Sri Lanka:
Digital Transformation Laggard

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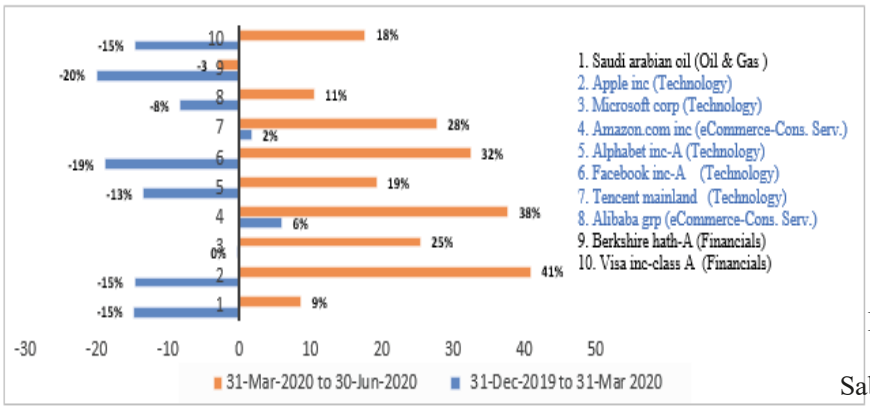

Figure 1: Global Top 100 companies by market capitalization
Source: Bloomberg with PwC analysis, July 2020

In 2019, among the top ten largest companies in the world by market value, it represents almost seven (70 percentage) as digital companies (Figure 01).

Global top 100 largest companies have got a strong bounce back from the COVID 19 downturn seen in March 2020. Having decreased by 15% ($3,905bn) from December 2019 to March 2020, the market capitalization of the Global Top 100 as at June 2020 was 1% ($335bn) behind December 2019. In general, the world's current largest companies have seen a stronger market capitalization recovery than the wider market indices, reflecting the relative concentration of the Technology and eCommerce (Consumer Services) sectors seen as benefiting from the digital acceleration in a post-COVID-19 new normal economy. The expectation is that the momentum for online retailers and migration to the cloud, in general, will continue to grow.

Figure 2: Market Capitalization of Global Top 100

Figure 3: Change in the Market Capitalization of June 2020 Global Top 100

Source: PwC | Global Top 100 companies by market capitalization, July 2020

This technological revolution created a drastic revolution in human as it could alter how we live (Life 4.0), work (Work 4.0), travel (Tourism 4.0), study (Education 4.0), trade (Industry 4.0), communicate (Web 2.0), shop (Retail 4.0), and entertain. It altered all the fundamental human activities in this digitalized society. Even though we like it or not, these modern technologies have now become a part of our day to day lives.

The Industry 4.0 has revolutionized the industrial value web which is integrated with digital technologies such as automation, robotics, artificial intelligence, augmented reality/virtual reality, nanotechnology, quantum computing, biotechnology, the internet of things, the industrial internet of things (IIoT), decentralized consensus, fifth-generation wireless technologies (5G), 3D printing.

By automating traditional manufacturing and industrial practices, using modern smart technologies, it facilitates business interoperability, decentralization, real-time analytics, virtualization, service orientation, modularity, and scalability. Businesses who achieve competitive differentiation via introducing new market, service, product and business model in its digital transformation journey will be the frontrunners in this smart industry.

How prepared are the countries to productively use these transformative technologies? This question can be answered by analyzing the IMD World Digital Competitiveness (WDC) ranking which analyses the extent to which countries adopt and explore digital technologies leading to transformation in government practices, business models and society in general.

This WDC ranking examines three factors; (1) knowledge (measures the know-how necessary to discover, understand and build new technologies), (2) technology (evaluates the overall context that enables the development of digital technologies), and (3) future readiness (assesses the level of preparedness to exploit digital transformations). Top ten rankers (out of 63 economies covered by the WCY selected countries) are R1: USA, R2: Singapore, R3: Sweden, R4: Denmark, R5: Switzerland, R6: Netherlands, R7: Finland, R8: Hong Kong SAR, R9: Norway, and R10: Korea Rep. Observations reveals that the economies based on individuals who adopt new technologies and show flexibility to innovations are the ones that perform well in the digital ranking.

