

Bridging the Digital Gap:

**The state of digital inclusion in the
MENA region**



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Introduction:

What is Digital Inclusion?

We are witnessing unseen technological innovations that are inspiring more intelligent and automated societies. Governments across the globe are digitising to improve their services and the lives of citizens. While this has brought greater convenience and efficiency, it has also created a “**Digital Gap**”.

Across the world, communities and individuals continue to find themselves unable to reap the benefits of advancements in the digital age due to gaps in connectivity & Information and Communication Technology (ICT) infrastructure, access to affordable technology and devices, and gaps in digital literacy. The digital gap prevents equal participation and opportunity in all parts of life, disproportionately affecting marginalised communities, low-income households, people with disabilities, rural areas, and older adults. The digital gap is detrimental to societal well-being and cohesion because it translates to unequal access to education, healthcare, employment and public services.

Efforts by governments, the private sector and international organisations to bridge the digital gap is what is referred to as “**Digital Inclusion**”. It includes five elements:

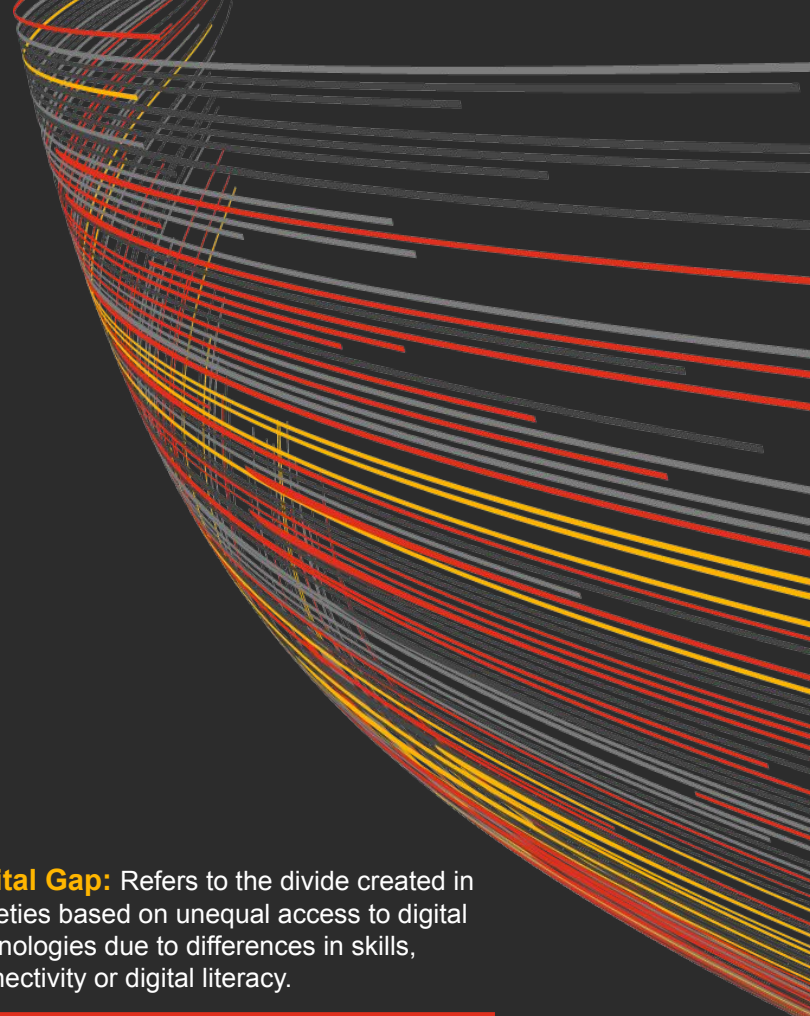
1. Affordable Internet.
2. Access to Internet-enabled devices.
3. Access to digital literacy training.
4. Quality technical support.
5. Applications & online content designed to enable self-sufficiency, participation and collaboration.

Digital inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional and structural barriers to access and use technology. Successful digital inclusion efforts lead to “**Digital Equity**”.

In the modern world of intelligent societies, smart cities and digital government services, digital inclusion has become indispensable to social and economic well-being.

¹ According to The National Digital Inclusion Alliance (NDIA), an organisation that provides a unified voice for home broadband access, public broadband access, personal devices and local technology training and support programs.

² As defined by the NDIA



Digital Gap: Refers to the divide created in societies based on unequal access to digital technologies due to differences in skills, connectivity or digital literacy.

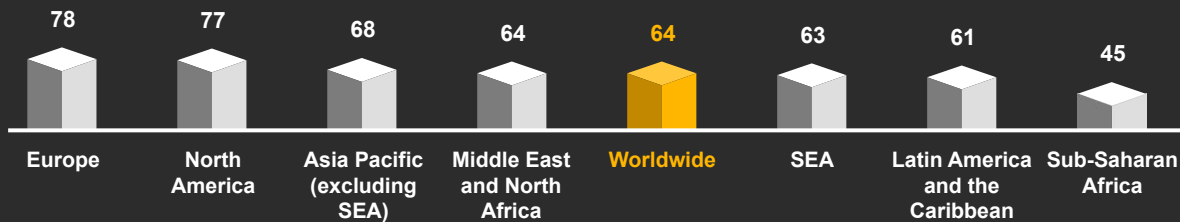
Digital Inclusion: Refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use information technologies¹.

Digital Equity: A condition in which all individuals and communities have the information technology capacity needed for full participation in modern societies and economies².

