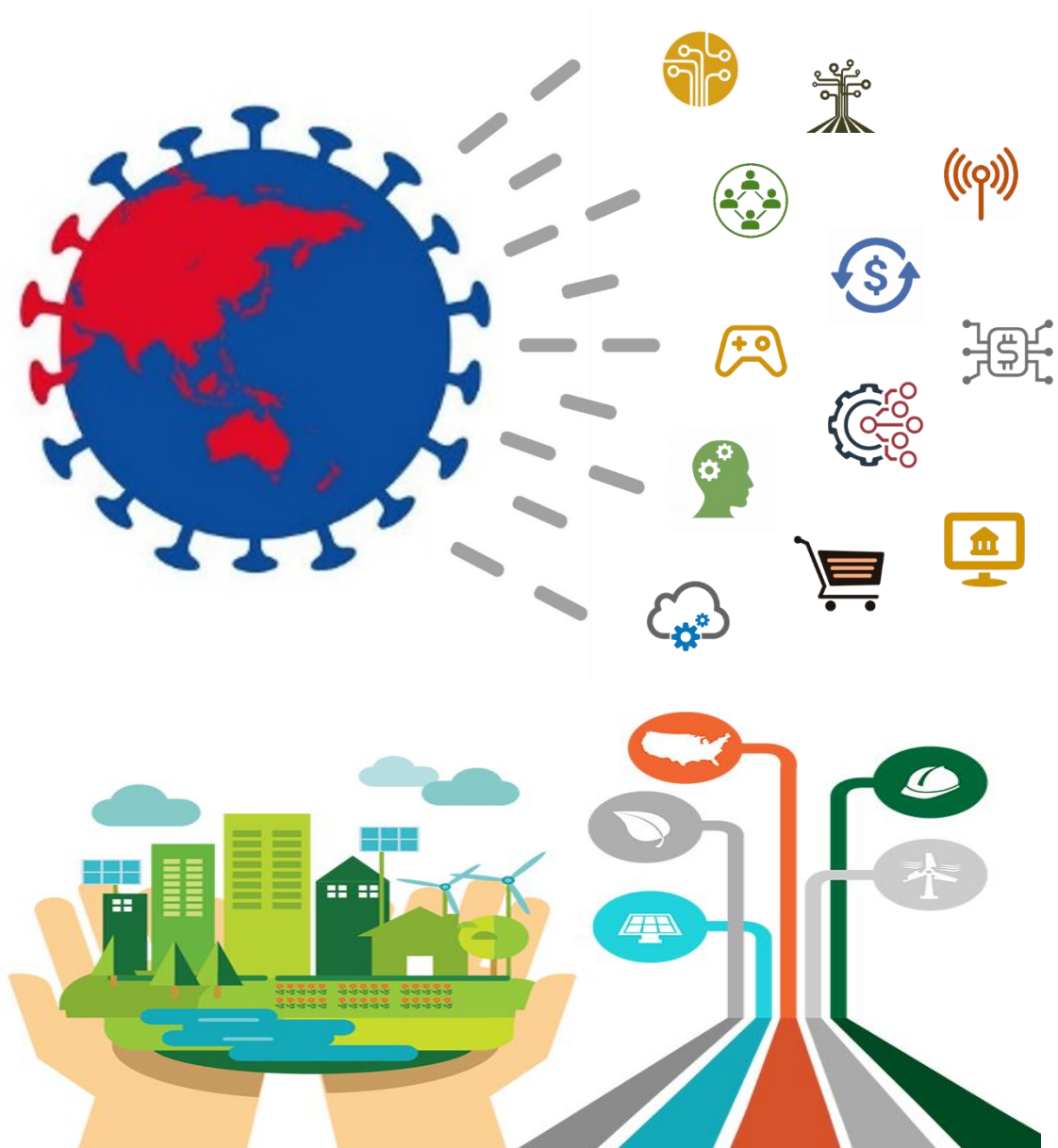


ASIA AFTER COVID

*Driving Digital in Response
to the Global Pandemic*



Economies and Businesses in a Pandemic Reality

The world has changed and continues to do so even as Covid-19 remains the greatest threat to humankind and our way of life in more than seven decades. Barely a year since it first emerged as a novel coronavirus, Covid-19 is leaving a trail of destruction across the world, cutting a swathe through billions of lives, hundreds of million livelihoods, tens of million businesses and industries, and hundreds of economies and nations.

The numbers are staggering. By the end of the 2020, the pandemic has already infected an estimated 80 million and claimed more than 1.7 million lives (*www.worldometers.info*). Total losses in working hours as a result of lockdowns and shutdowns have been estimated at over 12% or the equivalent of almost 400 million jobs for 2020 (*International Labour Organization – ILO*). This remains an optimistic forecast given the current surge in global cases which is expected to last beyond this year.

Such dire numbers correspond with the widespread closure of businesses and industries worldwide. A World Bank survey conducted in early September found 26% of global businesses were non-operational, whether they were permanently shuttered or temporarily closed in response to the enforced lockdowns as well as drastic drop in consumer demand.

Given the impact on businesses, industries and trade, the world is now in recession with the International Monetary Fund (IMF) projecting in October 2020 a contraction of -4.4% for the global economy. The World Bank has released a worse forecast, predicting a steeper dive in global growth of 5.2% for the year.

Compared to the world economy, the picture in Asia is rosier. Nevertheless, the region is expected to record its first contraction in 6 decades. The Asian Development Bank (ADB) in September 2020 predicted negative growth of 0.7% with three quarters of Asian economies headed for a contraction this year.

Recent news of imminent vaccine availability has created an upsurge of hope and optimism. However, scientists and pharmaceutical companies have repeatedly cautioned that vaccine for the masses should not be expected before the third, if not fourth, quarter of 2021. What this means is that the world would need to contend with Covid-19 and its debilitating impact on lives, livelihoods and economies for at least another 8 – 10 months.

In the meantime, human capital, enterprises of all sizes from micro and small to medium and large corporations, industries and governments are compelled to look for solutions in order to mitigate the business and economic impact of the global pandemic while preparing for a post-Covid-19 landscape.

Digital, the Way Forward After Covid-19

Following the anticipated recession in 2020, the global and Asian economies are forecast to rebound in 2021. Such an outcome, however, would hinge on the caveat that the pandemic does not exceed projections before widespread vaccine availability in the new year.

