

must be on a major growth and productivity increasing, job-creating strategy. We should launch a **Digital Revolution** to create e-**Lebanon**. Digitalisation is becoming pervasive, transforming government, commerce, manufacturing, industry, transport and logistics, banking and finance, health services and other sectors. Technology is rapidly changing agriculture to Agritech. We are increasingly living in digital economies and societies. The coronavirus outbreak has triggered a faster pace of digital transformation: witness “work from home”, webinars, contactless delivery of food, or online education. The critical need for Lebanon is electricity and stable, widely available, broadband connectivity – two enabling factors to support and develop digital activity and be internationally connected.

It is imperative that Lebanon make massive investments in digital infrastructure to lower the cost and increase the speed of broadband services, by jumping to 5G, networks and platforms. While the 4G network was partially extended and densified during 2019-20, with a development of the underlying infrastructure (there are 6,000 fiber connected customers and 120,000 ready to be connected according to Ogero, while broadband connectivity is much higher, with 3 Mn subscribers), there is no perceptible change in throughput yet! Lobbying efforts by ISPs and DSPs to maintain market share, along with the failure of regulatory governance have obstructed change. The Ministry of Telecommunications taking control of the two cellular network operators in 2020 spells doom for innovation and development. The Telecoms Regulatory Authority needs to be made fully independent from the Ministry to liberalise, develop and regulate telecoms, along with a privatisation of operators (Alpha and Touch).

Only a drastic change from “business as usual” will enable Lebanon to actively participate in the four major transformations that will unfold over the coming decades: Digital Services such as e-commerce & FinTech; Clean Energy & Clean Technologies to mitigate the risks and consequences of climate change; health and life sciences; AI, Blockchain, robotics and nanotechnologies.

Lebanon’s banking sector will be undergoing a major restructuring and downsizing in the coming years. As confidence is restored, digitalisation and widespread adoption of FinTech will be necessary to maintain competitiveness. Countries as diverse as Estonia, China, Kenya, Malta, Thailand and Singapore are witness to the economic development benefits of the digitalisation of payment and banking services.

Digitalisation of government can strengthen public finances and reduce budget deficits through better monitoring of transactions and collection of VAT, customs and real estate taxes, increase service productivity, reduce waste, bribery and corruption in public procurement and spending. Digital IDs for all public sector employees would dramatically reduce the number and cost of “shadow” and absent employees, some 20% of the total! Digital government is a potent, effective tool against bribery and corruption.

Introducing a national digital ID system (like in Estonia) can provide access to all e-services, including government and allow secure voting for elections. To enable Lebanon’s Digital Revolution, we need to establish digital institutions, set-up a Ministry for Digital Economy and AI (incorporating telecoms), enact laws and regulations to support new technologies and

recognize digital assets. A National Institute of Science & Tech would host digital labs, incubators and accelerators. A digital Lebanon would maximize the use of Lebanon's talented youth and entrepreneurs and human capital and attract FDI to promote technological innovation and knowledge-intensive sectors. The evidence from China and other countries indicates that a 1 percentage point increase in digitalisation increases growth by 0.3 percentage points.

An e-Lebanon requires a Public-Private Partnership, but our capable private sector can spearhead a Digital Revolution to rescue Lebanon and transform our economic landscape.