The Importance of Digital Inclusion to MENA leaders

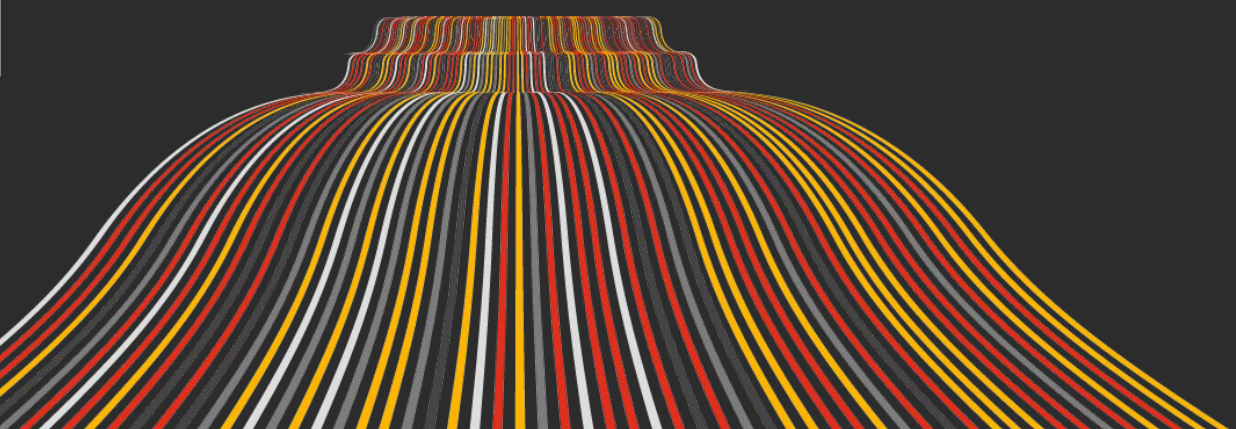
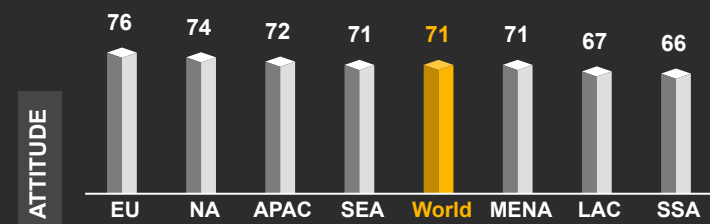
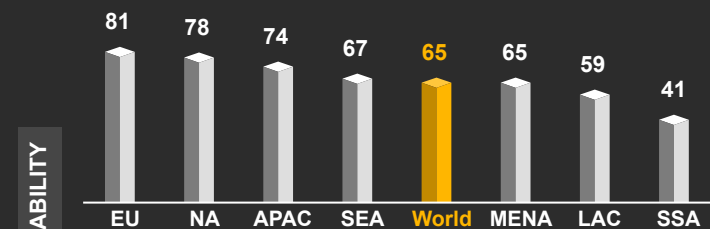
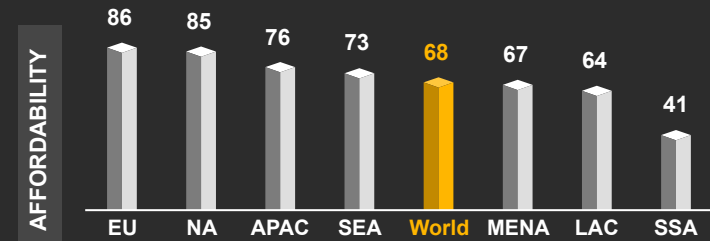
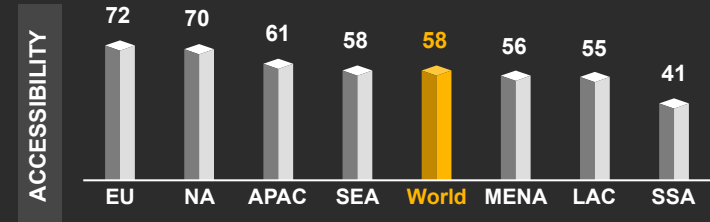
While digital exclusion affects communities around the world, this issue has unique implications to the MENA region, where financially weaker and more remote communities are often unable to access education, healthcare, public services and employment, partially due to the digital gap. A study by Roland Berger comparing 80 countries across the globe to trace the rate of digital inclusion and how it corresponds with social and economic inequalities, found that MENA is behind North America and Europe in scores for digital inclusion but at an equal score to global. The researchers assessed digital inclusion based on four metrics: 'accessibility' to digital equipment; 'affordability' of digital access; 'ability' to understand digital tools and processes; and 'attitude' – willingness to adopt a digital life. Within this framework, at present, the MENA region is slightly behind the global average across all four components of digital inclusion.

Digital inclusion scores - overall



Source: Roland Berger index on GSMA, ITU, World Bank, UNESCO, UNDP, Euromonitor, Ookla

Digital inclusion scores - metrics



Bridging the digital gap for more digitally included societies is important to MENA leaders and policy makers for **three main reasons**:

01 The digital gap prevents the MENA region from unlocking its full potential

According to a new World Bank report (The Upside of Digital for the Middle East and North Africa, World Bank, 2021), the universal adoption of digital technologies in countries across the Middle East and North Africa (MENA) would reap substantial socio-economic benefits, amounting to hundreds of billions of dollars each year and a much-needed surge in new jobs. According to this report, the widespread use of digital services and fully digitising the economy would boost economic growth, raising the GDP per capita by at least 46 percent over 30 years with an estimated gain of almost \$300 billion in the first year alone.

The report predicted that universal adoption of digital technologies would double the female workforce participation from 40 million women to 80 million over a thirty-year window and reduce frictional unemployment from 10 percent to 7 percent of the workforce over a six-year period and to zero frictional unemployment within sixteen years, since digital technologies substantially reduce the time taken to match job seekers to openings. The MENA region is yet to unleash its full potential and advancing digital inclusion is the only way to ensure that it unlocks this potential.

02 The digital gap exacerbates the regions inequalities

The region as a whole has 420 million people. 49.7% of whom are women, 15% are people with disabilities, over 50% are under the age of 25 and host a large number (27.7m) of refugees and migrants³. Across the countries which make up the region, there is a wide range of ethnically, politically and socially marginalised groups. Thus, integrating the various segments and achieving societal cohesion has proved challenging for MENA governments and leaders.

The digital gap has added an entirely new layer to these challenges. It is difficult to bridge social gaps and achieve social equity when low-income households and marginalised groups find themselves without access to education, healthcare, public services and employment opportunities within digital channels.

