

Fast Forward e-Commerce

How Can Developing Countries
Leap e-Commerce Barriers in the
Post-Covid 19 Era?



Fast Forward E-Commerce: How Can Developing Countries Leap e-Commerce Barriers in the Post-Covid 19 Era?

Author:

Yasmin Ismail

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Abbreviations

AfCFTA	African Continental Free Trade Agreement
AI	Artificial Intelligence
ASEAN	Association of South-East Asian Nations
B2B	Business to Business
B2C	Business to Consumer
CPG	Consumer-packaged goods
COVID-19	Coronavirus Disease
ECLAC	Economic Commission for Latin America and the Caribbean
EGDI	E-government Survey Index
FAO	Food and Agriculture Organisation
CIS	Commonwealth of Independent States
GSC	Global Supply Chain
GVC	Global Value Chain
IFC	International Finance Corporation
ICT	Information and Communication Technology
ITU	International Telecommunications Union
OECD	Organisation for Economic Cooperation and Development
PC	Personal Computer
PPP	Public-Private Partnership
PPP LRC	Public-Private-Partnership Legal Resource Center
RCEP	Regional Comprehensive Economic Partnership

RTA	Regional Trade Agreement
SARS	Severe Acute Respiratory Syndrome
SMEs	Small and Medium Enterprises
UNICEF	United Nations Children's Fund
UNCTAD	United Nations Conference on Trade and Development
UPU	Universal Postal Union
USMCA	United States-Mexico-Canada Agreement
WBG	World Bank Group
WEF	World Economic Forum
3D Printing	Three-dimensional Printing
2IPD	Integrated Index for Postal Development

Abstract

Since the start of Covid 19 pandemic, digital channels have become the primary means of communication and the basis for stable supply chains. The world is witnessing a spike in online B2C and B2B purchases of physical products and digital services, as many consumers resorted to online shopping. And the so-called disruptive technologies are demonstrating their vital role in fighting the pandemic and ensuring the survival of people and businesses.

COVID-19 gave a glimpse to a future where platform-based/digital businesses and e-commerce are the lead drivers of trade and the economy. However, not everyone was ready for this unexpected digital economy quantum leap. In fact, the already existing digital-divide among countries as well as within countries often determined the winners and losers from this great shock and transformation.

This study aims to examine the impact of COVID 19 on digital trends in developing countries and LDCs in light of their pre-existing structural barriers to e-commerce growth. It also looks into the possible means for them to leapfrog the digital divide and catch-up with an accelerating race to a digitalised global trade and economy.

SECTION 1

Introduction: The Covid-19 disruption: A Quantum Leap for Digital Economy

For the past few months and as of this writing, the world continues to grapple with the coronavirus disease (COVID-19) pandemic and the various measures adopted by governments to contain it, from the enforcement of mask-wearing to confinement and shut-down of economic activity. The ‘unprecedented’¹ global health crisis hit ‘in the context of sluggish global trade that has been dragging on since the 2008–2009 financial crisis’ (Economic Commission for Latin America and the Caribbean - ECLAC, 2020). And amid the extreme uncertainty about its path and duration, as well as its non-uniform spill-over effects, the pandemic has been generating social and economic disruptions and posing multifaceted challenges to households, businesses and governments.

In a matter of days, physical movement of goods and people were widely restricted, remote working became the rule, and digital platforms the primary mean for safe communication, online ordering and transactions. Other emerging technologies also called “disruptive technologies” such as big data analytics and Artificial Intelligence (AI) had an integral role in fighting the pandemic and adapting to its consequences. *‘Supercomputers analyse thousands of drug compounds to identify candidates for*

treatments and vaccines. E-commerce platforms prioritise household staples and medical supplies, while videoconferencing platforms enable education and economic activity to continue.’ (United Nations’ Secretary-General, 2020).

1.1 Increased and broader adoption of “Disruptive Technologies” and their applications

The International Finance Corporation (IFC) of the World Bank Group (WBG) defines “disruptive technologies” *as* emerging technologies ‘that result in a significant change in the cost of, or access to, products or services, or that dramatically change how we gather information, make products, or interact. They are largely enabled by the dramatic increases in computing capacity and Internet bandwidth that has made their diffusion exponentially faster.’ (Verma & Al. 2019 - IFC part of the World Bank Group) Alfred Watkins, Chairman of the Global Solutions Summit and Senior Director of the P80 Group Foundation, further explains that

¹ The Covid-19 Pandemic was widely described as “unprecedented” in several reports by International Organisations like the United Nations Conference on

Trade and Development, as well as news and media articles.

‘Disruption occurs when entrepreneurs develop innovative business models and harness the surrounding ecosystem to deploy that technology at scale in new, unique and inclusive ways’².

According to a more recent IFC note (2020, part of WBG), in the past few years and prior to the Covid-19 pandemic, disruptive technologies have been increasingly adopted by businesses, governments, as well as individuals for different purposes (IFC, part of

WBG, 2020). The note highlights that the pandemic has caused an increase in technology usage, referring to the excess growth in mobile internet traffic per user³ in the first quarter of the year 2020 compared to the first quarter of the year 2019. Table 1 below describes several rising disruptive technologies and demonstrates how these enabled responses to the Covid-19 pandemic and proved its vitality for the continuation of the economic and social life. (Piekarz, 2020).

TABLE 1: EXAMPLES OF “DISRUPTIVE TECHNOLOGIES” AND THEIR USE IN RESPONSES TO CHALLENGES POSED BY COVID-19 PANDEMIC

Disruptive Technology	Description and application ⁴	Response to Covid-19
Three-dimensional - 3D Printing	‘It is the process of making a three-dimensional solid object from a digital model through an additive process where successive layers of material are laid down in different shapes. It offers flexibility in production: the same printer can produce different products based on different design files and materials, and simple parts can be made onsite quickly without requiring a lengthy procurement process.’	3D printers were used in a hospital in Italy to turn snorkelling masks into emergency ventilator masks ⁵ .
Robotics	‘Robots are smarter, possess greater dexterity, and are safer to operate. As a result, industries including manufacturing, maintenance, prosthetics, and surgery are relying more and more on advanced robotics.’	Robots were used in Singapore to deliver meals and medication to patients, and In China, to disinfect hospitals ⁶ .
Artificial Intelligence (AI)	‘An area of computer science that emphasizes the creation of intelligent machines that work and react like humans. Some of the activities computers with artificial intelligence are designed	In China, AI has been used to sort scans to spot the infection ⁷ .

² <https://unctad.org/news/deploying-disruptive-innovations-sdgs#:~:text=There%20is%20nothing%20inherently%20di,ruptive,deployed%20on%20a%20massive%20scale.&text=Disruption%20occurs%20when%20entrepreneurs%20develop,new%2C%20unique%20and%20inclusive%20ways.>

³ IFC used growth in mobile internet traffic per user as a proxy for the usage of digital platforms.

⁴ Descriptions are quoted from Verma & AI. 2019 - IFC part of the World Bank Group

⁵ <https://www.3dnatives.com/en/3d-printed-respirator-250320205/#!>

⁶ <https://fr.reuters.com/article/us-health-coronavirus-tech-trfn-idUSKBN2132ZP>

⁷ Ibid.

	for include speech recognition, learning, planning, reasoning, and problem solving.’	
Cloud Computing and Digital Platforms	Cloud computing is ‘characterized by its high storage capacity and ability to be accessed remotely from multiple locations. The cloud allows the on-demand sharing of resources, software, and information among computers, smart phones, tablets, and other devices.’. Together with network technologies, cloud computing is behind online digital platforms as we know them today with multiple applications: social networking, online market places allowing e-commerce transactions and e-payments... etc.	During the crisis, digital platforms allowed access to food and medical supplies through online market places and e-commerce websites. Governments turned to it to provide online health care and the continuation of schools and higher educations. And companies increasingly turned to it for their supplies and for telecommunicating with their employees.

Source: Author

1.2 Acceleration of e-commerce expansion towards a digitalised global economy

In April 2020, 70% of countries worldwide had enforced social distancing and lockdowns measures in response to the COVID-19 pandemic (World Economic Forum – WEF, 2020a). Since then, the demand for internet and mobile data services has surged (World Trade Organisation, 2020). According to preliminary statistics by Forbes in late March 2020, total internet use for entertainment and more has increased by between 50% and 70%⁸. Several reports by international organisations and high-tech companies revealed online Business-to-Consumers (B2C) retail sales ramped up as consumers have adapted their shopping behaviours to ensure safe and sustainable access to essential goods. Reports pointed as well to Business-to-Business (B2B) e-commerce increase as more and more businesses turned to online

marketplaces to buy their manufacturing inputs and business supplies. In other words, Covid-19 has fueled the desire of consumers and businesses to adopt digital trade to stay prepared and resilient in future crisis and pandemics (WEF, 2020a).

According to a recent Global Survey of executives and senior managers conducted by McKinsey from 7th July to 31st July 2020, representing various regions, industries and company sizes, the digitisation of interaction with their customer as well as of their supply-chains and internal operations accelerated by three to four years. The survey also found that the share of adoption of digital products and services accelerated by seven years than before Covid-19. (Laberge & Al., 2020). As per the responses to the survey by Mckinsey, these changes ‘could be here for long’.

The Organisation for Economic Cooperation and Development (OECD) shares the same view and prediction based on historical observations of how SARS pandemic outbreak in 2002 and 2003 in China acted as a catalyst for the digital transformation of Chinese retail (See Box. 1 below).