The IMF, in its latest global outlook in October, expects the global economy to expand by 5.2% while the World Bank has projected partial recovery at 4.2% in 2021. For Asia, the ADB has forecast a stronger rebound of 6.8% with China leading the way.

In the meantime, businesses worldwide and in Asia have grappled with common issues stemming from restrictions imposed to curb Covid-19 and they include the following:

- **Drop in demand** from a combination of enforced shutdowns; restricted movement preventing conventional sales; and physical distancing requirements leading to fewer customers.
- **Lack of supply** from the disruption to the local and global supply chains as vendors face similar restrictions described above.
- **Obstacles to operations as usual** as owners and employees faced various difficulties merely to turn up for work.

It is clear that digital solutions served to partially offset many of these problems, whether it is migrating to a digital and in many cases an e-commerce platform to create and meet demand, utilising e-procurement for supplies, or shifting to work-from-home (WFH) via online communication and interaction tools.

Indeed, this shift towards digitalisation, particularly among the micro, small and medium enterprises (SMEs) around the world, is gaining momentum following the onset of the global pandemic. For instance, the US Chamber of Commerce estimated that digital sales among American SMEs grew by 10 – 17% in April and May 2020 while a McKinsey survey in May 2020 found that digital adoption increased by one third during the first Covid-19 peak in Germany.

In addition, the ICCO Cooperation in May had called on businesses to capitalise on digital models, platforms and technologies, stating: *“This (Covid-19) has created a very huge opportunity for digital transformation. In order to ensure business continuity ... businesses should quickly shift to digital platforms in terms of order booking, money transfer and coordinating the delivery of order.”*

In view of rapidly-escalating digital adoption levels, the digital industries in Asian economies are poised to capitalise on this turn of events.

Nevertheless, growth in digital demand is still dependent on the capacity of the industry to innovate and produce digital solutions tailored to the needs of business and industry in their respective economies.

At the same time, traditional businesses and industries require assistance, financial or otherwise, to embrace digital transformation. This being the case, these two complementary forces of digital demand and supply are critical to building economic resilience in a post Covid-19 landscape.

In response to the pandemic, governments across the region have introduced aid packages and rolled out initiatives to revive and revitalise economic activity, including specific programmes to either develop the digital industry or accelerate digital transformation within the physical economy.

The remainder of this White Paper presents a brief look at some of the public and private sector initiatives for digital development, adoption, migration and transformation across 12 ASOCIO member economies that participated in an online roundtable discussion on 20 October, 2020.

Their responses are featured in two separate sections. The first, **Digital Response and Best Practices** looks at how these economies responded to the pandemic, some of which can be emulated across the region.

The second part outlines the **National Digital Response to Covid-19** in alphabetical order of economies and contains information that was extracted to populate the first part.

Digital Response and Best Practices



Leveraging on E-Commerce, Online Banking and Digital Payments

Businesses and societies in every economy went digital in response to the pandemic and enforced restrictions. E-commerce experienced a boom, as did the alternative of online banking and using digital means and instruments for payment.

In **Bangladesh**, one of the leading online grocery stores recruited and trained almost 1,000 additional employees to meet pandemic-driven market demand while leading banks reported as much as a 70% rise in online banking.

In the case of **Bhutan**, banks moved towards providing payment apps with scan and pay features. The central bank initiated the single QR code-based payment method that allowed consumers to scan one QR code and make payment. Further, the central bank also promoted the centralised payment gateway known as Bhutan Immediate Payment System (BIPS). Several eCommerce platforms emerged during the lockdown and have continued to gain traction. IN addition, the central bank also introduced a sandbox programme to promote and support the development of fintech, regtech, blockchain and distributed ledger technologies.

India's financial and related institutions expedited digital adoption and transformation in the wake of Covid-19, particularly in the area of digital payments. In this case, the digital payment ecosystem had already been developed by the National Payments Corporation of India (NPCI) through initiatives for bill payments and electronic toll collection, among others.

As the pandemic surged in **Japan**, the Government raised its intention to move towards the use of digital currencies, which has been under consideration by the Bank of Japan in collaboration with foreign central banks.

Malaysia, which already had among the world's highest per capita online shoppers, experienced a surge in e-commerce at the height of the Covid-19 pandemic, resulting in many of the newly-unemployed joining the ranks of the gig economy as delivery providers.

The current NLD Administration in **Myanmar** released its Covid-19 Economic Relief Plan (CERP) in April 2020 consisting of 7 Goals, 10 Strategies, 36 Action Plans and 76 Actions, out of which a main goal is to promote e-commerce and mobile payments.

In **Singapore**, e-commerce also experienced a boom with the Government placing emphasis on driving SMEs towards digitalisation, particularly in e-payment and e-invoicing capabilities. The Government also offered matching grants and other subsidies to businesses to go online as this would open up future opportunities for cross-border sales and gain a foothold on the global market in the post-pandemic landscape.

At the height of the pandemic, businesses and talents in **Thailand** increasingly embraced digital technologies and solutions including mobile payments, e-wallets, video conferencing and collaboration tools. Thai businesses are also harnessing AI as a means to gain insights into customer needs and to help reduce physical interaction during the epidemic while also improving the digital customer experience and helping companies understand changes in consumer behaviour.

Likewise in **Vietnam**, the number of people buying online increased by more than 70% in 2020. Currently, Vietnam has more than 150 fintech companies including 28 e-wallets. During the year, VN Pay, a Vietnamese startup on epayment solutions, became the second unicorn startups in the country and 12th in the region.

Adjusting to Work from Home and Transitioning to Virtual

For millions of business owners and employees, the lockdowns in their economies led to the relatively novel concept of work-from-home (WFH) with meetings, discussion and presentations carried out via online video conferencing tools such as Zoom, Microsoft Teams and others.

For instance, the Government of **Bhutan** actively promoted the WFH culture among civil servants with meetings and capacity building activities conducted online. This same trend was also seen in the private sector.

Many physical events were held fully or partially online, including the Tech Fest Asia in **Malaysia**, which was originally intended to coincide with the World Congress on IT (WCIT 2020).

Specific industry sectors in many economies also took the opportunity to push for WFH and the virtual way of doing business. In **Hong Kong**, the logistics industry expedited its roll out of AI-powered robotic process automation (RPA), ramping up its schedule to automate more processes such as e-invoicing to enable WFH or work from anywhere.

Meanwhile, the public and private sectors in **Taiwan** leveraged on everything virtual during the global height of Covid-19. Remote conferences became mandatory while B2B business transactions were conducted almost exclusively online. A virtual exhibition centre was also established.