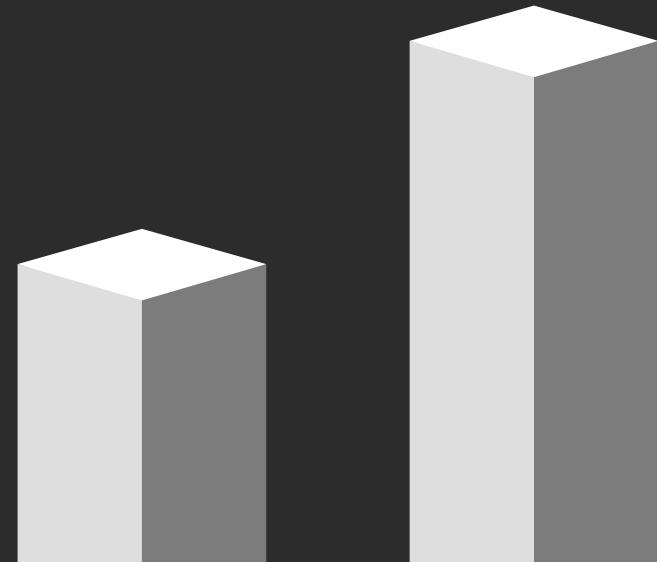
03 The digital gap hinders participation in the international economy

As countries worldwide move towards fully digital economies, the effects of globalisation have increased exponentially. Technology has enabled business on an international scale and across borders in ways that could not have been conceived several decades ago, with employees working remotely from across the globe, purchases and transactions made across borders, and technology-enabled international collaboration. As the developed world moves at great speed towards digital, a physical presence is no longer a prerequisite to doing business.

While large communities within the MENA region continue to find themselves excluded from the digital economy, they are unable to reap the benefits of this globalisation and participate in the international economy. This can overwhelm MENA leaders' efforts to improve their countries' participation in global economies and the standing of their economies on the international stage.

Thus, digital inclusion efforts are high on the agenda of the region's leaders since the digital gap prevents the region from achieving its potential and exacerbates inequalities making a complex region even more difficult to govern. However, the effects of the digital gap are felt differently across different countries in the MENA region and the state of digital inclusion varies from region to region and country to country.

³These numbers and percentages are according to ITU, World Bank and the UNHCR



The State of Digital Inclusion in the MENA region: Persisting Challenges

While addressing the question of digital inclusion in the MENA region, it is important to consider that the countries making up the region are economically and digitally diverse.

According to the International Telecommunications Union, mobile penetration in the MENA region was as high as 103.1 per cent, with more than 50 per cent of the population with home internet subscriptions and 62.7 per cent of the population with mobile broadband subscriptions. These figures appear to be quite high and allude to a digitally inclusive society. However, it is important to consider that these figures are high because of the high mobile penetration rates of the GCC countries which are far more developed than other countries in the region. Thus, it becomes essential to delve into the sub-regions of the wider MENA region to paint a more accurate picture of the state of digital inclusion.

For the purposes of exploring the state of digital inclusion in MENA, the region may be segmented into three country groups:



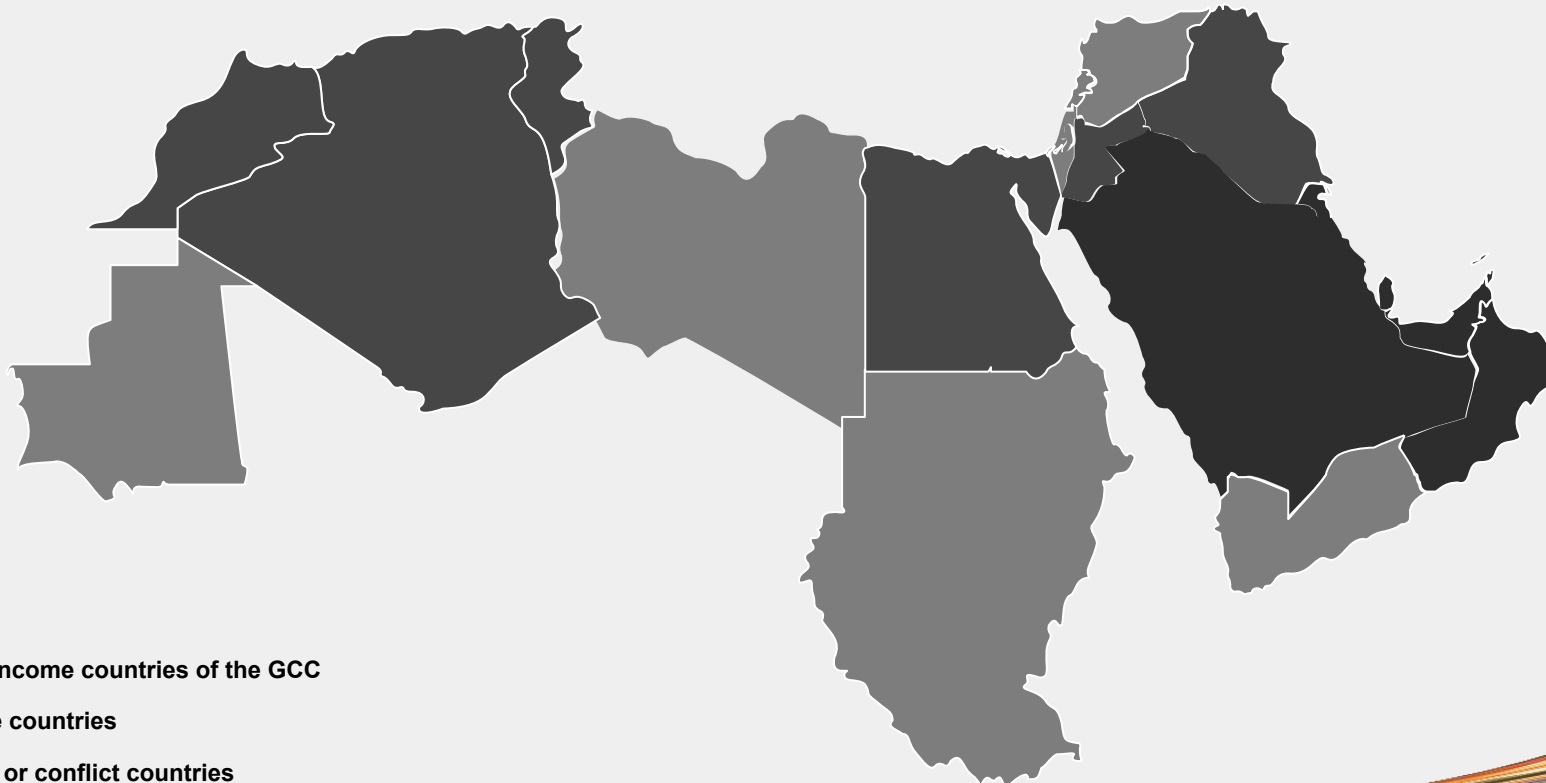
Oil-rich, high-income countries of the GCC: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and UAE.



