**Bridging the Digital Divide in Post-War Lebanon: Challenges and Policy Solutions**

Lebanon, a country with a complex history of political instability, economic struggles, and the scars of multiple wars and conflicts, faces an even more urgent challenge in bridging the digital divide in the wake of recent hostilities with its neighbour, Israel. The digital divide- the gap between those who do not have access to modern digital technologies or possess the necessary digital skills and the ability to benefit from digital services and those who do- has only deepened due to the devastating effects of war, the ongoing financial crisis, and political instability. This divide remains a critical barrier to recovery, with thousands of displaced people post-war in need of resources to reconnect and rebuild their lives. The country’s post-war recovery efforts must prioritise digital inclusivity to ensure long-term stability, economic resilience, and better governance.

Lebanon has one of the largest diasporas in the world, with more Lebanese living abroad than within the country. Decades of wars, economic crises, and political instability have driven waves of migration, leading to a globally dispersed yet deeply connected Lebanese community. Lebanon's political landscape is characterised by a system of power-sharing among several political parties, primarily based on sectarian lines, which has often resulted in gridlock and inefficiencies. This fragmentation has hindered effective governance and delayed critical reforms, including those needed to address the digital divide. After years of political gridlock and a presidential vacuum, Lebanon experienced a significant political breakthrough in January 2025 with the election of a new president. This development brings hope for a more stable governance framework, which could provide the necessary foundation for urgent reforms, including those addressing the digital divide. With renewed political leadership, there is potential for Lebanon to shift its focus toward digital transformation, infrastructural development, and a more coherent national strategy that can improve the lives of its citizens, especially those displaced by recent conflicts. As such, this article is both timely and essential in offering key policy recommendations.

***Understanding the Digital Divide in Lebanon***

Lebanon’s digital divide is influenced by multiple factors, including economic disparity, rural-urban inequality, outdated infrastructure, electricity problems, and inconsistent government policies. While Beirut and other major cities enjoy relatively advanced internet services, rural and marginalised communities often struggle with unreliable connections and limited access to digital resources. Even those with access may not have the necessary skills to use digital tools effectively or the required internet speed to fully benefit from online services such as e-learning, e-commerce, and telehealth.

The economic crisis has further deepened this divide, making it difficult for many Lebanese citizens to afford internet services, smartphones, or computers. The COVID-19 pandemic and recently, the war, exposed these digital inequalities as students, businesses, and public institutions shifted online. Thousands of students were unable to continue their education due to a lack of digital access, and businesses that could not transition online faced closure. Moreover, government inefficiencies in digital transformation have slowed the country’s progress toward e-governance and modernised public services.

A crucial aspect of the digital divide is that mere access to the internet does not automatically translate into meaningful digital engagement. Many Lebanese citizens have internet access but lack adequate bandwidth or stable connections to benefit from online services effectively. This is compounded by the frequent electricity shortages in the country, with many people relying on generators to power their devices. For example, students in rural areas may have internet access but struggle to participate in virtual classrooms due to frequent disruptions, slow speeds, or power outages. Similarly, businesses attempting to digitise operations often face connectivity issues and inconsistent electricity, hindering their ability to compete in the digital economy.

Additionally, digital disparities are evident in education and employment opportunities. Many high-paying jobs now require digital proficiency, leaving those without the necessary skills at a severe disadvantage. Women and marginalised groups are particularly affected, as they often face additional barriers to accessing digital tools and education. The lack of investment in digital literacy programmes, exacerbated by the country’s financial struggles, prevents individuals from leveraging technology to improve their socio-economic status.

***Key Challenges Facing Digital Inclusion in Lebanon***

*Weak Telecommunications Infrastructure*

Lebanon's internet services are plagued by frequent power outages, slow broadband speeds, and a reliance on outdated technology. The absence of substantial investment in fiber-optic networks has left many regions with poor connectivity, making it difficult for people to benefit from digital services such as telemedicine or online education.

*High Costs of Internet and Devices*

The economic crisis has made internet access a luxury rather than a necessity. Many households cannot afford mobile data or broadband subscriptions, while the prices of digital devices have surged due to inflation and currency devaluation, further limiting digital engagement.

*Governmental Inaction and Policy Gaps*

Lebanon lacks a coherent national strategy for digital transformation. Bureaucratic inefficiencies, corruption, and political instability have hindered efforts to modernise telecommunications and integrate digital literacy programmes into education and public services.

*Rural and Regional Disparities*

Internet access remains concentrated in urban areas, while many rural communities lack basic connectivity. This rural-urban digital divide prevents equal opportunities for education, business, and civic engagement, as those in rural areas often do not have the bandwidth or skills to benefit from digital advancements.