When companies moved to work from home in **Singapore**, 37% of respondents in a survey conducted by SGTech indicated WFH was new to them. It took at least 3 weeks before

companies surveyed became comfortable with WFH. Without surprise, 60% of respondents had acquired remote collaboration software/meeting tools as a first priority.

As the months progressed, companies highlighted 3 key areas of concern with WFH:

1. managing employees remotely;
2. tools and practices to keep company data secure; and
3. managing approval processes and workflow.

Against this backdrop, SGTech created webinars offering solutions from members to tackle such requests and worked with government agencies to curate a list of specific digital solutions that could be used to tackle the pandemic such as online collaboration tools, temperature scanning solutions and e-commerce solutions.

In **Vietnam**, monthly government meetings were carried out online as was the case with National Assembly meetings.

Shifting Towards Digital Business Models

As the pandemic resulted in restrictions on traditional brick and mortar business, many turned towards digital business models to continue driving sales by engaging with customers and selling online.

This could be seen in **Bangladesh**, where there was a discernible shift towards businesses built on a digital model or the adoption of digital platforms to replace shuttered enterprises hit by the pandemic.

In **India**, fintech companies are leveraging on the impact of Covid-19 to offer a wide range of integrated solutions and are deploying innovative business models by developing cutting-edge technologies such as AI, machine learning (ML), cloud, internet of things (IoT), blockchain and human computer interfaces (HCI).

A new project was launched in **Korea** to encourage the development and migration to ‘untact’ business using AI, software programs, networks, and digital devices. ‘Untact’ is a new term meaning non-face-to-face contact. Among the activities this would cover are food & beverages, shopping, delivery, job interviews and even cultural performances.

Meanwhile in **Malaysia**, the government-owned Malaysia Productivity Corporation (MPC) developed a Digital Transformation Framework specifically for SMEs hardest hit by Covid-19. The framework included a roadmap to provide a step-by-step guide for businesses to transform into digital models able to ride out the pandemic and thrive in a post Covid-19

landscape. This ranged from securing financing via alternative and digital sources; to purchasing cloud-based apps and services; hiring and training talents in digital tools; migrating to new business models built on a digital platform; and adopting digital processes including automation for all aspects of business.

Similar to Malaysia, the Government in **Taiwan** is encouraging SMEs to migrate to digital platforms or at least to incorporate digital solutions in all their processes; from demand and supply side to operations and administration.

The online business model is also proliferating among businesses in **Vietnam**. Meetings, events, marketing and sales as well as customer training activities are being shifted from offline to online, in the process saving funds for businesses. The digital signature is used by almost all businesses here.

Expediting Digital Adoption and Transformation

Beyond the rapid adoption of digital business models, digital transformation also became a priority in many economies with the need to build resilience one of the many factors driving this trend.

One of the main components of Digital Drukgyul in **Bhutan**, digital transformation of public and business service delivery picked up pace during the pandemic. The National Unique Identity (UID) continued to be developed, which will enable the issuance of a unique identity to every individual in Bhutan. The UID is expected to be used in government service delivery, banking services, and more.

In **Hong Kong**, the financial industry accelerated its integration of artificial intelligence (AI) into operational processes with chatbots, robo-advisers and robotic process automation (RPA) to address the reduction in frontline banking and customer services. Support for this enhanced rate of digital adoption was forthcoming from the Hong Kong Government, with regulatory bodies such as the Hong Kong Monetary Authority moving swiftly to prepare relevant policies and guidelines.

In the case of **India**, the pandemic significantly boosted the use of contactless digital technology in the world's second most populous nation where every citizen already has a national digital identity in the form of the digitally-authenticated *Aadhar* identification number.

While businesses in **Japan** expectedly responded to the crisis with a swift and seamless transition to virtual business models, e-commerce and online transactions, the real gains in digitalisation came from the Government. It moved to drive its digital transformation (DX)

policy across many different aspects of government administration and public services. This included web conferencing for civil court proceedings, document submission to government agencies and many more. Among the first steps towards DX was the adoption of an Intellectual Property Promotion Plan 2020 by the Government

Similarly, the pandemic further served to drive the Government, businesses and society in **Korea** towards even deeper digitalisation to narrow the digital gap between companies and workers.

Digital transformation was also a priority in **Malaysia** where many SMEs, which account for a disproportionate 99% of all registered businesses, bore the brunt of pandemic restrictions. They began pivoting towards digitalisation and automation. Organisations such as the Malaysia Digital Economy Corporation (MDEC) and the National Tech Association of Malaysia (PIKOM) supported such efforts by rolling out programmes to offer digital tool suites to SMEs for their digitalisation journey.

In **Singapore**, the Government set aside 30% of a major allocation for digitalisation in the form of ICT contracts for the public sector in order to accelerate digital transformation as well as to support businesses through the pandemic. Many of these contracts are earmarked to migrate systems onto the commercial cloud as this would facilitate the development of applications and services for citizens and residents in a faster and more scalable manner.

In **Vietnam**, the National Digital Transformation Program to 2025, with a vision extending to 2030 was approved by the Prime Minister on 3 June 2020 and this will require all government offices, ministries and provinces to begin implementation soon.

Migrating to Online Education and Learning

With schools and higher learning institutions closed in many economies, the focus shifted to online education and digital delivery of learning and training. This was evident in almost all economies across ASOCIO.

In **Bangladesh**, the University Grants Commission introduced policies requiring all universities to digitalise delivery of education as well as other processes such as admissions. This aspect of digitalisation was already in the works following a collaboration between the Government and the World Bank under a 2009 programme, Higher Education Quality Enhancement (HEQEP). At the height of the pandemic, the North South University (NSU) became the nation's first education institution to roll out online learning courses with the focus now on reaching out to socially-marginalised groups.

In **Bhutan**, online education is now considered possible using Google Classroom, broadcast media and other channels. Classes from Pre-Primary to VIII went completely online since March 2020. The Ministry of Education is in the process of implementing a national-level Learning Management System and this is expected to be actively used from the 2021 academic session.

Meanwhile, the private sector in **Taiwan** ramped up knowledge acquisition and skills training in digital capabilities in order to build a strong digital economy for the long term, which will be focused on three key areas: digital literacy, digital learning and advanced knowledge. For instance, the Digital Trade Academy is giving hands-on training for among others, talents in tourism that have been hit especially hard.