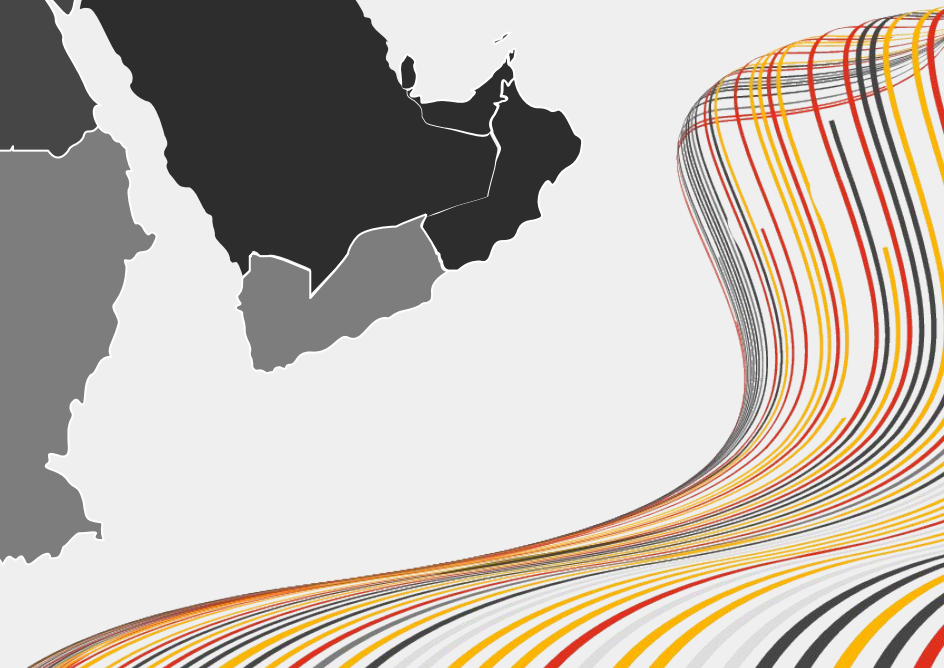
Middle-income countries: Algeria, Egypt, Morocco, Iraq, Tunisia and Jordan.



Lower-income or conflict countries: Lebanon, Libya, Mauritania, Palestine, Sudan, Syria, and Yemen.



- Oil-rich, high-income countries of the GCC
- Middle-income countries
- Lower-income or conflict countries





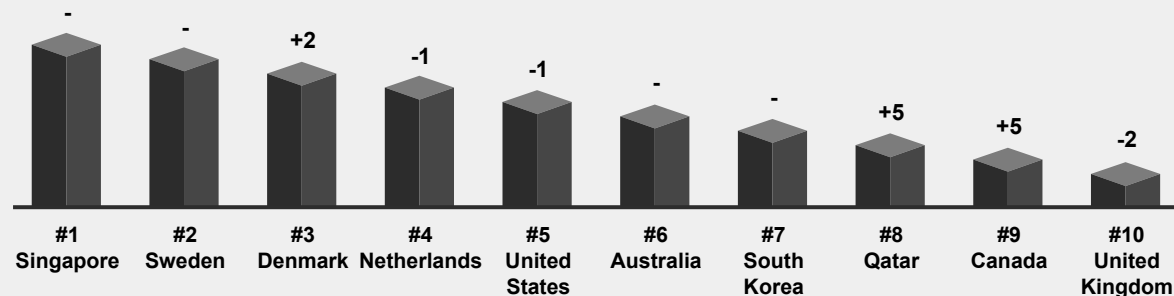
Oil-rich, high-income countries of the GCC: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and UAE

With ambitious national digital strategies and digital transformation programs, the Gulf countries are soaring towards full digitisation of their governments and economies. The GCC countries also boast some of the highest mobile penetration and broadband connectivity rates in the world. Thus, when it comes to the GCC region, digital inclusion is relatively high. These countries have increased their ICT spending with the UAE and Qatar estimated to spend over \$23 billion and \$9 billion respectively by 2024, bringing the total spending of the Gulf region on ICT to \$70 billion.

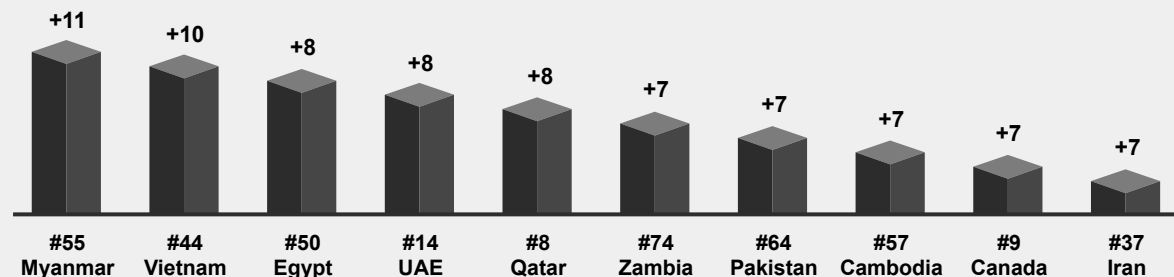
According to the previously cited Roland Berger Study, Qatar and the UAE are among the top five most improved countries when it comes to digital inclusion between 2017 and 2020 – each having jumped eight spots on the Roland Berger ranking. Qatar is the only Middle East country to break into the top ten countries on the overall rankings – placing in eighth.