*Lack of Digital Literacy*

Even when access is available, many individuals lack the digital skills needed to fully utilise online platforms. Without proper training and education, digital access alone does not translate into meaningful digital participation.

*Limited Cybersecurity Awareness*

Many Lebanese citizens are vulnerable to online threats, fraud, and misinformation due to inadequate digital literacy. Cybersecurity awareness programmes are necessary to help individuals and businesses navigate digital spaces safely and effectively.

*Impact of Conflict*

Ongoing political and social unrest, along with regional conflicts, have further disrupted the country's digital infrastructure and created additional barriers to digital inclusion. These conflicts have not only caused physical damage to telecommunications networks but have also diverted attention and resources away from long-term digital development initiatives.

*Refugee and Migrant Population*

Lebanon hosts a large number of refugees, primarily from Syria, and migrant workers. These groups often face unique barriers to digital inclusion, including lack of access to digital devices, limited internet connectivity, language barriers, and limited digital literacy. Providing these populations with access to digital tools and literacy programmes is critical for ensuring equal participation in society.

*Brain Drain and Talent Flight*

Due to the ongoing economic crisis and instability, Lebanon has experienced significant emigration of skilled professionals, including those in the tech and digital fields. This "brain drain" not only exacerbates the country's economic challenges but also weakens its ability to develop and sustain the digital infrastructure and innovation needed for long-term growth.

*Energy Crisis*

In addition to the frequent power outages affecting internet access, Lebanon’s broader energy crisis poses a significant barrier to digital inclusion. The lack of a stable, affordable, and reliable energy supply hampers both private and public sector efforts to provide consistent digital services. Many people, businesses, and institutions rely on costly generators, which only further strains their resources.

*Access to Quality Education and Training*

Even though there are online educational resources available, many Lebanese people- especially those in lower-income or rural areas- lack access to affordable, quality training programmes to improve their digital literacy. The lack of accessible and high-quality digital education at all levels makes it difficult for many to keep up with technological advancements or gain the necessary skills for the job market.

*Political Polarisation*

Lebanon’s political divisions can also hinder efforts to create a unified national strategy for digital transformation. Political infighting and lack of consensus on policy issues from the different political parties can lead to fragmented initiatives or delays in policy development that affect the country's overall digital progress.

***Policy Recommendations for Lebanese Officials***

To address Lebanon's digital divide and ensure a more inclusive digital future, a multi-pronged strategy is needed that targets all three levels of the divide: access, skills, and benefits. The recommendations below are designed to foster an equitable digital ecosystem that benefits all Lebanese citizens and helps bridge the digital gap.

*Invest in Telecommunications Infrastructure*

-Expand the fiber-optic network by securing international funding and public-private partnerships. Lebanon should seek investment from global organisations such as the World Bank, the International Telecommunication Union (ITU), and regional allies to finance nationwide fiber-optic expansion, particularly in underserved areas.

-Upgrade broadband networks by implementing regulatory reforms that encourage competition among private internet service providers, reducing monopolistic control and improving service quality. The government should offer incentives for telecom companies to modernise networks, prioritising high-demand sectors like education and healthcare.

-Expand mobile network coverage by attracting foreign telecom investments and leveraging Lebanon’s diaspora for funding initiatives. Implementing 4G and 5G infrastructure in rural areas should be a national priority, with partnerships from regional telecom leaders such as UAE’s Etisalat or Qatar’s Ooredoo.

-Address power supply issues affecting connectivity by integrating alternative energy solutions. Lebanon should negotiate grants or loans for solar-powered telecom towers from green energy funds or climate-focused organisations. Additionally, telecom providers should be encouraged to use hybrid energy models, reducing reliance on costly private generators.

*Make Internet Access More Affordable*

-Implement targeted subsidies for low-income households by leveraging international aid and grants. Given Lebanon’s financial crisis, the government should collaborate with organisations like the United Nations Development Programme (UNDP), the World Bank, and NGOs focused on digital inclusion to fund subsidised internet programmes for vulnerable populations.

-Encourage competition in the telecom sector by enforcing stronger regulatory reforms through Lebanon’s Telecommunications Regulatory Authority (TRA). Reducing the dominance of a few providers and allowing more private-sector competition could lower prices and improve service quality. The government should also explore privatising parts of the telecom sector to attract foreign investment.

-Establish free public Wi-Fi hotspots in schools and government offices by securing funding from Lebanon’s diaspora, corporate social responsibility (CSR) programmes from telecom companies, and tech giants such as Google or Meta, which have global internet access initiatives.

-Partner with international organisations to provide funding for subsidised internet programmes for students and job seekers. Lebanon could request technical and financial support from UNESCO, UNICEF (for education-related digital access), and the European Union’s digital inclusion programmes to create affordable broadband packages for educational and employment purposes.