⁸ <https://www.forbes.com/sites/markbeech/2020/03/25/covid-19-pushes-up-internet-use-70-streaming-more-than-12-first-figures-reveal/?sh=45223e643104>

Box. 1: SARS-2003 outbreak and E-commerce acceleration in China

The Severe Acute Respiratory Syndrome (SARS) pandemic that severely hit China in 2003 led to adopting strict hygiene, social distancing and quarantine measures, such as the closure of public places, schools, restaurants and markets, to avoid uncontrolled contaminations. At the time, e-commerce was in its early primitive stages (orders had to be manually jot down and text messages individually sent as the products were shipped). The outbreak of SARS was a turning point for the development of e-commerce in China. The two lead Chinese online retail platforms of our days were originally founded in response to SARS measures: JD.com and Alibaba.

JD was originally a chain of small electronic shops with 12 offline stores in Beijing. The ambition of its leader was to expand the number of stores to more than 500. With the pandemic, all his existing stores had to close but one. In response, he launched his e-commerce website and could develop his online business. It has today become the second-largest Chinese online selling platform after Alibaba.

As for Alibaba, the platform was created four years before SARS erupted and it was only a Business to Business (B2B) platform. It aimed at matching American procurement teams with Chinese suppliers. The quarantine measures and restrictions in travelling to China, especially for businessmen, led to a significant increase in the use of Alibaba to source Chinese goods adding 4000 new members and 9000 listings each day, an average of 3 to 5 times increase over the pre-SARS rate. After the pandemic, Chinese suppliers continued to turn to online marketing and Alibaba grew to be Alibaba Group creating more platforms addressing other B2C and C2C segments.

Source: CUTS, based on several articles from <https://www.digitalcommerce360.com/>

According to OECD (2020a), 'The COVID-19 crisis accelerated an expansion of e-commerce towards new firms, customers and types of products. (...) Some of these changes in the e-commerce landscape will likely be of a long-term nature, in light of the possibility of new waves of the epidemic, the convenience of the new purchasing habits, learning costs and the incentive for firms to capitalise on investments in new sales channels.'

The pandemic has accelerated already growing trends of digitalisation and e-commerce expansion to light speed and gave a glimpse to a future where e-commerce businesses and third-party digital marketplaces are the lead drivers of global trade and economy (OECD, 2020c; Blackburn & *Al.*, 2020).

1.3 But the acceleration depends on the countries' level of income

The acceleration of digitalisation and e-commerce is 'a privilege not enjoyed by all' (United Nations' Secretary-General, 2020). According to research by IFC (2020), 'countries with lower incomes show lower usage of technology as part of their response to COVID-19'. The pandemic's digital stress test magnified existing cross-country digital divides and economic inequalities.

This study aims to put post-covid 19 acceleration of digitalisation and e-commerce in the specific context of developing countries, their existing digital business ecosystems and

regulatory frameworks. In the next section, the study identifies critical structural barriers to e-commerce growth in developing countries and LDCs. Then it explores how the e-commerce boom in covid-19 accentuated the digital divide between developing and developed countries despite efforts from consumers, businesses and governments to digitalise trade and the provision of services. Then Section 3 suggests actions governments can take to allow faster digital and e-commerce catch-up. Section 4 concludes the study.

SECTION 2

Covid-19 E-commerce acceleration: an unequal opportunity

The digital acceleration during COVID-19 has demonstrated that digital economy and e-commerce are double-edged swords. While they are promoters of resilient supply chains and sustainable businesses and trade in times of crisis, they also can be exacerbators of inequalities if digital gaps and needs of the vulnerable remain unaddressed (Ismail, 2020a). 'Despite the efforts of some governments to foster e-commerce during the COVID-19 crisis, persistent digital divides imply that not everyone has been able to participate.' (OECD, 2020a)

As previously introduced, the pandemic has given a significant push to online shopping. The substantial increase in demand for online shopping is reported by leading e-commerce platforms and online marketplaces. According to JUMIA's 1st quarter financial report of this year: 'Annual Active Consumers reached 6.4 million, a year-over-year increase of 51%. (Also) Orders reached 6.4 million, a year-over-year increase of 28%'⁹. Also in its financial report of 30 June 2020, Mercado Libre registered 65,5 million online active users for the same period in 2020, compared to 47,6 million online active users in the six

months ending 30 June 2019, showing a 37,6% increase¹⁰.

Consumers also became more open to trying different e-payment methods. Mobile Money, e-banking and credit card use has been on the rise (UNCTAD & Netcomm Swiss, 2020). 'However, cash on delivery remains prominent in absolute terms, particularly in LDCs.' (UNCTAD, 2020b). In developing countries more generally, several factors stand against the growth in digital payments. It can be lack of access to connectivity or ICT. But in the case of consumers with digital access but preference for cash-on-delivery payments, it is usually due to trust issues and privacy concerns (OECD, 2020a; UNCTAD, 2020b).

While before the crisis, many consumers and businesses were not keen on using online platforms and digital technologies to buy and sell goods and preferred cash transactions, yet they had no choice but to adapt their behaviours and convert to e-commerce business models (Laberge & Al., 2020; UNCTAD. & Netcomm Suisse Observatory, 2020). Governments exerted efforts to support online marketplaces and e-commerce companies given their critical role in surviving the pandemic (UNCTAD, 2020b; OECD,

⁹ <https://www.bloomberg.com/press-releases/2020-05-13/jumia-reports-first-quarter-2020-results>

¹⁰ <http://investor.mercadolibre.com/static-files/d2daae8c-939f-4148-88cf-d5278fb2fead>

2020a). For developing countries and LDCs, such trends represent a positive change and an exceptional opportunity for a faster digital transformation and a better placement in the globally rising digital economy.

However, the digital acceleration ‘has taken place in a significant manner in developed economies and relatively high-income developing economies, where a sound ICT infrastructure, an e-commerce ecosystem and a distribution network are already in place.’ (UNCTAD, 2020c) LDCs and many developing countries were unable to seize the full potential of the opportunities covid-19 created, as ‘they do not have such an infrastructure, ecosystem or network’ (Ibid, 2020c).

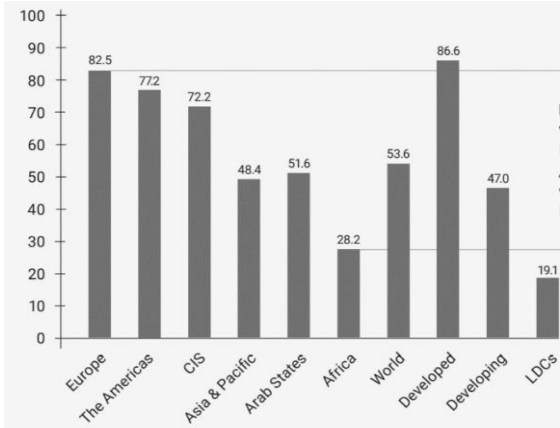
2.1 The persistent divides in crucial e-commerce enablers: connectivity, digital skills and postal capacities

Connectivity gap and lack of affordable access to ICT

When it comes to connectivity, figure 1 below compares estimates from the International Telecommunications Union (ITU) of the proportion of Individuals using the internet by region and development status in 2019. It shows that Africa remains the region with the lowest internet usage rate. This despite the significant pace of digital transformation (access to the internet, mobile payments, etc.) the continent has been witnessing in the past decade during the past decade (Ismail, 2020b). The figure also reveals the significant gap between developed countries with close to almost 87 per cent of individuals using the

internet and the least developed countries where only 19 per cent of individuals are online.

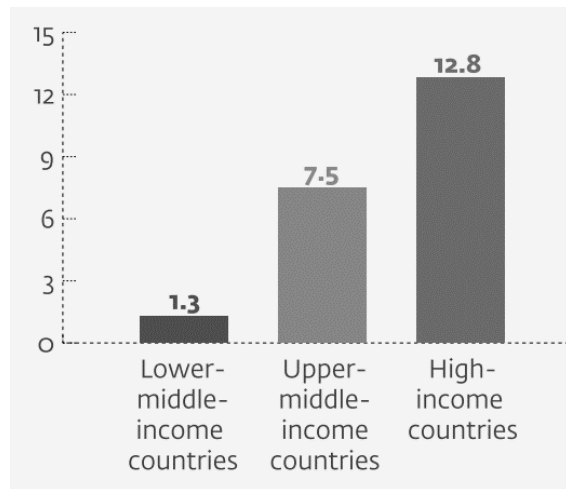
FIGURE 1: PROPORTION OF INDIVIDUALS USING THE INTERNET BY REGION AND DEVELOPMENT STATUS, 2019



Source: United Nations’ Secretariat General, 2020 – based on ITU data

This gap between developed countries and developing countries is also evident in the below figure 2 which shows that the quarterly growth in internet usage was only 1.3 percentage points higher in lower-middle-income countries in the first quarter of 2020 when covid-19 outbreak occurred, compared with the first quarter of 2019. In contrast, it reached 12.8 percentage points higher in high-income countries. As for upper-middle-income countries, it was 7.5 points higher, which reflects that emerging market economies are better placed to fast-forward digitalisation and e-commerce if critical gaps are addressed.

FIGURE 2: EXCESS QUARTERLY GROWTH IN INTERNET USAGE, Q1-2020 (PERCENTAGE POINT)



Source: IFC-part of WBG, 2020 (based on data from GSMA Intelligence)

Beyond connectivity and coverage, there is an affordability gap. According to the World Economic Forum (2020a), ‘smartphone ownership drops to 30-60% in low-income countries and only 21% for personal computer (PC) ownership’. In the middle and higher-income countries, the percentages are 57% and 85% respectively.

The respondents to a recent survey conducted by UNCTAD (2020b) and which investigated the impact of COVID-19 on e-commerce businesses in 23 countries, mainly LDCs in Africa and Asia-Pacific from early March to end of July 2020, highlighted: ‘Bottlenecks persist also in better connected areas. (...) working from home has been hampered by power cuts, insufficient bandwidth and no reliable infrastructure to sustain demand for automation of business processes’. They also pointed to the fact that access to affordable

connectivity and ICT infrastructure is uneven within their countries indicating that rural areas are particularly disadvantaged.