The top 10 countries and top 10 improvers of the 82 nations assessed

Top 10 Countries



Top 10 Improvers

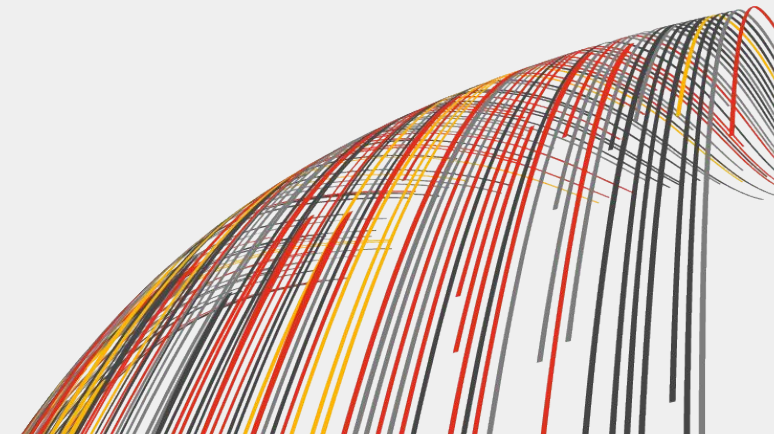


Source Roland Berger

The digital government leaders within the GCC region have made admirable efforts to improve digital inclusion, incorporating accessibility into their digital government platforms to account for people of determination and focusing on user-centricity within the design of their digital government services. The UAE boasts various digital inclusion initiatives, mainly focused on women, children, people of determination and the elderly. This includes online digital government services for vulnerable groups and the UAE council for digital wellbeing. In January 2021, the UAE Cabinet approved the 'National Policy for Quality of Digital Life' which aims to maintain a safe digital community in the UAE and promote a positive identity through appropriate digital interactions.

Meanwhile in KSA, the Digital Government Authority has placed digital accessibility for the disabled at the top of its agenda and has taken the Online Services Index as its guide for ensuring the availability, quality, connectivity and diversity of channels of its digital government services.

Overall, the GCC countries are diving into the digital age with intentional and well-calculated digital transformation strategies that have accounted for digital inclusion in many ways. While challenges with the inclusion of low-income groups and the elderly continue to persist, both in the GCC and globally, the GCC governments are making strides in bridging the digital gap to enable their digital transformations.





Middle-income countries:

Algeria, Egypt, Morocco, Iraq, Tunisia and Jordan

Middle-income countries continue to face significant challenges with digital inclusion due to large rural populaces with limited access to connectivity, low-income populaces with limited access to mobiles and laptops, limited digital literacy among the working classes, and limited affordable digital training opportunities. However, many of the middle-income countries are taking steps towards improving digital inclusion.

In Egypt, the digital gap stems mainly from the urban-rural divide. A study conducted in 2014 indicates a positive correlation between urbanisation and digital divide. Other factors such as gender, wealth, and education level were also significant predictors of the digital divide.

However, Egypt has made significant strides in the digital inclusion space. Egypt's overall score in the Roland Berger digital inclusion index improved to record 60 during 2020, up from 52 in 2017, making it the 3rd top improver in the Roland Berger rankings. Egypt achieved this by significantly improving accessibility, enhancing mobile data availability and coverage infrastructure, and enhancing affordability through market competition between rival telcos.

In Morocco, like many other MENA countries, the digital gap falls along gender lines. According to Plan International, the cost is a bigger barrier for women than for men, where gender income inequalities already exist. Some societal traditions and norms discourage women from embracing technology like their male counterparts. Additionally, fears over a woman's safety on the Internet and a lack of female role models in tech prevent women from going to the Internet as men do. According to the Arab Barometer, 79 percent of men in Morocco use the Internet while 56 percent of women do. Of the twelve Arab countries surveyed, only Tunisia had a larger divide between male and female Internet usage rates.

In addition to the gender divide, Tunisia also faces issues with digital rights and digital privacy, with Tunisians expressing a lack of trust in how their information is used and protected in digital services and their safety on the Internet. While Tunisia faces ongoing challenges in ensuring the protection of digital rights and digital privacy, the country was pushed into action by the COVID lockdown which resulted in various initiatives to bridge the digital divide such as providing children from low-income families with laptops and an Internet connection and implementing legislation on the right to access information.

In Algeria, only 59.6 per cent of the population is connected to the Internet, and only 4.6 per cent of the population makes online purchases despite Algeria's large tech savvy and young population. Digital inclusion and consumption of digital services remain low despite recent government efforts to pave the way for digital transformation, mainly due to mistrust of digital services. While the government has focused on digitalisation and tech startups, partial implementation of adoption initiatives and lack of trust have hampered digital inclusion efforts. Algeria ranks 183 out of 193 on the E-Participation index and 120/193 on the UN's e-gov index, rendering it lagging in digital inclusion. To alleviate this, the Algerian government is shifting focus to improving the affordability of digital services and connectivity and coverage through various initiatives, including plans to extend fibre optic cables to Spain, Niger and Nigeria.

Iraq also faces significant digital inclusion issues, stemming particularly from the digital skills gap. According to UNICEF, around 60 per cent of youth in Iraq lack the digital skills needed for employment and social inclusion. The report indicates that 59.2 per cent of the youth aged between 15-24 lack digital skills to perform basic computer-related activities. UNICEF has called for urgent action to address the digital skills crisis, which would prevent the youth from transitioning to the labour market and becoming active and informed citizens.

While the gender digital divide is also prominent in Jordan, the kingdom faces uncommon factors of refugee inflow and laws limiting Internet openness and keeping the state in control of what the people access and use online, resulting in an atypical situation for Jordan as compared to other countries. Jordan is tasked with the difficult job of extending digital services to a large populace of refugees that are often undocumented and unregistered.