Supporting the Economy and Society with Government Aid Packages

Given the economic toll on business and individuals wrought by the pandemic, governments in many economies were compelled to roll out a host of economic aid packages. Many were in the form of grants, financing or incentives to adopt digital technologies and platforms.

One of the few yet to announce digital-specific measures is the Government in **Bangladesh**, which however is expected to respond to calls by businesses and industries to provide economic incentive packages for digital-related and digital-enabled SMEs to bring their services to the grassroots. Digital industry entrepreneurs believe such government support could offset an anticipated drop in ICT revenues for 2020 resulting from the impact on Bangladesh's outsourcing service provision.

The Government of **Bhutan** is supporting training programmes to public, corporate and private sector professionals, including on blockchain, micro-services and other technologies and frameworks.

To support all businesses impacted by pandemic restrictions, the **Hong Kong** Government funded remote working or remote services for businesses. For example, the Innovation and Technology Commission (ITC) launched the Distance Business (D-Biz) Programme to support enterprises under an Anti-Epidemic Fund. This programme offers funding support by fast-tracking processing for the adoption of digital solutions by enterprises.

In **India**, since its national digital identity *Aadhar* is linked to individual bank accounts and mobile numbers, this enabled a smooth and seamless distribution of financial aid by the Government. To date, the Government has disbursed more than USD5 billion in cash benefits to those in need via digital payments using *Aadhar*. Beyond financial handouts, the Government has also provided generous credit facilities to the economy's many SMEs as well

as other monetary and fiscal support. It has pumped in an estimated USD63 billion to mitigate liquidity issues for business and industry.

The Government in **Malaysia** lent considerable support via a Short-Term Economic Recovery Plan that included financial aid in the form of grants and financing to drive digital migration of SMEs. This encompassed a RM700 million (USD170 million) digitalisation fund and a separate RM100 million (USD24 million) smart automation grant. In addition, the Government also provided 2 further allocations: a matching grant and another ‘Shop Malaysia Online’ allocation for e-commerce, as well as disbursement of funds for e-wallets to stimulate commerce. Over and above this, a ‘Dana Penjana’ National Investment Fund was established to provide venture capital for digital startups and other growth stage companies.

The **Singapore** government, meanwhile, rolled out 4 fiscal packages to support workers and businesses during this period. Singapore has set aside SGD93 billion or about 20% of its GDP to counter the impact of the pandemic. The main objectives of the support were to help companies manage cash flow, protect livelihood of the workers as well as re-train/upgrade the skillsets of workers to take on new roles in the economy with the anticipated displacement of jobs. Close to 80% of the fiscal package is used for these purposes. SGTech took on the task of conducting webinars to break down the government aid packages into bite-size pieces to make it easily understood by our members as well as the larger economy.

Accelerating National Digital Programmes

Every economy in ASOCIO already has an existing national digital programme. What the pandemic did was to accelerate some of these initiatives on the basis that digital would ease constraints on business and pave the way for new opportunities in a post-pandemic environment.

This was the case with **Bangladesh**’s ‘Digital Bangladesh’ programme, which grabbed the limelight as the Covid-19 pandemic took a grip on a nation in which a vast majority of the population continue to live on a subsistence level.

In **Bhutan**, the focus was on its ‘Digital Drukyl’ initiative to digitalise for a start; public services, education and healthcare with a longer term objective of developing a digital industry and economy. The public and private sectors are already looking into several areas to create a sustainable digital ecosystem.

The pandemic is also poised to weigh in on the formulation of a new national Science Technology and Innovation Policy (STIP 2020) for **India**. The changes to the business

landscape are bound to add input into this new outlook and strategy for the digital industry and economy.

In **Japan**, among the first steps towards digital transformation (DX) was the adoption of an Intellectual Property Promotion Plan 2020 by the Government, followed by the proposed establishment of a dedicated ministry to promote DX. The Government made a declaration to create the ‘World’s Most Advanced Digital Nation’ involving the digitalisation of the whole of Japanese society. This was immediately followed by a new plan, Cybersecurity 2020, to drive government agencies and private enterprises towards comprehensive digital transformation. Subsequently, the government's Cyber Security Strategic Headquarters issued a new plan, "Cybersecurity 2020", aimed at encouraging government agencies and private enterprises to carry out digital transformation.

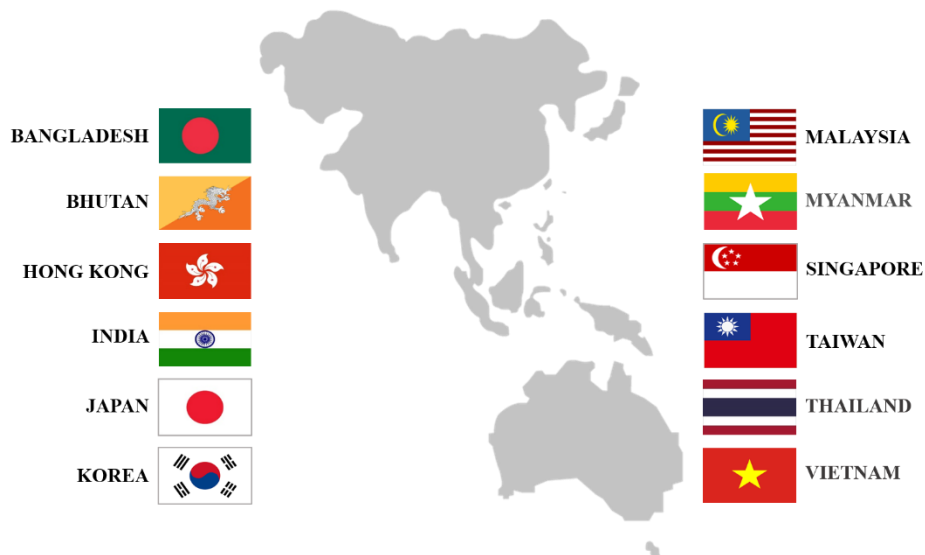
Meanwhile, the Government in **Korea** unveiled a new master plan for digital transition post Covid-19 revolving around 2 pillars: The Green New Deal and the Digital New Deal, with heavy investment for the latter over the next 2 years intended to create some 900,000 new jobs by 2025 and catalysing industries in big data and digital infrastructure.

And in **Thailand**, the Government is proactively accommodating the needs of users apprehensive over the potential impact of Covid-19 with policies and investments such as 5G high speed networks, remote working capabilities and e-learning. To stimulate 5G development and alleviate some of the investment required for operators, the Government has introduced flexible payment terms that allow 700 MHz and 2600 MHz licenses to be paid over a ten-year period.