Language and digital skills gap

Also, the lack of language and digital skills remains a significant barrier to e-commerce acceleration in developing countries. ‘Those with coverage may not use the internet due to lack of affordability, digital skills or relevant content in the local language.’ (World Economic Forum, 2020a). A recent World Bank publication on the future of work in Africa found that only 4 per cent of the labour force among the 27 sub-Saharan African countries use LinkedIn which requires at least some ‘basic’ digital skills as a prerequisite. Based on the data available on LinkedIn, even this small portion of sub-Saharan Africa users has a lower level of digital skills than workers in other regions (Choi & Al., 2020).

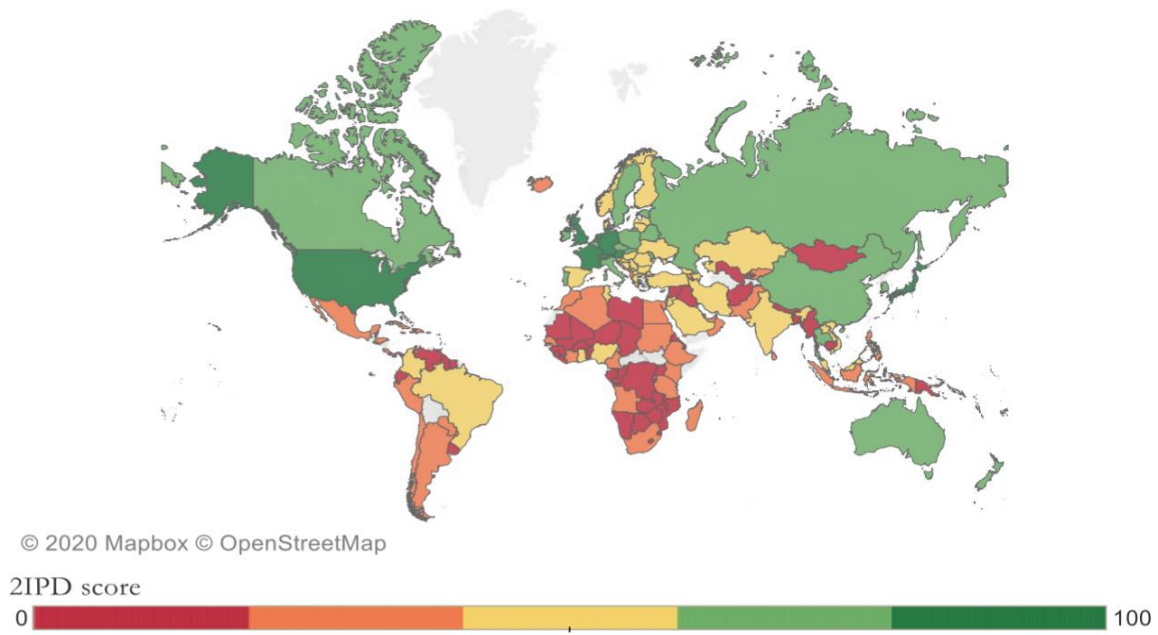
Postal Development Gap

The Universal Postal Union (UPU, 2020) defines postal development ‘as reflecting the ability of a country’s postal network to perform across a wide range of factors that enable socio-economic development. In this regard, postal networks can be considered as high performing if they offer a reliable service and have good connectivity, a high level of demand from citizens, and operations that are resilient to external shocks’. The below figure 3 shows the geographical heterogeneity of the UPU’s Integrated Index for Postal Development (2IPD)¹¹ 2020 ranking.

¹¹ UPU has been releasing the 2IPD ranking on a yearly basis since 2017. It is a comparative indicator of postal development around the world. It consists of a composite

index that summarizes information about the performance of postal operators in 170 countries according to 4 main sets of criteria: reliability, reach, relevance and resilience.

FIGURE 3: 2IPD 2020 RANKING



Source: 2020 2IPD ranking.

Notes: The five colours represent scores in the intervals 0–20, 20–40, 40–60, 60–80 and 80–100. The boundaries, colours and any other information on this map do not imply, on the part of the UPU, any judgement on the legal status of any territory, or any endorsement or acceptance of such boundaries.

According to UPU (2020) and its 2IPD 2020 results, the postal development divide continues to grow between regions and within regions. Based on the ranking, the Africa region has the lowest score of (19.8) followed by Latin America and the Caribbean region scoring 22.6. Both regions face significant challenges. The group of Industrialised Countries (IC) is the region with the highest score of 70.6. Eastern Europe and the Commonwealth of Independent States (CIS) scoring 51.2. The Asia Pacific is in 3rd place scoring 30, and the Arab region is in 4th place scoring 28.5 where some dynamism is observed in recent years with Tunisia retaining the top regional ranking (46th). UPU 2020 also points to the significant disparities within the Asia Pacific Region, particularly between Singapore (10th) and China (18th), the top performers of the region, and the

smaller states like Papua New Guinea and Samoa at the bottom of the ranking.

Finally, the lack of affordable and sustainable connectivity, access to ICT and digital skills do not only affect individuals and businesses' ability to make use of disruptive technologies and digital innovations for their social and economic development. They also constitute significant obstacles in the way of governments' digitalisation and expansion in e-government services, including e-payments and digital postal services. Such services are necessary to promote a digital ecosystem conducive of cross-border e-commerce transactions, and they proved crucial to the continuity of business and trade during the covid-19 crisis (OECD, 2020c).

2.2 The Covid-19 stress test: towards aggravated inequalities

The winners are the ‘big’ and ‘wholly digital’

In the context of the above-mentioned pre-existing divides across key e-commerce enablers, not all governments, businesses and individuals were able to respond swiftly to the sudden increase of need and demand for online shopping and services (UNCTAD, 2020).

When it comes to businesses, the opportunities were seized by the already performing, if not leading in e-commerce. Quoting from UNCTAD 2020c: ‘Many developing countries are struggling to harness various digital opportunities. By contrast, the digital shift during the pandemic has further boosted the performance of the leading digital platforms. Most digital solutions being used for e-commerce, teleworking, social media and cloud computing solutions are provided by a relatively small number of large companies (...). These companies are benefiting from the increased demand and have seen their market valuations grow significantly.’

Furthermore, according to UNCTAD (2020b)¹² survey on the impact of covid-19 on businesses, the sudden increase in demand could not be straightaway dealt with by the platforms. They needed some time to

adapt their capacity to invest and expand so as to not miss out on potential new gains. Quoting from UNCTAD 2020b: ‘Even when demand grew, businesses found it very challenging to adapt and expand to meet the additional demand. Insufficient funds to scale-up operations, uncertainty about the future to undertake new investments, availability of the required workforce on short notice were vital challenges, further complicated by health-related precaution measures’.

UNCTAD’s survey results are consistent with Mercado Libre financial report for the quarterly period ending 30 March 2020 which reported a negative impact on the company’s business despite the surge in demand and online sales. The report mentions that: “[the Company’s] business has been negatively affected this quarter in terms of operations, consumers buying trends, and consequently, net revenues. Consumers have pulled back on purchases of non-essential items. This led to a shift in sales, where categories such as health, consumer packaged goods and toys and games have shown greater growth, while categories such as auto parts and consumer electronics have seen marked declines in growth rates’¹³. Also, JUMIA’s first quarter 2020 financial report referred to a negative impact on the business due to the shift in sales to essentials, as well as logistical and operational challenges¹⁴.

According to a survey of online consumers in 9 countries undertaken by UNCTAD and Netcomm Swiss 2020: ‘Participants across all countries indicated to have lowered their average expenditures per online purchase for

¹² Conducted in 23 countries, mainly LDCs from Africa and Asia.

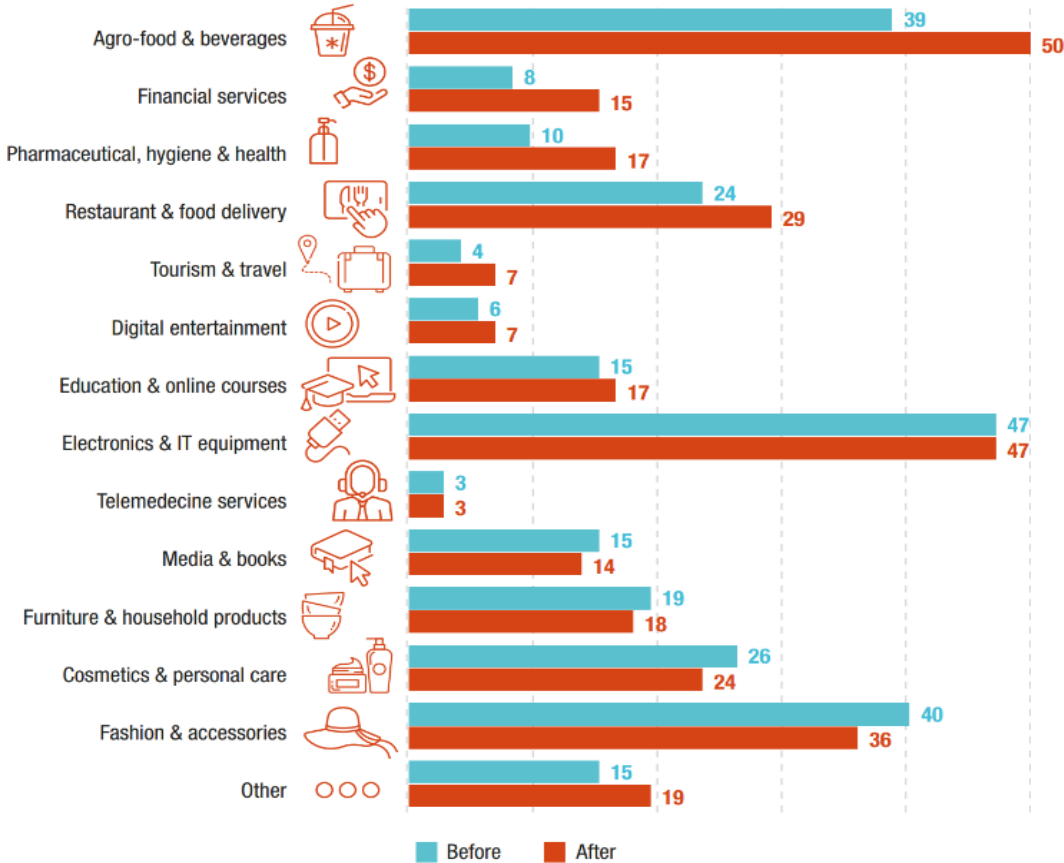
¹³ <http://investor.mercadolibre.com/static-files/614122c8-d973-4a1c-a77c-f3e428fba639>

¹⁴ <https://www.bloomberg.com/press-releases/2020-05-13/jumia-reports-first-quarter-2020-results>

most of the categories.’ Figure 4 below compares the percentages of various categories of goods and services sales marketplaces surveyed by UNCTAD 2020b before and after covid-19 outbreak. A

significant increase of agro-food and beverages is reported, with a decrease in non-essential goods like fashion and cosmetics.