Thus, while the middle-income MENA countries recognise the importance of digital inclusion for the digital age and are taking active efforts to bridge the digital gap, they continue to face barriers caused by large rural areas with limited connectivity, low-income or refugee populace with limited digital literacy, fears over Internet safety and digital rights, gaps in digital legislation and a culture that hinders the digital inclusion of women.



Lower-income or conflict countries:

Lebanon, Libya, Mauritania, Palestine, Sudan, Syria, and Yemen

The lower-income countries in the MENA region, especially those affected by conflicts, have the most glaring digital gaps. In places such as Libya, Syria and Yemen, strained by conflict and economic chaos, users face low-speed Internet and prolonged periods of loss in connectivity.

Misuse of digital technologies by opposing sides of the conflict against one another - these can include cyber-attacks on the computer systems of life-saving critical infrastructure and communications systems, emergent and abusive forms of digital surveillance, and electronic exploitation - has led to concerns about online privacy and surveillance. Indeed, a study conducted in 2016 found a correlation between the perceived levels of conflict and the willingness of users to adopt government e-services. The lack of social support in conflict zones also hinders access to digital upskilling opportunities that would enable users to adopt digital services.

In fact, Sudan was the only country in the world that showed no improvement in its overall Roland Berger digital inclusion score between 2017 and 2020.

Thus, digital inclusion efforts that may work in other countries may not prove as helpful in conflict zones if they have not been designed with consideration to the digital skills of citizens, e-service quality, social support, the awareness of citizens, and the ways that civil conflict and violence affect those citizens.

Even low-income countries that are not necessarily affected by outright civil violence, such as Lebanon, have detrimental digital divides due to weak connectivity and lack of access to digital devices. According to the United Nations Economic and Social Commission for Western Asia (ESCWA), more than half of Lebanon's population is now trapped in poverty. The survey showed that many families don't have access to electronic devices such as smartphones or TV. Lebanon ranked 60th on The Economist Intelligence Unit (EIU) world ranking of Internet quality among 100 countries.

In contrast to middle-income countries where the main barriers to digital inclusion are limited digital training, cultural factors, fears over Internet safety and the absence of proper legislation, the low-income and conflict countries face more basic challenges of Internet connectivity and affordability of devices as well as the added factor of the psychological effects of the misuse of digital technologies by warring parties.



Potential Solutions

There are various potential solutions to the persisting challenges that the MENA region faces with regard to digital inclusion, which fit into the categories of **connectivity, legislation, and training & upskilling**:



Connectivity

- Enhance market competition through rival telcos to support the affordability of Internet connection.
- Telecommunication infrastructure development to enable universal access, particularly in rural areas.
- Subsidised access to digital tools and digital services platforms for low-income communities.



Legislation

- Regulations reform and open access to promote competitive pricing.
- Appropriate digital legislation to promote Internet safety to foster trust in digital services.



Training & Upskilling

- Targeted active learning support to build digital literacy and skills customised for the communities that need it.
- Incorporation of a digital toolkit to support humanitarian organisations serving refugee populaces in transferring digital skills.
- Awareness programs to foster a culture that promotes the digital participation of women.

The whole region stands to benefit from a regional collaboration on digital inclusion. It is well-positioned to form such a collaboration due to its diversity as it includes the high-income countries of the GCC that have made advancements in digital technologies which can be leveraged for the benefit of lower-income countries.



Success Stories

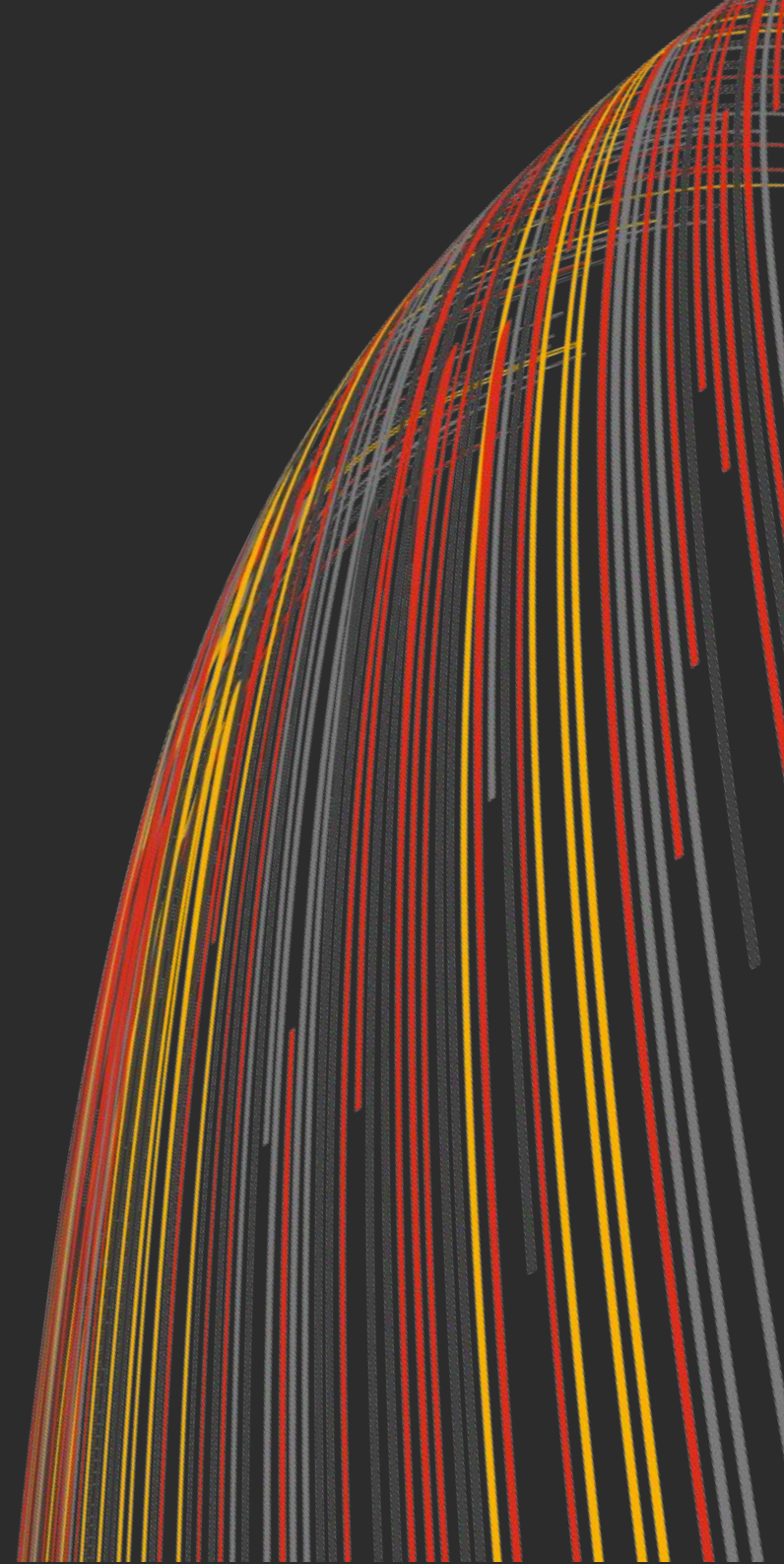
Though digital gaps in the region remain, there have been various collaborative efforts between governments, private sector companies and civil society across MENA to take active steps towards bridging the digital divide.