*Develop Digital Literacy Programmes*

-Incorporate digital literacy into national education curricula from an early stage. Expand teacher training in digital education by equipping educators with the necessary skills to integrate technology into classrooms. Lebanon should seek funding from UNESCO and UNICEF to train teachers, particularly in public schools, on using online learning platforms, coding basics, and cybersecurity awareness to ensure students gain practical digital skills.

-Launch community-based digital training programmes by partnering with NGOs and private companies to provide free workshops in underprivileged areas. Organisations like Lebanese Alternative Learning (LAL) and the Digital Skills Foundation can help train local trainers, ensuring sustainability. These programmes should prioritise women, elderly populations, and marginalised groups who face greater digital exclusion.

-Provide specialised digital training for refugees and displaced populations in collaboration with UNHCR, the World Bank, and local NGOs. Programs should focus on remote work skills, freelancing, and digital entrepreneurship, giving refugees and internally displaced persons (IDPs) access to global job markets despite Lebanon’s economic crisis.

-Develop digital mentorship programmes by leveraging Lebanon’s global diaspora network. The government and private sector should facilitate virtual mentorship platforms that connect students and young professionals with Lebanese experts abroad, offering guidance on tech careers, online business opportunities, and digital freelancing. Corporate sponsors, such as Google, Cisco, or Microsoft, can provide internships, training, and access to certification courses.

*Promote E-Government Services*

-Revive stalled digital government initiatives by securing technical and financial support from the World Bank, the European Union, and the UNDP. Given Lebanon’s history of bureaucratic inefficiencies and corruption, an independent E-Government Oversight Committee should be established to ensure transparency and prevent misuse of digital infrastructure projects.

-Enhance transparency and citizen engagement by developing interactive digital platforms where Lebanese citizens can access budget reports, anti-corruption updates, and policy discussions. Lebanon should follow models like Estonia’s e-Government system, adapting blockchain-based tools for secure, tamper-proof public records.

-Strengthen cybersecurity and data privacy laws by updating outdated legislation and partnering with international cybersecurity agencies such as Interpol’s Cybercrime Division and the Global Forum on Cyber Expertise (GFCE). This is critical to protecting citizens’ digital identities and rebuilding trust in government-run online services.

-Develop a centralised digital services portal to streamline essential services, such as business registration, civil documents, tax payments, and social aid applications. Lebanon should partner with regional tech hubs like Dubai’s Smart Government Initiative to receive technical guidance and funding for implementation. Encouraging private-sector involvement through public-private partnerships (PPPs) can also accelerate the transition without relying solely on state funds.

*Support Innovation and Tech Startups*

-Establish innovation hubs and incubators to support Lebanese entrepreneurs in the digital economy. While existing initiatives like Berytech and Speed Accelerator have supported some startups, Lebanon needs more sector-specific incubators focused on fintech, e-commerce, and digital health. The government should collaborate with the European Bank for Reconstruction and Development (EBRD) and the World Bank to establish funding mechanisms for young entrepreneurs.

-Create alternative funding opportunities for tech startups by attracting venture capital and impact investment from the Lebanese diaspora. Given Lebanon’s banking crisis, the government should promote crowdfunding platforms, equity-based investment models, and startup-friendly financial regulations to facilitate access to capital.

-Support the digital transformation of traditional industries by offering tax breaks and low-interest loans for small and medium-sized enterprises (SMEs) that adopt e-commerce, AI-driven logistics, or cloud-based business solutions. Lebanon should look to regional success stories, such as Egypt’s digitization of SMEs, as a model for supporting businesses in agriculture, manufacturing, and retail.

-Strengthen university-private sector partnerships by encouraging Lebanese universities to collaborate with tech companies on applied research projects. Government agencies should facilitate internship programmes, joint R&D grants, and digital skills training partnerships with major firms like Microsoft, Amazon Web Services (AWS), and Cisco.

***Conclusion***

Lebanon’s digital divide is a significant barrier to the country’s recovery and long-term stability. It is not just about having access to the internet- it is about ensuring that citizens have the skills they need to fully participate in the digital economy and that they can benefit from the advantages of digital services, such as remote education, e-commerce, telemedicine, and e-government. Addressing the digital divide requires a coordinated effort from both the government and the private sector, focusing on infrastructure investment, affordability, digital literacy, and e-government services.

With the right policies and investments, Lebanon can bridge the digital divide, fostering a more connected, resilient, and equitable society in the post-war era. By empowering its citizens with the necessary tools to thrive in a digital world, Lebanon can overcome the challenges posed by its complex history and move toward a more inclusive, sustainable future.