FIGURE 4: THIRD-PARTY MARKETPLACES: TOP 5 SALES CATEGORIES BEFORE AND AFTER THE COVID-19 CRISIS (IN PER CENT)



Note: 72 responses from the third-party marketplace track. Based on the questions “Before the COVID-19 crisis, which were the top 5 categories of goods and services sold on your third-party marketplace?” and “Since the outbreak of the COVID-19 crisis, which are the top 5 categories of goods and services sold on your third-party marketplace?”. Results are expressed in per cent of the respondents to each question.

Source: UNCTAD, 2020b

More of the vulnerable left behind

Micro-enterprises and small and medium enterprises (SMEs) are major players in non-essential and recreational services, such as accommodation, catering and travel (UNCTAD, 2020c). According to the WorldBank, SMEs represent 90 per cent of businesses worldwide and 50 per cent of global employment and more in developing

countries and LDCs where they are considered drivers for the economy. Long before the COVID-19 crisis, SMEs have been lagging behind large companies in terms of ICT adoption, digital skills and financial capacities (WEF, 2020a). E-commerce is considered SME’s chance for further integrating into global trade. It helps reduce cross-border trade costs (Fan & Gallaher, 2020). However, with the lack of capacities

and supportive digital ecosystem, SMEs' were unable to meet the scalability needed to respond to demand increase, absorb negative impacts of disruption in supply chains and logistics then adapt to digital business processes (OECD, 2020a).

Furthermore, respondents to UNCTAD 2020b survey indicated that 'access to online markets in rural areas remained particularly low' where the most vulnerable populations are left offline, particularly women and the poor. According to the United Nations on the International Day of Rural Women: 'Poverty rates in rural areas across most regions are higher than those in urban areas'¹⁵. On the same occasion, the Food and Agriculture Organisation (FAO) declared that 'in most countries, women living in rural and remote areas are more likely to suffer from discrimination and poverty'¹⁶.

In the context of COVID-19 school closure decisions were taken by many governments. The United Nations Children's Fund (UNICEF, 2020) reported 90 per cent of ministries of education had adopted policies providing a form of remote learning: internet, radio or television. It highlighted that 'at least 463 million students worldwide have been cut off from education'. It then added that at least 31 per cent of schoolchildren worldwide could not be reached by remote learning programs and over 70 per cent of them live in rural areas with limited household assets and connectivity. Furthermore, it highlighted that countries of sub-Saharan Africa have the highest share of students who cannot be

reached by digital and broadcast means: 'at least 48 per cent in West and Central Africa and 49 per cent in Eastern and Southern Africa'.

A risk of further decline in developing countries' Postal capacities

In the aftermath of Covid-19, 'postal services in developing countries are particularly at risk' (UPU, 2020). The pandemic and the unprecedented global recession have added to countries' economic sufferings. 'The economic and postal development are intimately linked. The more a country is suffering from economic hardship, the more it will find it challenging to build high-performing postal services. (...) Therefore, if e-commerce does pursue its path of growth because or in spite of the COVID-19 crisis, the positive externalities for the postal sector are not at all guaranteed, with a risk of further decline in postal relevance.' (Ibid, 2020).

To conclude, this section demonstrated how the pandemic shed light on pre-existing bottlenecks that developing countries, particularly LDCs, are facing to promote digital ecosystems and accelerate e-commerce. It is now even more urgent to address the broad digital divides worldwide and to bring digitalisation in developing countries and LDCs up to speed with the e-commerce and digital economy post-covid acceleration trends.

¹⁵ <https://www.un.org/en/observances/rural-women-day>

¹⁶ <http://www.fao.org/fao-stories/article/en/c/1313789/>

SECTION 3

Means for developing countries to fast forward e-commerce post-covid-19

While many of the challenges (mentioned in the previous section) existed before COVID-19, the pandemic revealed the powerful and crucial role e-commerce played for businesses, individuals and governments at times of crisis and the increasingly strategic role it is taking in the post-COVID-19 era. Hence, there is a pressing need for governments of developing countries and LDCs to rethink existing policy actions, formulate new ones and seek innovative solutions to accelerate bridging the gaps (OECD, 2020a).

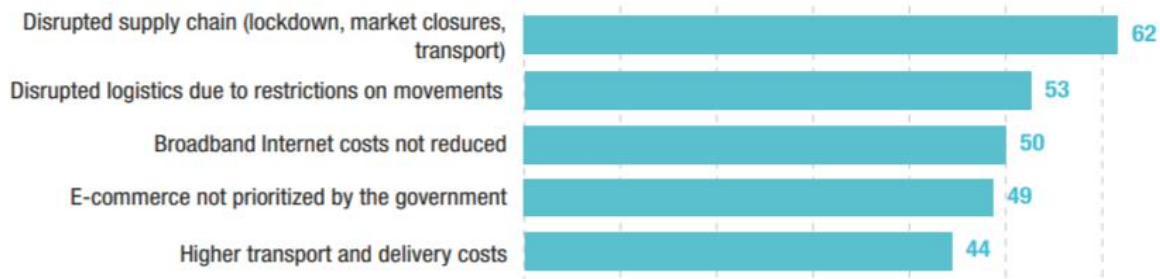
In light of the above, the following three observations are the starting point for the three actions promoted in this study:

- E-commerce in COVID grew to become a strategic economic sector and will remain so
- Developing digital and postal infrastructure and capacities can not be postponed and will be critical for sustainable recovery and resilience to future shocks (Ungerer & *Al.*, 2020)
- The COVID-19 crisis serves as an accelerator for greater public-private cooperation (UNCTAD, 2020b) and regional cooperation.

3.1 Developing a Post-COVID E-commerce and Digital Strategy

Governments who have already developed and adopted e-commerce and digitalisation strategies before COVID-19 outbreak need to revisit them in light of the pandemic's aftermath and its disruptive trends. At the same time, governments who do not have any digital or e-commerce strategies will need to take urgent steps to develop these to be able to plan a sustainable Post-COVID-19 recovery. Respondents to UNCTAD's Covid-19 Businesses' Survey (UNCTAD, 2020b) 'have highlighted the need for e-commerce enabling measures in COVID-19 recovery plans. For the majority of the survey respondents, having a well-defined national e-commerce strategy was seen as a top priority for the COVID-19 recovery plans'. In addition to that 49 per cent of the respondents thought that e-commerce was not a priority to their governments and 40 per cent indicated that the e-commerce sector was not consulted properly in relevant government policy responses during the pandemic (see figure 5 below).

FIGURE 5: TOP 5 CHALLENGES DURING COVID-19 (IN PER CENT)



Note: 232 responses. Based on the question "Since the outbreak of the COVID-19 crisis, which are the challenges that most impacted on your business?" Maximum 10 choices allowed. The full set of choices is reported by policy area in the next figures.

Source: UNCTAD, 2020b.

The development of an E-commerce and/or a comprehensive digitalisation strategy therefore is critical to ensure the cross-cutting impacts of Covid-19 are recognised and addressed. A national strategy usually starts with a strong and high-level political commitment, which then facilitates coordination between concerned government bodies, and the engagement and commitment of non-governmental stakeholders in series of consultations. Consulting with all relevant stakeholders, whether private sector or individual consumer will be key in the post-COVID-19 to unmask country-specific challenges and ensure objectives are aligned. To ensure the strategy development process will be well-informed, a first step should be to assess where the country stands. Eventually, the overall objective of the strategy is for the government to create a conducive digital ecosystem for e-commerce businesses to grow (UNCTAD, 2017).

The UNCTAD eTrade Readiness Assessment Programme initiated in 2017 is designed with the objective of helping developing countries and particularly LDCs to identify the challenges facing e-commerce in seven policy

areas, on top of them is E-commerce readiness assessment and the formulation of national strategy to address them. The other policy areas are: ICT infrastructure and services, Trade facilitation and logistics, Legal and regulatory framework, Payment solutions, Skills development and Access to financing¹⁷.

Among the 25 countries where the assessment was completed (See Figure 6 below), Cambodia and Senegal have decided to accelerate the adoption and implementation of their national e-commerce strategies in response to COVID-19. Also Myanmar has made e-commerce a priority area in its "COVID-19 Economic Relief Plan"—including measures to promote mobile payments and creating a central platform where retail businesses can sell their products online (UNCTAD, 2020b).

¹⁷ See eTrade for All Initiative webpage here: <https://etradeforall.org/>

FIGURE 6: UNCTAD ETRADE READINESS ASSESSMENT STATUS – AS NOVEMBER 2020



Source: UNCTAD, 2020b

While scaling up physical infrastructure can be very challenging in the aftermath of COVID-19, regulatory frameworks can be mobilised to provide assurance to online businesses and consumers and eliminate uncertainty and unnecessary regulatory blockages. For example, a first step can be to revisit competition laws in telecommunication services sectors with a view to lower internet costs for Internet and broadband access (one of the top 5 challenges outlined in Figure 5 above) (OECD, 2020c).