The **Singapore** Government will spend an estimated SGD3.5 billion on ICT procurement, up from SGD2.7 billion in 2019, an increase of 30%. This is to allow the Government to continue to invest in technology to accelerate Singapore's digitalisation push on a whole-of-nation level.

In **Vietnam**, the National Digital Transformation Program to 2025, with a vision extending to 2030, was unveiled on 3 June 2020, highlighting eight priority areas for digital transformation: healthcare, education, finance and banking, agriculture, transportation and logistics, energy, environment and industry production. In addition, a strategy to develop digital enterprises by 2030 was also submitted to the Government.

National Digital Response to Covid-19



BANGLADESH



This economy's nascent 'Digital Bangladesh' programme assumed the limelight as the Covid-19 pandemic took a grip on a nation in which a vast majority of the population continue to live on a subsistence level.

Since a prolonged lockdown would have been just as, if not more, devastating to Bangladesh's populace, the public and private sectors turned to more sustainable solutions by leveraging on digital platforms and technologies to support business and industrial activities.

This included measures such as work-from-home (WFH) and a surge towards e-commerce, online banking and telemedicine, developments that are expected to gain momentum in a post Covid-19 landscape. For instance, one of the leading online grocery stores recruited and trained almost 1,000 additional employees to meet pandemic-driven market demand while leading banks reported as much as a 70% rise in online banking.

Another positive development for Bangladesh's digital economy was a discernible shift towards businesses built on a digital model or platform to replace shuttered enterprises hit by the pandemic.

Businesses and industries are now calling for economic incentive packages for digital-related and digital-enabled SMEs to bring their services to the grassroots. Digital industry entrepreneurs believe such government support could offset an anticipated drop in ICT revenues for 2020 resulting from the impact on Bangladesh's outsourcing service provision.

The pandemic also had the effect of accelerating the nation's transition towards online education. Its University Grants Commission has introduced policies requiring all universities to digitalise delivery of education as well as other processes such as admissions. This aspect of digitalisation was already in the works following a collaboration between the Government and the World Bank under a 2009 programme, Higher Education Quality Enhancement (HEQEP).

At the height of the pandemic, the North South University (NSU) became the nation's first education institution to roll out online learning courses with the focus on reaching out to socially-marginalised groups.

BHUTAN



The scourge of Covid-19 has crystallised the importance of digital to the predominantly agrarian economy of Bhutan although the pandemic caused minimal disruption to lives and livelihoods unlike many other nations worldwide and in Asia.

Nevertheless, the public and private sectors recognised the urgency of such digital alternatives as online education and work-from-home (WFH) capabilities alongside the need to invest in digital technologies and a digital industry.

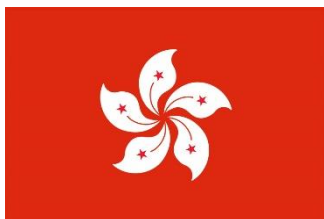
The Government has launched a ‘Digital Drukyl’ initiative to digitalise for starters; public services, education and healthcare with a longer term objective of developing a digital industry and economy.

Officials in Bhutan have outlined three reasons for the push towards digital: firstly, to scale up the knowledge, skills and capabilities of the nation’s limited talent pool; secondly to drive innovation within business and industry in order to facilitate greater participation in the global market; and lastly to restructure an economy over-reliant on certain sectors towards more productive and lucrative opportunities.

To prepare for a post Covid-19 scenario, the public and private sectors are already looking into several areas to create a sustainable digital ecosystem. They include:

- A new digital blueprint as a replacement or extension of the existing Information and Communications Technology Policy and Strategies first introduced in 2009;
- Development of a digital infrastructure to improve connectivity in order to expedite the deployment of digital technologies for automation, e-commerce, digital identity and blockchain;
- Improvement to digital literacy and skills via a digital curriculum in schools and institutions of higher learning as well as programmes to equip the workforce with digital skills;
- Incentives for private sector investment via opportunities in flagship public sector programmes, and support for digital startups and digital adoption; and
- Development of a roadmap for a 21st Century economy with digital and other technologies as the enablers.

HONG KONG



Hong Kong's high level of digital readiness cushioned the impact of Covid-19 on its economy and businesses. While pandemic control measures such as stay-at-home and social distancing invariably affected commerce, overall, the public and private sectors were either sufficiently digitalised or able to immediately embrace digital transformation in adapting to the new normal of doing business.

For instance, the pandemic has accelerated digital adoption in Hong Kong's financial industry, particularly in integrating artificial intelligence (AI) into operational processes with chatbots, robo-advisers and robotic process automation (RPA) to address the reduction in frontline banking and customer services.

Meanwhile, early adopters spent the time sophisticating such AI and data capabilities including biometrics and fraud detection as well as the roll out of virtual banks and insurers.

Support for this enhanced rate of digital adoption has also been forthcoming from the Government, with regulatory bodies such as the Hong Kong Monetary Authority moving swiftly to prepare relevant policies and guidelines.

Logistics was another sector where the roll out of AI-powered RPA was hastened by Covid-19. The industry ramped up its schedule to automate more processes such as e-invoicing to enable WFH or work from anywhere.

Digital entertainment in the form of OTT video, games and related products and services was yet another industry to benefit from the pandemic as consumers were compelled to or chose to stay at home.

To support all businesses impacted by pandemic restrictions, the Government funded remote working or remote services for businesses. For example, the Innovation and Technology Commission (ITC) launched the Distance Business (D-Biz) Programme to support enterprises under an Anti-Epidemic Fund. This programme offers funding support by fast-tracking processing for the adoption of digital solutions by enterprises.

INDIA



Like many other economies, India's digital industry is accelerating faster as a result of the sudden dependence of business and industry on digital platforms, channels and touchpoints to cope with Covid-19 and its restrictions.

The pandemic has significantly boosted the use of contactless digital technology in the world's second most populous nation where every citizen already has a national digital identity in the form of the digitally-authenticated *Aadhar* identification number. Since *Aadhar* is linked to individual bank accounts and mobile numbers, this has enabled a smooth and seamless distribution of financial aid by the Government. To date, the Government has disbursed more than USD5 billion in cash benefits to those in need via digital payments using *Aadhar*.