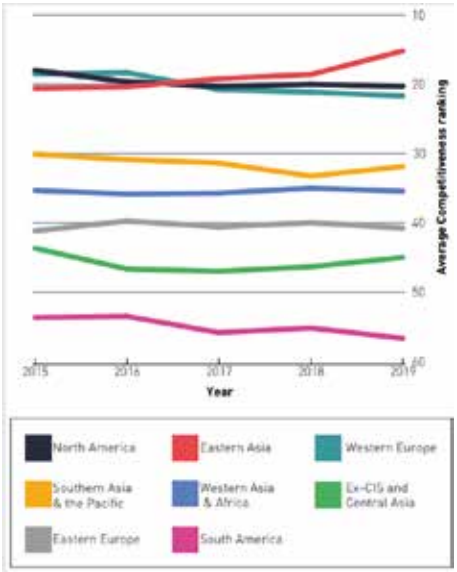

Figure 4: Overall Digital Competitiveness trends at sub-regional level 2015-2019
Source : IMD world Competitiveness Centre (2019)

When looking into the evolution of the average digital competitiveness ranks at the sub-regional level, in 2019, Eastern Asian countries keep their leadership (15.2) in the development, adoption and exploration of digital technologies while North American and Western Europan countries' averages remain stable around 20. Digital competitiveness average performances increase in Southern Asia and the Pacific which scores an average of 31.9, up from 33.3 in 2018. Ex-CIS and Central Asian countries' average moves from 46.3 to 45 in 2019. Western Asian and African and Eastern European countries' averages are in line with last year. South American economies continue to lag behind the other sub-regions.

Let's zoom out this analysis towards Southern Asia and the Pacific region. Singapore came 2nd in WDC overall ranking (2019); securing 1st in technology, 3rd in knowledge, and 11th in future-readiness. Singapore's strongest performance at the sub-factor level was in talent and technological framework, ranking 1st in both. It also ranked highly in training and education and IT integration (4th in both).

Indonesia was far behind other WDC calculated 13 Southern Asia and the Pacific countries. But, Indonesia experienced important progress from 62nd (2018) to 56th (2019). This result was driven largely by the technology factor (47th) with improvement in executive perceptions about the effectiveness of the regulatory framework (57th to 51st) and the availability of capital for technology development (34th to 26th). Sri Lanka is not among the selected IMD ranking countries.