Building businesses and consumers' awareness of existing online consumer protection laws and personal information protection laws can help build confidence in online payment facilities and increase their adoption. Consumer protection laws and adopting dispute settlement mechanisms are also vital to increasing SMEs' credibility and chances to perform cross-border e-commerce transactions.

'The digital trade system will only work if people trust it, especially in the absence of human interactions. We must build trusted technologies for all participants, including stronger data privacy protection, better online dispute systems and algorithms that don't discriminate against minorities and smaller players.' (Fan & Gallaher, 2020).

Another e-commerce facilitator is the availability of e-government services. The UN E-government Survey Index (EGDI) of 2020, announces the good news that e-government has been growing with many more countries taking e-government initiative in the last decade: 'All regions are making progress in e-government development... In Africa, even though countries continue to lag other regions, there are positive signs of accelerated advancement. Africa has the largest share of countries that have moved to a higher EGDI group (15 countries, or 28 per cent)'. (United Nations Department of Economic and Social

Affairs, 2020). The COVID-19 pandemic also witnessed a surge in e-government portals and open government data¹⁸, particularly in e-health and online learning services. Governments adopting and permitting electronic signatures, transactions and records, such as UNCITRAL's Electronic

Transfer Records can bring a significant push to cross-border e-commerce (Fan & Gallaher, 2020). See below figure 7, showing Africa is the remaining continent not implementing (or still in the process of implementing) the use of digital certificates and signatures in cross-border trade.

FIGURE 7: USE OF DIGITAL CERTIFICATES AND SIGNATURES IN CROSS-BORDER TRADE TRANSACTIONS



Source: OECD, 2020c.

Finally, the strategy should embed monitoring indicators and tools to measure progress and effectiveness of implementation and outline the process for a comprehensive or partial strategy review.

¹⁸ Guglya, L. Presentation on COVID-19 and E-commerce: What role for the JSI?, TAF2+ Umbrella Grant Geneva

Final Seminar, 15 October 2020, Geneva: CUTS International, Geneva.

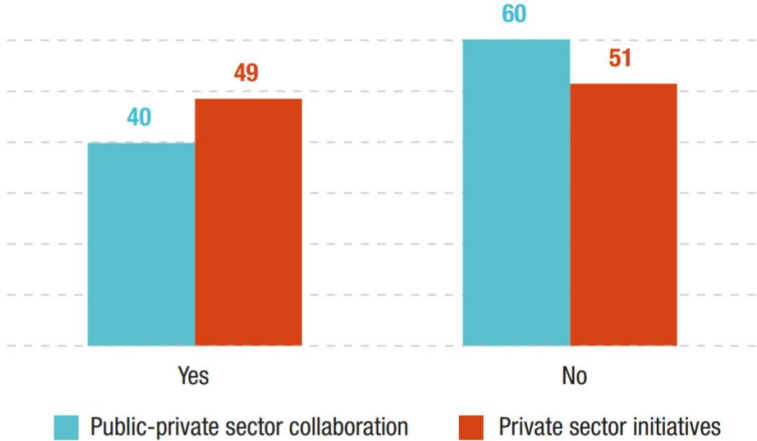
3.2 Revisiting Public-Private Partnerships to accelerate digital and postal infrastructure developments

‘Governments now face a dilemma whether to increase infrastructure spending as a means to stimulate their economies or, ironically, to cut committed infrastructure spending to save.

Past experience indicates that, when economic growth declines, so too does public investment. Yet, the pandemic will increase calls for increased spending to address certain priorities, such as digital connectivity, health care, welfare, pandemic-proofing of public services, and infrastructure such as transport’ (Abadie, 2020)

In fact, according to UNCTAD (2020b) survey, covid-19 stimulated the collaboration between private and public sector. According to figure 8 below, 40 per cent of the respondents to UNCTAD’s survey from the business sector were or are involved in public-private sector collaboration and close to half in public sector initiatives’.

FIGURE 9: COMPANY INVOLVEMENT IN NEW PUBLIC-PRIVATE SECTOR INITIATIVES TO SUPPORT E-COMMERCE (IN PER CENT)



Note: 211 responses for public-private sector collaboration; 206 for private sector initiatives. Based on the questions “Is your company involved in (a) new public-private sector collaboration initiative(s) to support e-commerce?” and “Since the start of the COVID-19 crisis, have you started to work with other private sector entities on joint projects and solutions related to e-commerce?”. Results are expressed in per cent of the respondents to each question.

Source: UNCTAD, 2020b.

In the report, several of these collaborations are mentioned, for example, the reduction of the data bundles prices to allow better accessibility and the launch of national e-commerce platforms to enable small businesses to sell their products. The aim of such cooperation is the immediate relief of the crisis on individuals and companies. However, arguments are on the rise that

‘governments could alleviate the shortfall by providing incentives that would allow the private sector (i.e. telecommunication carriers) to continue to invest, either in addressing the digital divide or deploying advanced technologies’ (ITU, 2020). In other words, calls are rising to revisit the role Public-Private Partnerships (PPPs) can play in

financing digital and postal infrastructure needs of governments.

There is no widely accepted definition for PPPs. The Public-Private-Partnership Legal Resource Center (PPP LRC) of the WBG defines it as 'long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance'¹⁹. The PPP LRC adds that PPPs are different than public procurement projects and privatisation.

According to Abadie (2020), both governments and private sectors pre-crisis, were losing interest in PPP projects mainly due to the long-term nature of PPP projects, the costs of the bidding process and if they are not done right or not supported with a well designed legal framework the losses can be high for any of the parties. However, we can see many countries who were able to get PPPs right and mobilised them for their infrastructural and digital development. Singapore is one of the examples considered successful in making use of PPPs to build its e-government (Thuy & Hai Yen, 2018; Taher & Al. 2012). Also, the World Bank (2020), highlights some countries which constitute successful models, namely: the United Kingdom, Australia, Canada, and South Africa. The fact that they have legislated a common law for PPPs may be the reason for their success, whereas many other countries launched PPPs based on one time stand alone laws.

Establishing and rethinking PPPs' legal framework in developing countries and LDCs

in the post-COVID era may be the key to overcome financing distresses and catching up with digital acceleration. E-procurement and PPP legal frameworks can make part of the national e-commerce strategy. It will give the relevant context to the objective of new PPPs setup, as well as multistakeholder discussions on the unique risks resulting from COVID-19 and how best to facilitate mutually beneficial PPPs and leverage them to accelerate e-commerce.

'To sum up, fiscal positions have deteriorated, but infrastructure needs have not. Narrowing the infrastructure gap just became even more challenging' (Abadi, 2020). In a post-covid-19 era, governments can not afford to wait until fiscal positions redress. Not to mention that donors funding was not already enough before the crisis and is likely to decrease as the traditional donors face economic contractions post-Covid.

3.3 Forward-Looking Trade Agreements

E-commerce and regional trade can catalyse one another. When it comes to cross-border trade, the ecosystem created by e-commerce provides a unique opportunity for developing countries and LDCs to connect their goods and services with potential buyers beyond their borders and access their regional markets (as well as the international market) at lower costs and to creating regional supply and value chains. While promoting intra-regional e-commerce allows scaling up conducive digital ecosystems and promoting digital societies through cooperation and

¹⁹ <https://ppp.worldbank.org/public-private-partnership/overview/what-are-public-private-partnerships#:~:text=The%20PPP%20Knowledge%20Lab>

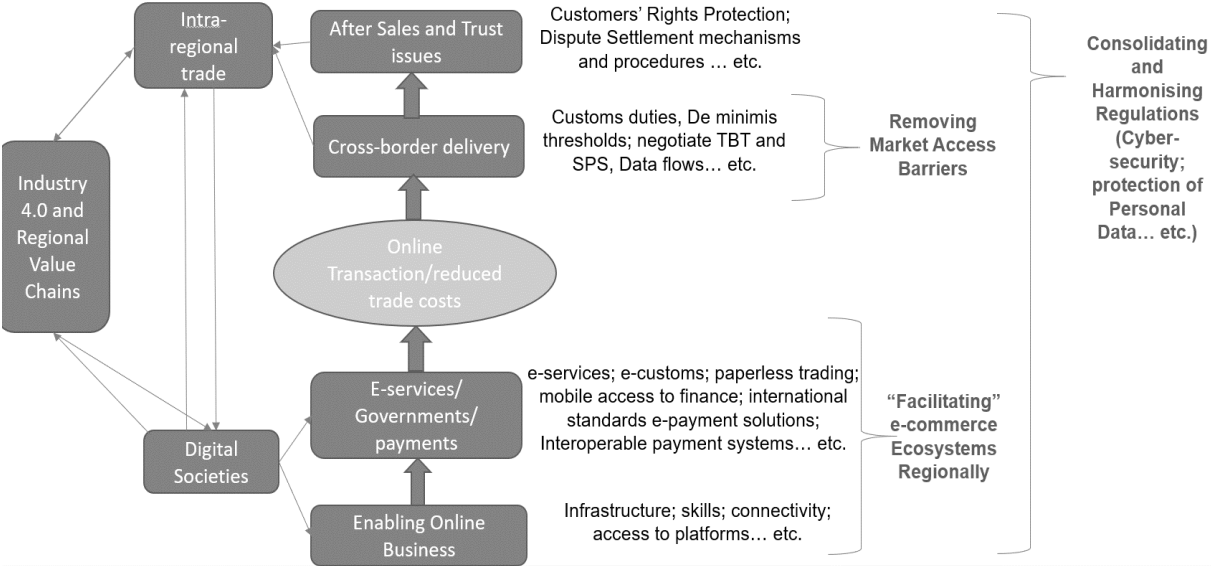
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sharing of experiences, it also increases harmonisation and clarity of rules, thus attracting foreign investments to the region (See figure 10 below).