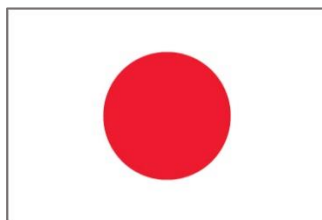
Beyond financial handouts, the Government has also provided generous credit facilities to the economy's many micro, small and medium enterprises (SME) as well as other monetary and fiscal support. It has pumped in an estimated USD63 billion to mitigate liquidity issues for business and industry.

Like the Government, India's financial and related institutions have also expedited digital adoption and transformation in the wake of Covid-19, particularly in the area of digital payments. In this case, the digital payment ecosystem has already been developed by the National Payments Corporation of India (NPCI) through initiatives for bill payments and electronic toll collection, among others.

Over and above this, fintech companies are leveraging on the impact of Covid-19 to offer a wide range of integrated solutions and deploying innovative business models by developing cutting-edge technologies such as AI, machine learning (ML), cloud, internet of things (IoT), blockchain and human computer interfaces (HCI).

The pandemic is also poised to weigh in on the formulation of a new national Science Technology and Innovation Policy (STIP 2020) for India. The changes to the business landscape are bound to add input into this new outlook and strategy for the digital industry and economy.

JAPAN



As one of the world's most digitally-advanced economies, Japan responded to its Covid-19 state of emergency with a swift and seamless transition to virtual business models, e-commerce and online transactions on the part of the private sector.

That was to be expected, but the real gains in digitalisation resulting from the pandemic came from the Government, which had lagged behind the private sector all this while despite the introduction of a digital transformation (DX) policy almost 20 years ago.

As the pandemic swept through Japan in the second quarter of 2020, the Government moved to drive its DX policy across many different aspects of government administration and public services. This included web conferencing for civil court proceedings, document submission to government agencies and many more. Among the first steps towards DX was the adoption of an Intellectual Property Promotion Plan 2020 by the Government, followed by the proposed establishment of a dedicated ministry to promote DX.

Then in July 2020, the Government made a declaration to create the 'World's Most Advanced Digital Nation' involving the digitalisation of the whole of Japanese society. This was immediately followed by a new plan, Cybersecurity 2020, to drive government agencies and private enterprises towards comprehensive digital transformation.

Two days later, after the announcement was publicised, the government's Cyber Security Strategic Headquarters issued a new plan, "Cybersecurity 2020", aimed at encouraging government agencies and private enterprises to carry out digital transformation.

In addition and as part of Japan's renewed DX movement, the Government indicated its intention towards the use of digital currencies, which has in any case been under consideration by the Bank of Japan in collaboration with foreign central banks.

Digital industry players are now pointing out that Covid-19 and 2020 could well be the point in history when Japan made the quantum leap in digital transformation for both the public and private sectors.

KOREA



Similar to Japan, Korea is a world leader in digital technologies complete with a comprehensive digital infrastructure powered by 5G capabilities and an array of smart cities, smart factories, smart grids and smart roads.

The Covid-19 pandemic has further served to drive the Korean Government, businesses and society towards even deeper digitalisation to narrow the digital gap between companies and workers.

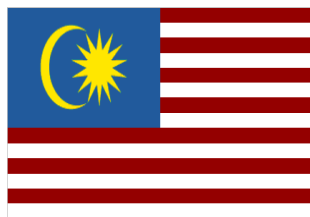
In April, the nation launched a new project to encourage the development and migration to ‘untact’ business using AI, software programmes, networks, and digital devices. ‘Untact’ is a new term meaning non-face-to-face contact. Among the activities this would cover are food & beverages, shopping, delivery, job interviews and even cultural performances.

On top of this, the Government then unveiled a new master plan for digital transition post Covid-19 revolving around 2 pillars: the Green New Deal and the Digital New Deal, with heavy investment for the latter over the next 2 years intended to create some 900,000 new jobs by 2025 and catalysing industries in big data and digital infrastructure.

The New Digital Deal capitalises on synergies between the government and the business sector and comprises 12 goals in 4 sectors:

- (1) Improve the Ecosystem of Data, Network and AI (D.N.A);
- (2) Apply 5G mobile and AI to all sectors of industry from primary, secondary to tertiary;
- (3) 5G mobile and AI based government;
- (4) Establish K-cybersecurity system;
- (5) Establish digital education infrastructure for elementary, middle and high schools;
- (6) Improve online education at universities and job training centres across the country;
- (7) Establish smart healthcare and care-giving infrastructure;
- (8) Promote remote working at SMEs;
- (9) Support micro enterprise’s online business;
- (10) Establish a digital management system for critical infrastructure in four sectors;
- (11) Digital transformation of urban areas and industrial complexes; and
- (12) Establish a smart logistics system.

MALAYSIA



An economy with among the highest proportion of online shoppers in the world, Malaysia experienced a surge in e-commerce at the height of the Covid-19 pandemic with many of the newly-unemployed joining the ranks of the gig economy as delivery providers.

The nation's micro, small and medium enterprises (SME), which account for almost 99% of all registered businesses, bore the brunt of pandemic restriction which led the survivors to pivot towards digitalisation and automation.

On this score, the Government lent considerable support via a Short-Term Economic Recovery Plan that included financial aid in the form of grants and financing to drive digital migration of SMEs. This encompassed a RM700 million (USD170 million) digitalisation fund and a separate RM100 million (USD24 million) smart automation grant.

In addition, the Government also provided 2 further allocations: a matching grant and another 'Shop Malaysia Online' allocation for e-commerce, as well as disbursement of funds for e-wallets to stimulate commerce. Over and above this, a 'Dana Penjana' National Investment Fund was established to provide venture capital for digital startups and other growth stage companies.

Supporting this provision of funding, the government-owned agency Malaysia Productivity Corporation (MPC) developed a Digital Transformation Framework to drive digital transformation of SMEs. The framework included a roadmap to provide a step-by-step guide for businesses to transform into digital models able to ride out the pandemic and thrive in a post Covid-19 landscape. This ranged from securing financing via alternative and digital sources; to purchasing cloud-based apps and services; hiring and training talents in digital tools; migrating to new business models built on a digital platform; and adopting digital processes including automation for all aspects of business.

Meanwhile, other organisations such as the Malaysia Digital Economy Corporation (MDEC) and the National Tech Association of Malaysia (PIKOM) rolled out programmes to offer digital tool suites to SMEs for their digitalisation journey.

MYANMAR



The Myanmar Government responded to the pandemic with a Covid-19 Economic Relief Plan (CERP) which seeks to mitigate the inevitable economic impact posed by the crisis while establishing foundations that will facilitate Myanmar's rapid economic recovery using all available policy instruments to the fullest possible extent.