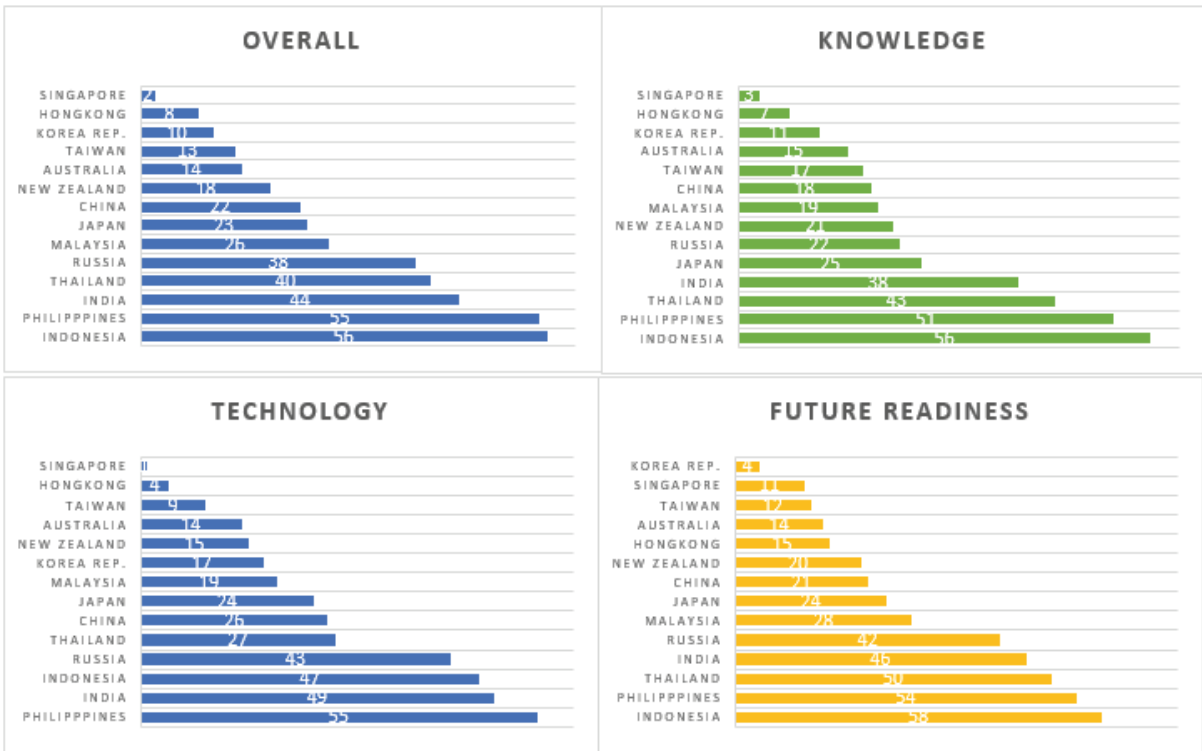

Figure 5: IMD Ranking of selected Southern Asia and the Pacific region countries, 2019
Source: IMD World Competitiveness Centre, 2019

To analyze Sri Lanka's digital readiness, we can use a few indices. Let's look into the Cisco Global Digital Readiness (CGDR) Index which helps countries understand how well-positioned they are to take the benefits of digitization.

Sri Lanka's CGDR index score provides insight into its overall progress towards digital readiness calculating 10.58 out of a maximum possible total of 25.0 representing a minimum acceleration. The CGDR index has taken a holistic approach that includes seven different components to build a complete picture of a county's digital readiness taking seven components into the consideration.

The true value of a nation's technology and infrastructure is delivered through its population's ability to take advantage of it. Without a population's basic needs met, they are not able to reap the benefits of technology. Sri Lanka scored 3.53 (out of 4.00) for the index component of 'Basic Human Needs' where the index assessed life expectancy, the mortality rate of children under five years of age, and access to basic services such as electricity and safe drinking water are at a quite satisfactory level.

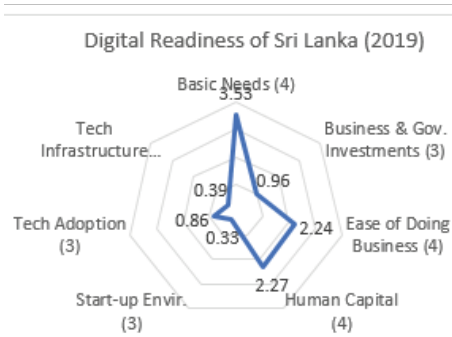

Figure 6: Digital Readiness of Sri Lanka (CGDRI-2019)
Source: Cisco public| Cisco Global Digital Readiness Index, 2019

'Human Capital' sub-component scored 2.27 (out of 4.00) where it represents moderate digital skills level within the workforce. The sub-component of 'Ease of Doing Business' was measured by examining the factors; local rule of law, the Ease of Doing Business Index, the Logistics Performance Index (LPI) infrastructure rating, and the time it takes businesses to obtain access to electricity. Sri Lanka recorded 2.24 (out of 4.00) for this sub-component. But controversially, Sri Lanka positioned low in technology adaption and infrastructure as in 2019 it indicates 0.86 (out of 3.00) for 'Technology Adaption' and 0.39 (out of 4.00) for 'Technology Infrastructure' showing minimum activation on its digital journey.

According to the Global Competitiveness Index 4.0 in 2019 edition, Sri Lanka ranked 107th (out of 141 countries) for ICT adoption (index components:

Mobile-cellular telephone subscriptions per 100 pop./ Mobile-broadband subscriptions per 100 pop./ Fixed-broadband Internet subscriptions per 100 pop./ Fiber internet subscriptions per 100 pop./ Internet users% of the adult population). But under the skills of the current workforce, the index component "digital skills among the active population" Sri Lanka ranked 68th out of 141 economies which is at moderately satisfaction level. As work 4.0 is undergoing major digital transformations, these rapid changes in technology advancement require sustained efforts in reskilling and upskilling as the chances of job loss and redundancy are very high.

According to the Global Information Technology Report (2016), Sri Lanka falls in the 63rd position (out of 139 countries) in the Network Readiness Index (NRI). In the readiness sub-index, it could identify that even Sri Lanka possesses affordability (value 6.0) and skills (value 5.7), infrastructure remains low valuing only 3.0. In the Usage sub-index, business usage showcase 3.9 moderate usage.