Recently, governments have been increasingly engaging in negotiating e-commerce and broader digital economy rules at the regional level, as well as at the World Trade Organisation. We can mention the United States-Mexico-Canada Agreement which entered into force 1st July 2020 and the Regional Comprehensive Economic Partnership (RCEP) which was signed 15 November this year. The RCEP agreement is signed between the members countries of the Association of Southeast Asian Nations (ASEAN includes Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam) and ASEAN’s free trade agreement

partners (Australia, China, Japan, New Zealand and Republic of Korea)²⁰. ASEAN itself has an Agreement on Electronic Commerce, expected to enter into force soon. Finally, African negotiators also decided earlier in the year to add the 3rd phase of negotiation for an E-commerce Protocol under the African Continental Free Trade Agreement (AfCFTA). Annex 1 compares key e-commerce provisions under USMCA, ASEAN and RCEP. While ASEAN’s e-commerce agreement has a focus on cooperation between members, USMCA and RCEP tackle other policy questions, like data and the moratorium on customs duties, which remain highly debated in the World Trade Organisation (WTO). It is observed that RCEP allows more policy space for its members.

FIGURE 10: CROSS-BORDER E-COMMERCE CHAIN AND REGIONAL TRADE



Source: Ismail, 2020a.

²⁰ <https://www.dfat.gov.au/trade/agreements/not-yet-in-force/rcep>

SECTION 4

Conclusion

The implications of the COVID-19 pandemic turned consumers more open to online shopping and digital transactions. They also made businesses' and brick and mortar shops keener than ever to adopt digital processes and online platforms. These trends are like to stay even after the mass production of a vaccine.

Big digital marketplaces and platforms were the best fit to take COVID-19 digital stress test, survive and make gains, particularly in developed countries. In developing countries and LDCs, the stress test further exposed the significant bottlenecks standing against digitalisation and e-commerce expansion: lack of connectivity and access to ICT, lack of digital skills, weak postal capacities and infrastructure.

The pandemic has magnified the digital divide which separates developing countries and LDCs from the developed world. Furthermore, the acceleration in e-commerce adoption while some not being ready for it created the risk of exacerbating divides and inequalities, not only between the countries but also within countries.

Developing countries and LDCs no longer have the luxury of time. They need to take quick and steady actions to fast track digitalisation and create a conducive ecosystem for SMEs to seize e-commerce opportunities. An e-commerce strategy needs to be part of their Covid 19 recovery plans. Cooperation and consultation with the private sector and consumers will be key to striking the right balance between short term

facilitation goals and long-term digital development goals.

Closing the digital and postal infrastructure gap is an urgency. Governments need to explore ways to scale up their networks and infrastructure despite the economic and financial distress the pandemic has caused. Reconsidering and retooling public-private-partnerships can be a solution while recognising that they may not have worked for all countries in the past. But valuable lessons and some best practices exist which can be built upon.

Finally, when it comes to leaping cross-border e-commerce barriers, regional cooperation and RTAs can offer opportunities for scalability and the creation of regional digital value chains.

References

1. Abadie, R. 2020. COVID-19 and infrastructure: A very tricky opportunity, World Bank Blogs, 15 May 2020. Available at: <https://blogs.worldbank.org/ppps/covid-19-and-infrastructure-very-tricky-opportunity>
2. Apedo-Amah, M.C., Avdiu, B.; Cirera, X., Cruz, M., Davies, E., Grover, A., Iacovone, L., Kilinc, U., Medvedev, D., Maduko, F.O., Poupakis, S., Torres, J., & Tran, T.T. (2020). Unmasking the Impact of COVID-19 on Businesses: Firm Level Evidence from Across the World, Policy Research Working Paper, No. 9434, World Bank. Available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/34626/Unmasking-the-Impact-of-COVID-19-on-Businesses-Firm-Level-Evidence-from-Across-the-World.pdf?sequence=1&isAllowed=y>
3. Blackburn, S., LaBerge, L., O'Toole, C. and Schneider, J. (2020). Digital Strategy in a Time of Crisis, Mckinsey and Company. Available at: <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/digital-strategy-in-a-time-of-crisis>
4. Choi, J., Dutz, Mark., Usman, Z. (2020). The Future of Work in Africa : Harnessing the Potential of Digital Technologies for All. Africa Development Forum. Washington, DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/32124> License: CC BY 3.0 IGO
5. Buck, R., Coggins, B., Francis, T., Henrich, J., Kelly, G., Kohli, S., Mcinerney, P., Wachinger, T., & Zipser, D. (2020). Perspectives on retail and consumer goods, Number 8, August 2020, Mckinsey and Company. Available at: https://www.mckinsey.com/~/_media/McKinsey/Industries/Retail/Our%20Insights/Perspectives%20on%20retail%20and%20consumer%20goods%20Number%208/Perspectives-on-Retail-and-Consumer-Goods_Issue-8.pdf
6. ECLAC (Economic Commission for Latin America and the Caribbean). (2020). The effects of the coronavirus disease (COVID-19) pandemic on international trade and logistics, COVID-19 Special Report, No. 6, Santiago, July. Available at: https://repositorio.cepal.org/bitstream/handle/11362/45878/1/S2000496_en.pdf
7. Fan, Z., & Gallaher, M. (2020). 5 Ways To Advance Digital Trade In The Post-Covid World. World Economic Forum. Available at: <https://www.weforum.org/agenda/2020/06/5-ways-to-advance-modernize-digital-trade-in-the-post-covid-pandemic-world/>
8. IFC. (2020). The impact of COVID-19 on Disruptive Technology Adoption in Emerging Markets. IFC, World Bank Group. Available at: <https://doi.org/10.1080/20954816.2020.1839166>
9. ITU. (2020). Economic Impact Of Covid-19 on Digital Infrastructure, Report of an Economic Experts Roundtable Organized By ITU, July 2020, Geneva: The International Telecommunication Union. Available at: ECONOMIC IMPACT OF COVID-19 AND THE DIGITAL INFRASTRUCTURE (itu.int)
10. Ismail, Y. (2020a). Trade and Digital Africa: Innovating for Inclusive and Sustainable Continental Integration, 28 September 2020, Geneva Trade Week 2020, Geneva: CUTS International, Geneva.

11. Ismail, Y. (2020b). Mobilising E-Commerce for Development in Africa through AfCFTA, Geneva: CUTS International, Geneva. Available at: http://www.cuts-geneva.org/pdf/eAfCFTA-Study-E-Commerce_in_the_AfCFTA.pdf
12. Le Thuy, N.T. & Hai Yen, M.T. (2018). Public-Private Partnerships in E-Government: Experiences from Other Countries and Lessons for Vietnam, in *Journal of Asian Review of Public Affairs Policy and Review*, Vol. 3, No. 3, October 2018, Khon Kaen: Khon Kaen University. Available at: <http://arpap.kku.ac.th/index.php/arpap/article/download/134/65>
13. Laberge, L., O'toole, C., Schneider, J., & Smaje, K. (2020). How COVID-19 has pushed companies over the technology tipping point—and transformed business forever, McKinsey & Company. Available at: <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever>
14. Taher, M., Yang, Z., and Kankanhalli, A. (2012). Public-Private Partnerships In E-Government: Insights From Singapore Cases. PACIS 2012 Proceedings. Paper 116. Available at: <http://aisel.aisnet.org/pacis2012/116>
15. OECD. (2020a). E-commerce in the time of COVID-19, 7 October 2020, OECD Publishing. Available at: https://read.oecd-ilibrary.org/view/?ref=137_137212-t0fjgnerdb&title=E-commerce-in-the-time-of-COVID-19
16. OECD. (2020b). Leveraging digital trade to fight the consequences of COVID-19, 7 July, OECD Publishing. Available at: <http://www.oecd.org/coronavirus/policy-responses/leveraging-digital-trade-to-fight-the-consequences-of-covid-19-f712f404/>
17. OECD. (2020c). Connecting Businesses and Consumers During COVID-19 Trade in Parcels, 9 July 2020, OECD Publishing. Available at: https://read.oecd-ilibrary.org/view/?ref=135_135520-5u04ajecfy&title=Connecting-Businesses-and-Consumers-During-COVID-19-Trade-in-Parcels
18. Piekarz, P. (2020). Digital Technologies as An Element Of Power, in *Geopolitics of Emerging and Disruptive Technologies*, The Kosciuszko Institute. Available at: <https://ik.org.pl/wp-content/uploads/geopolitics-of-emerging-and-disruptive-technologies-2020.pdf>
19. Ungerer, C., Portugal, A., Molinuevo, M., & Rovo, N. (2020). Recommendations to Leverage E-Commerce During the COVID-19 Crisis, Trade and COVID-19 Guidance Note, World Bank. Available at: <https://doi.org/10.1596/33750>.
20. UNCTAD. (2017). Maximizing the development gains from e-commerce and the digital economy: Note by the Secretariat, Trade and Development Board Intergovernmental Group of Experts on E-commerce and the Digital Economy First session Geneva, 4–6 October 2017. Available at: https://unctad.org/system/files/official-document/tdb_ede1d2_en.pdf
21. UNCTAD. (2020a). Trade and Development Report 2020. From Global Pandemic to Prosperity for All: Avoiding Another Lost Decade, United Nations: Geneva. Available at: https://unctad.org/system/files/official-document/tdr2020_en.pdf
22. UNCTAD. (2020b). Covid-19 And E-Commerce Impact On Businesses And Policy Responses, United Nations: Geneva. Available at: https://unctad.org/system/files/official-document/dtlstictinf2020d2_en.pdf