The Ministry of Communications and Information Technology (MCIT) in Egypt rolled out a medium-term strategy to grow the digital economy in 2016. The four-year strategy focused on building the ICT sector's legal framework; expanding mobile, Internet and government network infrastructure; developing IT-related jobs and growing sector exports. Egypt significantly improved accessibility and enhanced infrastructure in mobile data availability and coverage and enhanced affordability through market competition between rival telcos. This represented a massive step forward in digital inclusion and accessibility, which paved the way for MCIT Egypt to unveil its Digital Egypt Strategy in 2020 to further ramp up the digital economy.

Other initiatives have focused on building resources to update citizens on the spread of the virus to ensure citizens' right to access information. In Tunisia, students were granted free access to educational platforms, and the Ministry of Education instead broadcast courses on national television. The government provided children from low-income families with laptops and an Internet connection.

Morocco focused its digital inclusion efforts on financial services, receiving an OPEC fund of \$100million to implement reforms to provide households and firms with affordable, transparent and sustainable digital financial services and build an inclusive financial sector as part of broader efforts to modernise the economy and support the Kingdom's recovery from the COVID-19 pandemic.

As ever, the GCC countries remain at the forefront of digital inclusion initiatives driven by digital government services focused on the user. Data suggests that the strong adoption of digital government services in GCC may be driven by citizens' high satisfaction rate and high trust in digital government services.



Conclusion

As technological innovation inspires more intelligent and automated societies, governments have also shifted towards digital governments leveraging digital technologies to improve their services and the lives of their citizens. While this has brought greater convenience and efficiency, it has also created a “Digital Gap” due to unequal access to digital technologies, whether due to differences in skills, connectivity or digital literacy. In the MENA region, these digital discrepancies are especially pronounced given the cultural and financial diversity of the region.

The GCC countries are diving into the digital age with intentional and well-calculated digital transformation strategies that have accounted for digital inclusion in many ways. While challenges with the inclusion of low-income groups and the elderly continue to persist in the GCC and globally, the GCC governments are making strides in bridging the digital gap to accelerate their digital transformations. Middle-income and lower-income countries face larger challenges of access, affordability, skills gaps, culture barriers and lack of digital trust.

In contrast to middle-income countries where the main barriers to digital inclusion are limited digital training, cultural factors, fears over Internet safety and the absence of proper legislation, the low-income and conflict countries face more basic challenges of Internet connectivity and affordability of devices as well as the added factor of the psychological effects of the misuse of digital technologies by warring parties.

Various regional efforts have been made to promote digital inclusion, and further initiatives should be focused on training, connectivity and legislation. The MENA region has yet to unleash its full potential, and a regional collaboration between digital government leaders across MENA to tackle digital inclusion barriers and bridge the digital gap between the high-income and low-income countries of the region would benefit the entire region and ensure it unlocks this potential.