Another worldwide index that measures countries' digital adoption across three dimensions of the economy: people, government, and business is the Digital Adoption Index (DAI). DAI index covers 180 countries on a 0–1 scale and emphasizes the "supply-side" of digital adoption to maximize coverage and simplify theoretical linkages. The overall DAI is the simple average of three sub-indexes (1) business sub-index (which denotes increasing productivity and accelerating broad-based growth for business), (2) people sub-index denotes expanding opportunities and improving welfare for people, and (3) government sub-index denotes increasing the efficiency and accountability of service delivery for the government.

Table 1: Sri Lanka Profile | Digital Adoption Index (DAI)

		Digital Adoption Index	DAI Business Sub-index	DAI People Sub-index	DAI Government Sub-index
Sri Lanka	2016 (the most recent year available)	0.475978	0.443433	0.37637	0.608131

Source: World Development Report 2016: Digital Dividends

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	**63**	**4.2**
Networked Readiness Index 2015 (out of 143)	65	4.1
Networked Readiness Index 2014 (out of 148)	76	3.9
Networked Readiness Index 2013 (out of 144)	69	3.9
A. Environment subindex	**73**	**3.9**
1st pillar: Political and regulatory environment	64	3.8
2nd pillar: Business and innovation environment	81	4.1
B. Readiness subindex	**63**	**4.9**
3rd pillar: Infrastructure	103	3.0
4th pillar: Affordability	35	6.0
5th pillar: Skills	32	5.7
C. Usage subindex	**67**	**3.9**
6th pillar: Individual usage	102	2.8
7th pillar: Business usage	49	3.9
8th pillar: Government usage	20	5.0
D. Impact subindex	**49**	**4.0**
9th pillar: Economic impacts	70	3.2
10th pillar: Social impacts	42	4.7

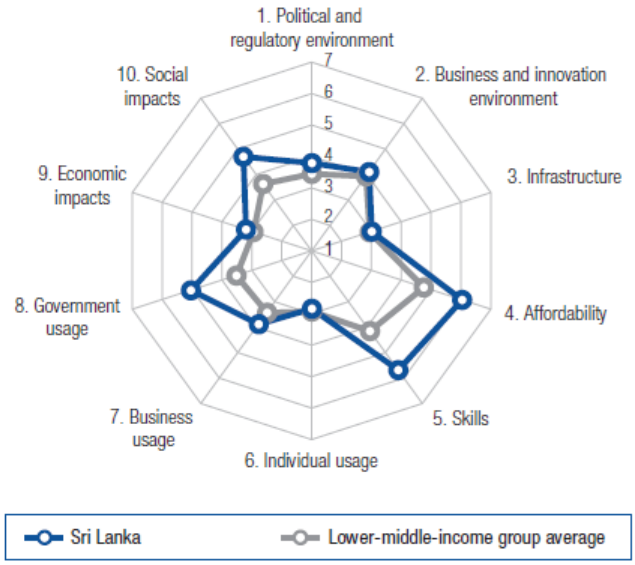

Figure 7: Sri Lanka Profile| NRI
Source: The Global Information Technology Report (2016)

DAI Business sub-index of Sri Lanka recorded only 0.44 but scored more (0.60) in DAI Government Sub-index where the government uses digital technologies more intensively than private setor firms.

Within the last couple of decades, almost 25 percent of global top business trumps lost their leadership positions as digital technology ramped up competition, disrupted industries, and forced companies out of business. Nowadays, digitally-matured companies across all industries become forerunners and leading industries in the economy. The McKinsey Digital Quotient framework developed a global multisectoral benchmark across four core pillars of successful digital transformation-strategy, capabilities, organizational practices, and culture-encompassing 18 management practices, including customer experience, automation and digital talent, at over 500 companies (the company score is calculated on a scale of 0 to 100). According to this McKinsey Digital Quotient framework, in an analysis of about 50 Sri Lankan companies across multiple industries, DQ scored 35 places, where it slightly higher than the global median of 33 (Figure 8). In comparison with other Asia Pacific emerging markets (Malaysia, Thailand, Vietnam, Philippines, and Indonesia), Sri Lanka exhibits strengths in connectivity, digital marketing, investment in digital initiatives, and the ability to move quickly.

But, when compared with China, India, Japan and more-developed countries, Sri Lanka is far behind. Sri Lankan companies lag in appetite for risk, ability to integrate their digital priorities into the overall business strategy, automation of internal and customer-facing processes, and adoption of a collaborative culture between the digital teams and business functions.

In summing up all these indices together, it is obvious that Sri Lanka's current digital profile is still lagging behind other developing economies in infrastructure, adoption, and skills.