23. UNCTAD. (2020c). Impact Of The Covid-19 Pandemic on Trade and Development Transitioning To A New Normal, United Nations: Geneva. Available at: https://unctad.org/system/files/official-document/osg2020d1_en.pdf
24. UNCTAD. & Netcomm Suisse Observatory. (2020). Covid-19 and E-commerce: Findings from a survey of online consumers in 9 countries, October 2020. Available at: https://unctad.org/system/files/official-document/dtltstictinf2020d1_en.pdf
25. United Nations Secretary-General. (2020). Report of the Secretary-General Roadmap for Digital Cooperation, June 2020: United Nations. Available at: https://www.un.org/en/content/digital-cooperation-roadmap/assets/pdf/Roadmap_for_Digital_Cooperation_EN.pdf
26. United Nations Children's Fund. (2020). "Covid-19: Are children able to continue learning during school closures? A global analysis of the potential reach of remote learning policies using data from 100 countries." UNICEF, New York, 2020. Available at: https://data.unicef.org/wp-content/uploads/2020/08/COVID-19-Remote-Learning-Factsheet_English_2020.pdf
27. United Nations Department of Economic and Social Affairs. (2020). United Nations E-Government Survey 2020: Digital Government in the Decade of Action for Sustainable Development, New York: United Nations Publications. Available at: [2020 UN E-Government Survey \(Full Report\).pdf](#)
28. Universal Postal Union. (2020). Postal Development Report 2020: Achieving higher performance amid a major crisis, October 2020, Bern: Universal Postal Union. Available at: <https://www.upu.int/UPU/media/upu/publications/2020-Postal-Development-Report.pdf>
29. Verma, P., Strusani, D., and Keller, J. (2019). Disruptive Technology is Transforming Society and Economies, in Reinventing Business Through Disruptive Technologies: Sector Trends and Investment Opportunities for Firms in Emerging Markets, EM Compass Notes, IFC, World Bank Group. Available at: <https://www.ifc.org/wps/wcm/connect/537b9b66-a35c-40cf-bed8-6f618c4f63d8/202009-COVID-19-Impact-Disruptive-Tech-EM.pdf?MOD=AJPERES&CVID=njn5xG9>
30. World Economic Forum. (2020a). Accelerating Digital Inclusion in the New Normal, June 2020, Geneva: World Economic Forum. Available at: http://www3.weforum.org/docs/WEF_Accelerating_Digital_Inclusion_in_the_New_Normal_Report_2020.pdf
31. World Bank. (2020). PPP Legal Frameworks Post-COVID-19, Practice Note, the Infrastructure Finance, PPPs and Guarantees Group, World Bank Group. Available at: [download \(pppknowledgelab.org\)](#)
32. Xiao, Y., & Fan, Z. (2020). COVID-19: 10 tech trends getting us through the pandemic. World Economic Forum. Available at: <https://www.weforum.org/agenda/2020/04/10-technology-trends-coronavirus-covid19-pandemic-robotics-telehealth>

Annex 1: Comparison matrix between USMCA, ASEAN and RCEP Key E-commerce Provisions

E-commerce Issue	USMCA	ASEAN	RCEP
Customs duties	<ul style="list-style-type: none"> • “No party shall impose customs duties, fees, or other charges on or in connection with the importation or exportation of digital products transmitted electronically”²¹ 		<ol style="list-style-type: none"> 1. Each Party shall maintain its current practice of not imposing customs duties on electronic transmissions between the Parties. 2. The practice referred to in paragraph 1 is in accordance with the WTO Ministerial Decision of 13 December 2017 in relation to the Work Program on Electronic Commerce (WT/MIN (17)/65). 3. Each Party may adjust its practice referred to in paragraph 1 with respect to any further outcomes in the WTO Ministerial Decisions on customs duties on electronic transmissions within the framework of the Work Program on Electronic Commerce. 4. The Parties shall review this Article in light of any further WTO Ministerial Decisions in relation to the Work Program on Electronic Commerce. 5. For greater certainty, paragraph 1 shall not preclude a Party from imposing taxes, fees, or other charges on electronic transmissions, provided that such taxes, fees, or charges are imposed in a manner consistent with this Agreement.²²
Digital products	<ul style="list-style-type: none"> • Digital products “created, produced, published, contracted for, commissioned, or first made available on commercial terms in the territory of another Party” shall not be accorded less favorable 		

²¹ USMCA Article 19.3

²² RCEP Article 12.11

	treatment (not applicable in the cases of government loans, grants, or subsidies) ²³		
Cross-border information transfer	<ul style="list-style-type: none"> • “No party shall prohibit or restrict the cross-border transfer of information, including personal information, by electronic means” if it is for business of a covered person • However, parties may restrict cross-border information transfer if needed “to achieve a legitimate public policy objective”²⁴ 	<ul style="list-style-type: none"> • Member States must “recognize the importance of allowing information to flow across borders through electronic means” if the information is used for business purposes • Cross-border e-commerce should be facilitated by making progress towards eliminating/ minimizing barriers in information flows²⁵ 	<ul style="list-style-type: none"> • 1. The Parties recognize that each Party may have its own regulatory requirements concerning the transfer of information by electronic means. • 2. A Party shall not prevent cross border transfer of information by electronic means where such activity is for the conduct of the business of a covered person. • 3. Nothing in this Article shall prevent a Party from adopting or maintaining: <ul style="list-style-type: none"> • (a) any measure inconsistent with paragraph 2 that it considers necessary to achieve a legitimate public policy objective, provided that the measure is not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on trade; or • (b) any measure that it considers necessary for the protection of its essential security interests. Such measures shall not be disputed by other Parties²⁶

²³ USMCA Article 19.4

²⁴ USMCA Article 19.11

²⁵ ASEAN Article 7.4

²⁶ RCEP Article 12.15

<p>Data Localization</p>	<ul style="list-style-type: none"> • “No Party shall require a covered person to use or locate computing facilities in that Party’s territory as a condition for conducting business in that territory”²⁷ 	<ul style="list-style-type: none"> • Concerning the operation of businesses, juridical persons from each state are not allowed to locate computing facilities in another state (not applicable to financial services)²⁸ 	<ul style="list-style-type: none"> • The Parties recognise that each Party may have its own measures regarding the use or location of computing facilities, including requirements that seek to ensure the security and confidentiality of communications. • No Party shall require a covered person to use or locate computing facilities in that Party’s territory as a condition for conducting business in that Party’s territory. • Nothing in this Article shall prevent a Party from adopting or maintaining: <ul style="list-style-type: none"> (a) any measure inconsistent with paragraph 2 that it considers necessary to achieve a legitimate public policy objective,¹² provided that the measure is not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on trade; or (b) any measure that it considers necessary for the protection of its essential security interests. Such measures shall not be disputed by other Parties²⁹.
<p>Source Code</p>	<ul style="list-style-type: none"> • “No party shall require the transfer of, or access to, source code of software owned by a person of another Party, or to an algorithm expressed in that source 		<ul style="list-style-type: none"> • The Parties recognise the value of dialogue, including with stakeholders where appropriate, in promoting the development and use of electronic commerce. In

²⁷ USMCA Article 19.12

²⁸ ASEAN Article 7.6

²⁹ RCEP Article 12:14

	code” ³⁰ except in cases of legal investigations or enforcement action		conducting such a dialogue, the Parties shall consider the following matters: b- current and emerging issues, such as the treatment of digital products, source code, and cross-border data flow and the location of computing facilities in financial services ³¹ ;
Consumer Protection	<ul style="list-style-type: none"> • Parties should establish laws against “fraudulent and deceptive commercial activities that cause harm or potential harm to consumers”³² • National consumer protection agencies should maintain cooperation 	<ul style="list-style-type: none"> • The importance of adopting and maintaining transparent and effective consumer protection measures for e-commerce as well as other measures conducive to the development of e-commerce” should be recognized • “Each member State shall provide protection for consumers using e-commerce that affords a similar level of protection to that provided of consumers of other forms of commerce under its relevant laws, regulations and policies”³³ 	<ul style="list-style-type: none"> • 1. The Parties recognize the importance of adopting and maintaining transparent and effective consumer protection measures for electronic commerce as well as other measures conducive to the development of consumer confidence. • 2. Each Party shall adopt or maintain laws or regulations to provide protection for consumers using electronic commerce against fraudulent and misleading practices that cause harm or potential harm to such consumers. • 3. The Parties recognize the importance of cooperation between their respective competent authorities in charge of consumer protection on activities related to electronic commerce in order to enhance consumer protection. • 4. Each Party shall publish information on the consumer protection it provides to users of electronic commerce, including how: <ul style="list-style-type: none"> (a) consumers can pursue remedies; and

³⁰ USMCA Article 19.16

³¹ RCEP Article 12:16 – 1b

³² USMCA 19.7

³³ ASEAN Article 7.3

			(b) business can comply with any legal requirements. ³⁴
Domestic regulations	<ul style="list-style-type: none"> • Domestic legal frameworks should be “consistent with the principles of the <i>UNCITRAL Model Law on Electronic Commerce 1996</i>”³⁵ • “unnecessary regulatory burden on electronic transactions” should be avoided³⁶ • Parties should “facilitate input by interested persons in the development of its legal framework” 	<ul style="list-style-type: none"> • Member states must “maintain, or adopt as soon as practicable, laws and regulations governing electronic transactions taking into account applicable international conventions or model laws relating to e-commerce”³⁷ 	<ul style="list-style-type: none"> • 1. Each Party shall adopt or maintain a legal framework governing electronic transactions, taking into account the UNCITRAL Model Law on Electronic Commerce 1996, the United Nations Convention on the Use of Electronic Communications in International Contracts done at New York on 23 November 2005, or other applicable international conventions and model laws relating to electronic commerce. • 2. Each Party shall endeavor to avoid any unnecessary regulatory burden on electronic transactions.³⁸
Unsolicited commercial electronic communication	<ul style="list-style-type: none"> • Parties should take measures to require that suppliers obtain consent from recipients of commercial electronic messages or allow recipients to opt out • Parties “shall provide recourse...against suppliers of unsolicited commercial communications” that fail to comply³⁹ 		<p>1. Each Party shall adopt or maintain measures regarding unsolicited commercial electronic messages that:</p> <p>(a) require suppliers of unsolicited commercial electronic messages to facilitate the ability of recipients to stop receiving such messages;</p> <p>(b) require the consent, as specified according to its laws and regulations, of recipients to receive commercial electronic messages; or</p> <p>(c) otherwise provide for the minimization of unsolicited commercial electronic messages.</p> <p>2. Each Party shall provide recourse against suppliers of unsolicited commercial electronic messages who do not comply with its measures implemented pursuant to paragraph 1.9</p>