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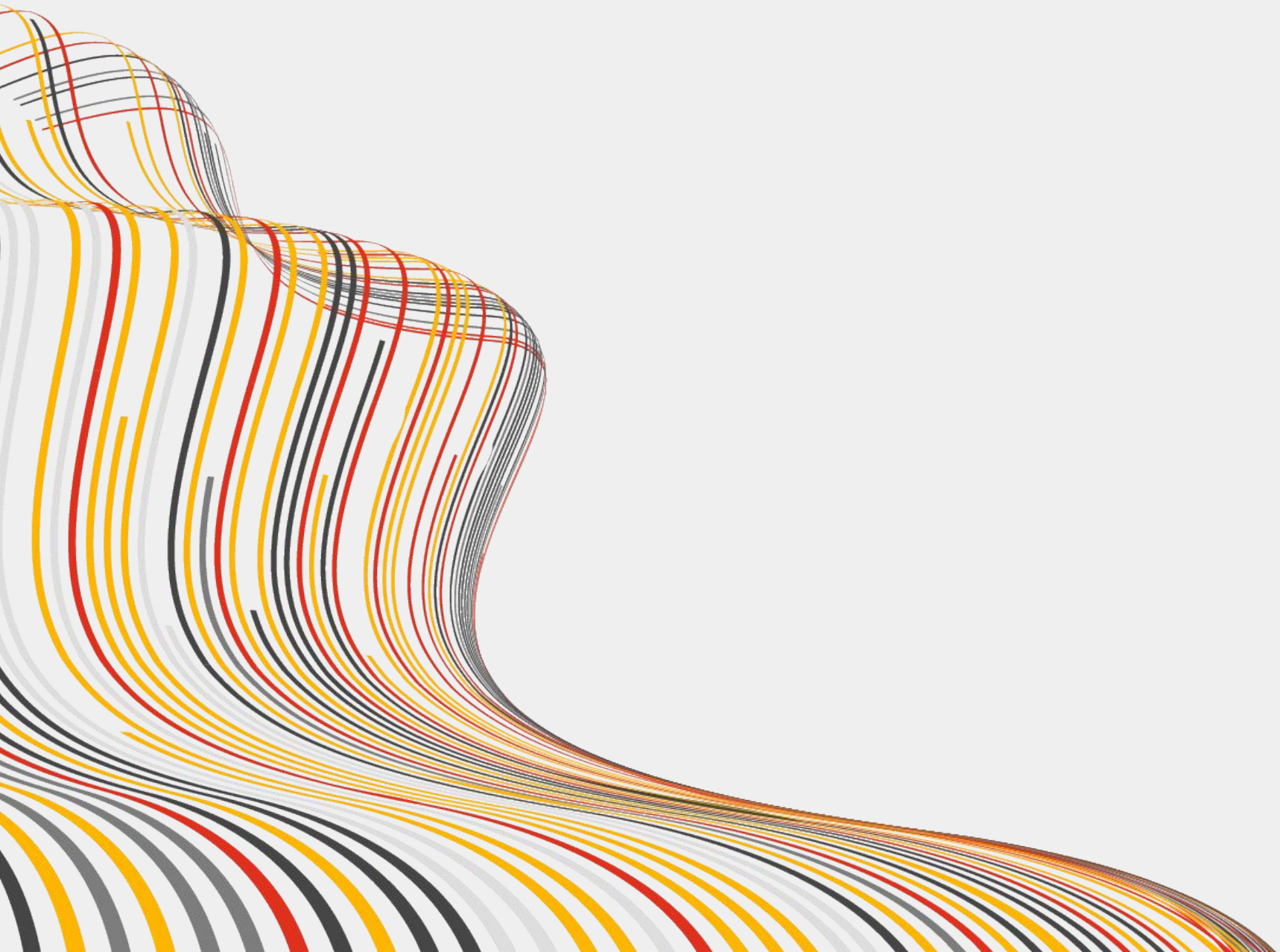
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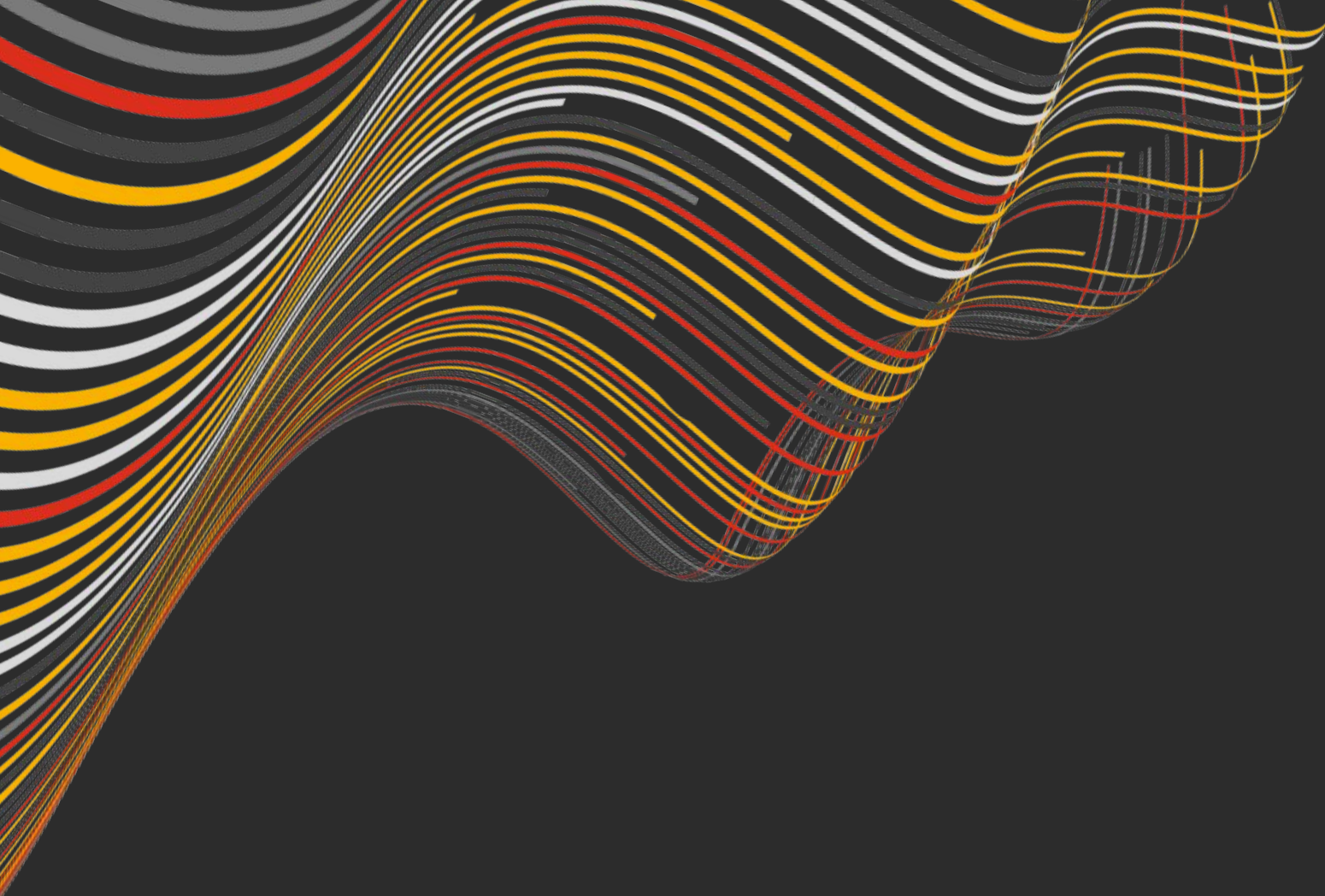
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