In the vision of placing Sri Lanka on the bench of Asia's booming digital economy, the Ministry of Telecommunications & Development Infrastructure and the Ministry of Development Strategies & International Trade identified 10 priority projects; 1. Creating a dedicated fast track channel for exporting goods and services 2. Educating small companies on how to list their products on local/international digital platforms (enterprise), Leveraging ground-level administrative centers to carry out large-scale digital literacy programs for smallholder farmers and artisanal fishers (for agriculture), Using digital media to carry out large-scale digital service quality training modules to train SMEs on international visitor preferences and implementable action steps to improve service quality (Tourism) 3. Creation of data governance/personal data protection act and regulations to ensure proper guidelines are established for the use of vast

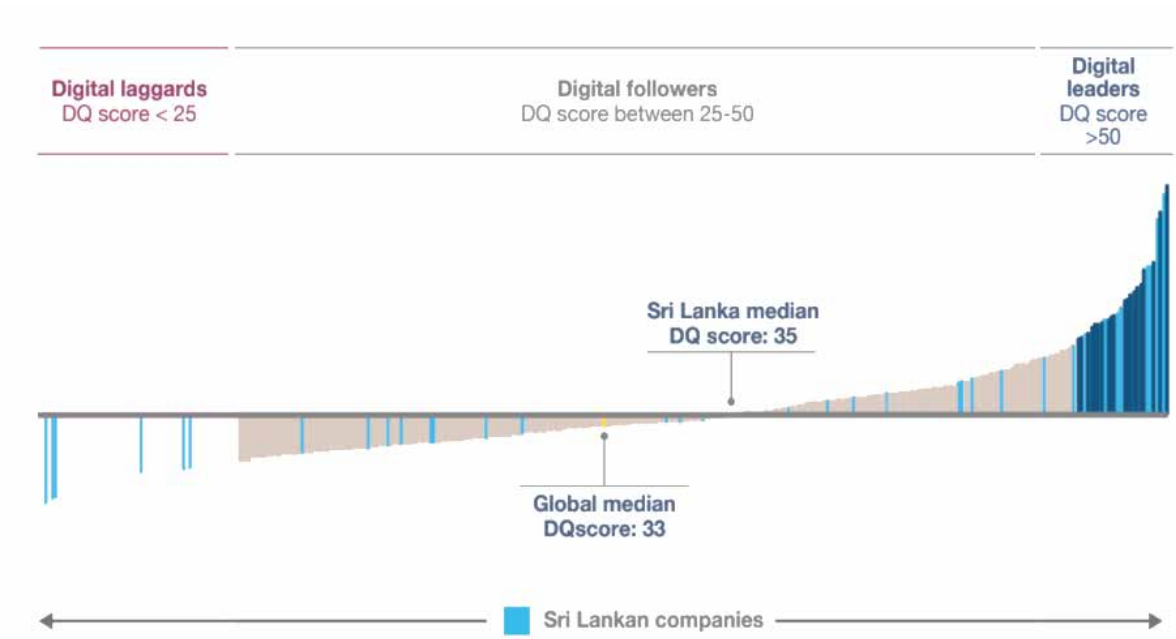

Figure 8: Significant variance in digital maturity of Sri Lankan players
Source: McKinsey & Company: Unlocking Sri Lanka's digital opportunity, 2018

amounts of data collected and used through flagship 4. Improvement of digital payment offerings to include overseas providers to drive exports, and increasing limits of mobile payments 5. Establishment of agriculture online marketplace to connect small-scale farmers and artisanal fishers directly to input suppliers and end buyers 6. Formalization and funding of National ICT Skills Council with a mandate to match the demand and supply for ICT labor in the country 7. Creation of shared services platform that offers price transparency, speed to delivery, and better end-to-end experience for players in agriculture value 8. Institution of step-up fund to small tourism operators that use digital technologies to improve the sector and visitor experiences 9. SME Go - Digital progra- mme for SMEs in tourism sector and 10. Pay- -as-you- -go cloud solution for SMEs in manufacturing.

These strategies could promote Sri Lanka digital economy through the lens of three economic development sectors; agriculture, tourism and manufacturing. Then transitioning Sri Lanka could encourage a new wave of entrepreneurship and innovation among the other economies.

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Do you believe the power of 'Digital'?

The world's most valuable retailer has no inventory (Alibaba).
The world's most popular media owner creates no content (Facebook).
The world's largest taxi company owns no taxis (Uber).