³⁴ RCEP Article 12.7

³⁵ USMCA Article 19.5

³⁶ Ibid

³⁷ ASEAN Article 12

³⁸ RCEP Article 12.10

³⁹ USMCA Article 19.13

			3. The Parties shall endeavor to cooperate in appropriate cases of mutual concern regarding the regulation of unsolicited commercial electronic messages. ⁴⁰
Personal Information Protection	<ul style="list-style-type: none"> • Parties should establish legal frameworks for personal information protection, considering “guidelines of relevant international bodies such as <i>APEC Privacy Framework</i> and the <i>OECD Recommendation of the Council Concerning Guidelines governing the Protection of Privacy and Trans border Flows of Personal Data (2013)</i>.”⁴¹ • Privacy protection frameworks include: “limitation on collection, choice, data quality, purpose specification, use limitation, security safeguards, transparency, individual participation, and accountability”⁴² • Parties should publish information regarding access to redress and how “an enterprise can comply with legal requirements”⁴³ 	<ul style="list-style-type: none"> • Members should put measures in place “to protect the personal information of users of e-commerce” taking into consideration international criteria⁴⁴ 	<ul style="list-style-type: none"> • 1. Each Party shall adopt or maintain a legal framework which ensures the protection of personal information of the users of electronic commerce. • 2. In the development of its legal framework for the protection of personal information, each Party shall take into account international standards, principles, guidelines, and criteria of relevant international organizations or bodies. • 3. Each Party shall publish information on the personal information protection it provides to users of electronic commerce, including how: <ul style="list-style-type: none"> • (a) individuals can pursue remedies; and • (b) business can comply with any legal requirements. • 4. The Parties shall encourage juridical persons to publish, including on the internet, their policies and procedures related to the protection of personal information. • 5. The Parties shall cooperate, to the extent possible, for the protection of personal information transferred from a Party⁴⁵

⁴⁰ RCEP Article 12.9

⁴¹ USMCA Article 19.8

⁴² USMCA Article 19.8

⁴³ USMCA Article 19.8

⁴⁴ ASEAN Article 7.5

⁴⁵ . RCEP Article 12.8

Internet access and use	<ul style="list-style-type: none"> Parties recognize that consumers should be able to access internet network management practices, and choose what services and applications to use, “subject to reasonable network management.”⁴⁶ 		
Electronic authentication and e-signatures	<ul style="list-style-type: none"> Electronic signatures should not be denied legal validity Parties shall be allowed to determine the best authentication methods and e-signatures for their transaction and should not be prevented from defending the transaction’s legality before the relevant authorities Parties may require “certain performance standards” or “certification by an authority accredited in accordance with its law” for certain types of transactions⁴⁷ 	<ul style="list-style-type: none"> The legal validity of a signature should not be denied because it is in electronic form The following measured based on international standards should be adopted: <ul style="list-style-type: none"> participants should have the opportunity to choose the appropriate authentication methods for transactions “the recognition of authentication technologies and implementation models for electronic transactions” should not be limited participants in electronic transactions should have the chance to confirm that their transactions adhere to regulations concerning authentication⁴⁸ 	<ul style="list-style-type: none"> Except in circumstances otherwise provided for under its laws and regulations, a Party shall not deny the legal validity of a signature solely on the basis that the signature is in electronic form. Taking into account international norms for electronic authentication, each Party shall: <ul style="list-style-type: none"> (a) permit participants in electronic transactions to determine appropriate electronic authentication technologies and implementation models for their electronic transactions; (b) not limit the recognition of electronic authentication technologies and implementation models for electronic transactions; and (c) permit participants in electronic transactions to have the opportunity to prove that their electronic transactions comply with its laws and regulations with respect to electronic authentication. 3. Notwithstanding paragraph 2, each Party may require that, for a particular category of electronic transactions, the method of electronic authentication meets certain performance standards or is certified by an authority accredited in accordance with its laws and regulations.

⁴⁶ USMCA Article 19.10

⁴⁷ USMCA 19.6

⁴⁸ ASEAN Article 7.2

			<ul style="list-style-type: none"> 4. The Parties shall encourage the use of interoperable electronic authentication.⁴⁹
Paperless trading	<ul style="list-style-type: none"> Electronic trade administration documents should be legally accepted 	<ul style="list-style-type: none"> There should be an expansion of “the use of electronic versions of trade administration documents through the use of ICT consistent with” the ASEAN Agreement on Customs⁵⁰ 	<ul style="list-style-type: none"> 1. Each Party shall: <ul style="list-style-type: none"> (a) work towards implementing initiatives which provide for the use of paperless trading, taking into account the methods agreed by international organizations including the World Customs Organization; (b) endeavor to accept trade administration documents submitted electronically as the legal equivalent of the paper version of such trade administration documents; and (c) endeavor to make trade administration documents available to the public in electronic form. 2. The Parties shall cooperate in international fora to enhance acceptance of electronic versions of trade administration documents.⁵¹
Cooperation	<ul style="list-style-type: none"> Parties should “exchange information and share experiences on regulations, policies, enforcement and compliance” regarding personal information protection, security, authentication, and government use of technology 	<ul style="list-style-type: none"> Members are encouraged to share information amongst themselves, implement to programs to assist other states in the creation of the e-commerce regulatory frameworks and develop mechanisms between state officials to facilitate 	<ul style="list-style-type: none"> 1. Each Party shall, where appropriate, cooperate to: <ul style="list-style-type: none"> (a) work together to assist small and medium enterprises to overcome obstacles in the use of electronic commerce; (b) identify areas for targeted cooperation between the Parties which will help Parties implement or enhance their electronic

⁴⁹ RCEP Article 12.6

⁵⁰ ASEAN Article 7.1

⁵¹ RCEP Article 12.5

	<ul style="list-style-type: none"> Parties should also “participate in regional and multilateral fora to promote development of digital trade”⁵² Cooperate to increase ICT access for people with disabilities 	<p>investigations of fraudulent activity in electronic transactions</p> <ul style="list-style-type: none"> Other areas that require cooperation are: ICT infrastructure, electronic payments, trade facilitation, intellectual property rights, competition and logistics to facilitate e-commerce 	<p>commerce legal framework, such as research and training activities, capacity building, and the provision of technical assistance;</p> <ul style="list-style-type: none"> (c) share information, experiences, and best practices in addressing challenges related to the development and use of electronic commerce; (d) encourage business sectors to develop methods or practices that enhance accountability and consumer confidence to foster the use of electronic commerce; and (e) actively participate in regional and multilateral fora to promote the development of electronic commerce. 2. The Parties shall endeavor to undertake forms of cooperation that build on and do not duplicate existing cooperation initiatives pursued in international fora.⁵³
Open government data	<ul style="list-style-type: none"> The government information that parties decide to make available should be “in a machine-readable and open format” that is searchable and usable⁵⁴ 	<ul style="list-style-type: none"> Member states are responsible for making “all relevant measures of general application pertaining to or affecting the operation of this agreement” accessible to the public “Requests by another member state for specific information on any of its measures of general application” concerning the agreement should be provided promptly⁵⁵ 	<ul style="list-style-type: none"> 1. Each Party shall publish as promptly as possible or, where that is not practicable, otherwise make publicly available, including on the internet where feasible, all relevant measures of general application pertaining to or affecting the operation of this Chapter. 2. Each Party shall respond as promptly as possible to a relevant request from another Party for specific information on any of its measures of general application pertaining to or affecting the operation of this Chapter.⁵⁶

⁵² USMCA Article 19.14

⁵³ RCEP Article 12.4

⁵⁴ USMCA Article 19.18

⁵⁵ ASEAN Article 13

⁵⁶ RCEP Article 12:12

Cybersecurity	<p>(a) Members should build their capacity to respond to cybersecurity threats and “strengthen existing collaboration mechanisms”⁵⁷</p> <p>(b) “Risk-based approaches” should be implemented for cybersecurity threat responses⁵⁸</p>	<p>(c) Members must acknowledge the significance of “building the capabilities of their national entities responsible for cybersecurity” which can be done for example through “the exchange of best practices”</p> <p>(d) Member states should be able to use “existing collaboration mechanisms to cooperate on matters related to cybersecurity”⁵⁹</p>	<ul style="list-style-type: none"> • The Parties recognize the importance of: <ul style="list-style-type: none"> (a) building the capabilities of their respective competent authorities responsible for computer security incident responses including through the exchange of best practices; and (b) using existing collaboration mechanisms to cooperate on matters related to cyber security⁶⁰
SMEs	<p>(e) Interactive computer services are important to digital trade growth, especially for SMEs</p>		<ul style="list-style-type: none"> • Each Party shall, where appropriate, cooperate to: (a) work together to assist small and medium enterprises to overcome obstacles in the use of electronic commerce⁶¹;

⁵⁷ USMCA Article 19.15

⁵⁸ USMCA Article 19.15

⁵⁹ ASEAN Article 8

⁶⁰ RCEP Article 12:13

⁶¹ RCEP Article 12:14 – 1a