Digital technologies and solutions such as mobile payments, online food orders, video-conferencing and collaboration apps got overwhelmed by businesses and social-influencers in Myanmar. Demand for webcams and laptops surged to a point that they went out of stock.

The Myanmar Economic Resilience and Reform Plan (MERRP) outlined the blueprint made possible by CERP to help the country get back on track to achieve the overall objectives and goals as set out within the Myanmar Sustainable Development Plan (MSDP). The MERRP's goals are bold and demanding, but they define the direction in which Myanmar must move.

Myanmar is drafting a national innovation policy and a series of action plans. Meanwhile, all government departments/agencies are expected to receive a notification to receive fees, charges, taxes, and all other levies in a digital-only form; via bank transfer, mobile banking, debit/credit card, and/or mobile wallet system.

Long-awaited real-time inter-bank interoperability between Myanmar banks, digital banking systems and mobile wallets will be implemented soonest. Popular shopping malls and markets are encouraged to develop their own e-commerce sites. The Government is expected to negotiate with large, global e-commerce companies to include Myanmar products.

With these developments, Myanmar entrepreneurs can sell online and ship abroad without licensing procedures and exemption or reduction of customs duties and/or commercial tax for the importation of 4IR technologies and related products.

As the next step, Myanmar will expand IT capacities across all government administrative units and strengthen cyber security measures. Data classification policies are also being drafted, in accordance with the upcoming trends and technologies.

SINGAPORE



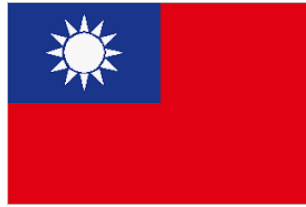
In response to Covid-19 and the considerably stringent pandemic control restrictions, this island nation spared no expense to prop up an economy increasingly leveraged on digitalisation and digital technologies. At this critical juncture, the Government has stepped up engagements with trade associations such as SGTech to forge deeper partnerships within Singapore.

The Government spared no efforts in making use of technology to tackle the pandemic, allowing the economy to slowly and safely open up, and allow lives to return to some level of normalcy. Examples include the building of TraceTogether digital application for contact tracing, roll out of SafeEntry as the National Digital Check-in System, as well as launch of MaskGoWhere and SupportGoWhere websites to help citizens find their designated collection points for mask and Covid-19 related government support schemes respectively.

Even as the private sector adapted to the situation via work-from-home (WFH) directives and e-commerce for essential needs, the Government set aside a significant allocation of SGD3.5 billion (USD2.6 billion) on ICT procurement to spur digitalisation across the economy and support business recovery. This is an increase of 30% from 2019. The funds are expected to be channelled into 5 key areas including: development of new tech tools to respond to COVID-19; development of citizen- and business-centric digital services; development of ICT systems on cloud; modernisation of government ICT infrastructure; and use of data analytics, artificial intelligence (AI) and sensors within the public sector.

Many of these contracts are earmarked for the migration of systems onto the commercial cloud as this would facilitate the development of applications and services for citizens and residents in a faster and more scalable manner. Importantly, SMEs will be eligible to participate in 80% of the potential ICT procurement opportunities. In 2019, nearly 70% of the total ICT contracts were awarded to SMEs. The Government has placed emphasis on driving SMEs towards digitalisation, particularly in e-payment and e-invoicing capabilities, in order to prepare for internationalisation of businesses upon recovery from COVID-19. Such aids are being provided via matching grants and subsidies. Another area given government support is e-commerce, where subsidies are given to retailers to go online as this would open up future opportunities for cross-border sales and gain a foothold on the global market.

TAIWAN



The island economy of Taiwan is among the very few success stories in the fight against Covid-19. With its sophisticated contact tracing capabilities based on digital technologies, Taiwan recorded very few cases and avoided the kind of stringent restrictions that other economies had to resort to.

Nevertheless, an export economy such as Taiwan's has been invariably hit by the slowdown in the world economy, particularly for its digital hardware and other software products and services.

This was to an extent offset by increased demand in Taiwan's video-conferencing and online solutions. Indeed, Taiwan's public and private sectors leveraged on everything virtual during the global height of Covid-19. Remote conferences became mandatory while B2B business transactions were conducted almost exclusively online. A virtual exhibition centre was also established.

In view of the pandemic's potential to disrupt economic activity, the Government is encouraging SMEs to migrate to digital platforms or at least to incorporate digital solutions in all their processes; from demand and supply side to operations and administration.

Taiwan's private sector is also ramping up knowledge acquisition and skills training in digital capabilities in order to build a strong digital economy for the long term, which will be focused on three key areas: digital literacy, digital learning and advanced knowledge. For instance, the Digital Trade Academy is giving hands-on training for among others, talents in tourism that have been hit especially hard.

These expanded efforts are expected to contribute to a strong economic recovery from the global pandemic by creating new digital opportunities for all Taiwanese in the years ahead, especially in the development of 5G network technology, AI and IoT applications as well as other digital-related solutions.

THAILAND



Thailand was another nation that was spared the brunt of Covid-19's devastating impact. Even so, the spectre of the pandemic became a key accelerator for digital transformation among businesses and organisations to ensure continuity.

As a result, Thai businesses and talents have increasingly embraced digital technologies and solutions including mobile payments, e-wallets, video conferencing and collaboration tools.

The Government is proactively accommodating the needs of users apprehensive over the potential impact of Covid-19 with policies and investments such as 5G high speed networks, remote working capabilities and e-learning.

To stimulate 5G development and alleviate some of the investment required for operators, the Government has introduced flexible payment terms that allow 700 MHz and 2600 MHz licenses to be paid over a ten-year period.

Thai businesses are also embracing AI as a means to gain insights into customer needs and helps reduce physical interaction during the epidemic while also improving the digital customer experience and helping companies understand changes in consumer behaviour.

Another area that this nation is focusing on is telemedicine. For example, the Yothi Medical Innovation District (YMID) and the Technology and Innovation-Based Enterprise Development Fund have fostered a channel where tech start-ups can help patients avoid the hospital, talking to doctors online to help reduce the chance of contracting Covid-19.

VIETNAM



One of the success stories in terms of controlling the spread of Covid-19, Vietnam was also one of the few economies that achieved positive growth in 2020 at 2.9%. In response to the pandemic, the Government implemented stringent measures including work-from-home (WFH) and online learning as well as other measures supported by IT applications.

Among the many apps developed during this period were Blue Zone for remote medical examination and treatment, online health declarations, and online learning modules for schools at all levels and geographic locations.

On June 3, 2020, the National Digital Transformation Program with a vision extending to 2030 was approved by the Prime Minister of Vietnam. During the year, many activities of exchanging, connecting, promoting digital transformation were organised, galvanising large enterprises and SMEs to accelerate digital transformation.

In 2020, the number of internet users increased by 40 million with Vietnam being one of six countries in the world to produce 5G equipment on their own. Many applications for WFH, online learning, telemedicine, electronic payments, and contactless transactions were deployed during this period. Meanwhile, new technologies such as AI, Blockchain, IoT, AR, VR were integrated in all solutions and applications to bring about very positive change in Vietnam.

Some of the digital transformation platforms developed have a large number of users of up to hundreds of thousands of businesses. Digital signatures, electronic identity and electronic invoices were also widely deployed while the Government is using eCabinet solutions, online meetings and the online dissemination of e-documents between government agencies, ministries and provinces.

The strategy “Made in Vietnam” by the Ministry of Information and Communication inspired Vietnamese technology companies to master technologies and develop digital solutions resulting in many applications and solutions during the last few years. In addition, a strategy to develop digital companies by 2030 was also submitted to the Government Office.

What's Next

Even as numerous types of vaccines are being transported and distributed worldwide, one issue has been made crystal clear by this once-in-a-generation pandemic: business and industry, governments and societies have to go digital in order to develop a more resilient and sustainable future.

Given this reality, ASOCIO member economies must capitalise on this opportunity to champion digital development and transformation to their respective private and public sectors using Covid-19 as an example and cautionary tale.

Needless to say, efforts to narrow the digital gap among ASOCIO member economies must be given priority and in this case, collaboration between the more digitally-advanced and the less so in ASOCIO should be ramped up. For the newly-digitalising economies, education is a critical area and this is where digital delivery of learning will come into play.

As the option of migrating to digital platforms for businesses and industries became a necessity during the pandemic, ASOCIO should coalesce digital transformation frameworks and roadmaps developed towards this end. Sharing of such strategies and processes will ultimately increase cross-border business within ASOCIO.

Member economies must also take on a more active role in appealing to governments for further economic measures designed to accelerate the development of the digital industry and digital adoption across all other industries as well as throughout government and society.

Another area for ASOCIO to speak as one voice should be a call to their respective governments to build information and data platforms to share information on national digital projects. Information is, after all, the business we are in.

SOURCES

- <https://www.unescap.org/news/un-forges-technological-cooperation-tackle-covid-19-asia-and-pacific>
- <https://modern diplomacy.eu/2020/10/06/innovation-and-inclusivity-in-the-age-of-covid-19-southeast-asias-path-to-a-resilient-digital-economy/>
- <https://govinsider.asia/connected-gov/leveraging-digital-connectivity-in-the-post-covid-new-normal/>
- <https://thediplomat.com/2020/04/how-could-covid-19-reshape-asias-digital-landscape/>
- https://asean.org/storage/2020/06/Factsheet-Go-Digital-ASEAN-as-of-19-June-2020_final.pdf
- <https://a4ai.org/tackling-the-covid-19-pandemic-with-digital-solutions-across-asia-and-the-pacific/>
- <https://www.foodnavigator-asia.com/Article/2020/03/24/COVID-19-and-APAC-s-food-and-beverage-sector-All-our-coronavirus-news-in-one-place>
- <https://unctad.org/meeting/asia-e-commerce-week-shaping-digital-economy-all-postponed-new-dates-be-advised>
- https://www.apec.org/Press/Blogs/2020/0727_COVID
- <https://www.scmp.com/week-asia/economics/article/3088351/coronavirus-drives-southeast-asia-digitalisation-push-raising>
- <https://sdg.iisd.org/news/state-of-asia-pacific-economy-reviewed-amidst-covid-19/>
- <https://ciotechasia.com/apac-govts-push-forth-covid-19-recovery-ict-initiatives/>
- <https://www.mckinsey.com/featured-insights/asia-pacific/how-technology-is-safeguarding-health-and-livelihoods-in-asia>
- <https://home.kpmg/xx/en/home/insights/2020/04/taiwan-government-and-institution-measures-in-response-to-covid.html>
- <https://www.digitallawjournal.org/jour/article/view/12>
- <https://home.kpmg/xx/en/home/insights/2020/04/japan-government-and-institution-measures-in-response-to-covid.html>
- <https://ciotechasia.com/south-koreas-digital-push-to-help-with-economic-recovery/>
- <https://oecdoscope.blog/2020/08/11/korea-roadmap-to-narrow-digital-gaps/>
- <http://cris.unu.edu/we-go-digital>
- <https://opengovasia.com/covid-19-pushes-digital-transformation-across-thailand/>
- <https://opengovasia.com/covid-19-prompts-surge-in-digital-adoption-in-thailand/>
- <https://home.kpmg/xx/en/home/insights/2020/04/bhutan-government-and-institution-measures-in-response-to-covid.html>
- <https://home.kpmg/xx/en/home/insights/2020/04/bhutan-tax-developments-in-response-to-covid-19.html>

- <https://www.scmp.com/comment/opinion/article/3092803/how-coronavirus-turbocharging-hong-kongs-fintech-revolution>
- <https://www.thoughtworks.com/business-strategies-for-hong-kong-business-during-covid-19>
- <https://www.weforum.org/agenda/2020/08/covid-19-has-accelerated-india-s-digital-reset/>
- <https://www.industrialautomationindia.in/industryitm/9452/How-Covid-19-Brings-a-Digital-Transformation-Boom-Across-the-Enterprise/industry>
- <https://home.kpmg/in/en/blogs/home/posts/2020/07/how-covid-19-accelerating-digitalisation-banking-payments-industry.html>
- <https://www.japantimes.co.jp/opinion/2020/04/15/commentary/japan-commentary/covid-19-pandemic-prompts-digital-revolution/>
- COVID-19 Economic Relief Plan (CERP) – [https://www.mopfi.gov.mm/sites/default/files/COVID-19%20Economic%20Relief%20Plan\(CERP\)-Eng_0.pdf](https://www.mopfi.gov.mm/sites/default/files/COVID-19%20Economic%20Relief%20Plan(CERP)-Eng_0.pdf)
- MERRP document

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