
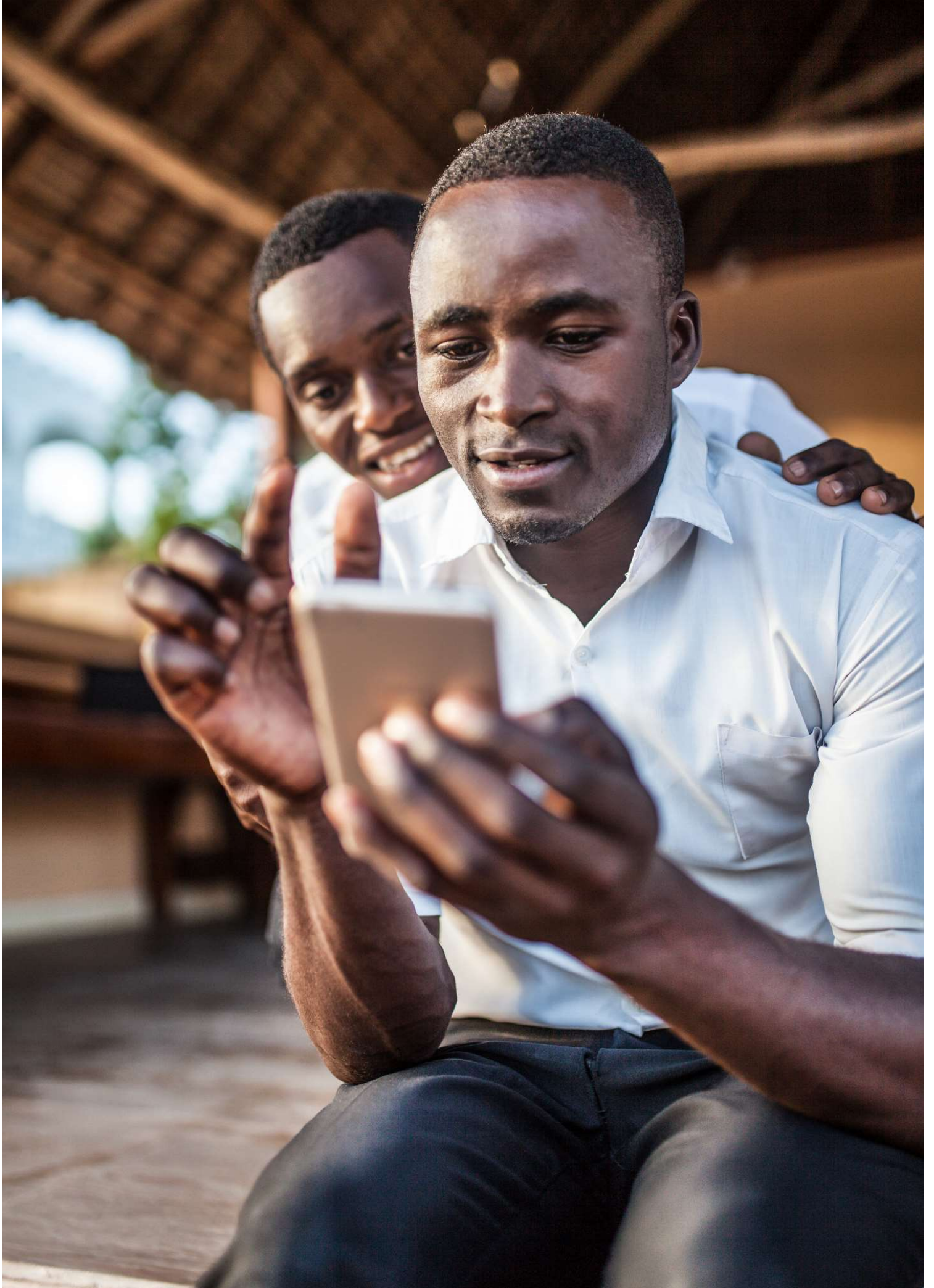




## Synopsis

Nearly half the planet remains unconnected at a time when COVID-19 has forced people's reliance on the Internet and digital technologies higher than ever before. Bridging the digital divide to provide mobile Internet access – the main driver of digital inclusion – is exceedingly important in the current context. Overcoming this connectivity crisis represents a growth opportunity for Mobile Network Operators (MNO) to expand their services outside of the crowded, highly competitive urban markets. But, even with mobile backhaul over satellite solutions readily available, which can offer a lower-cost solution than terrestrial and microwave expansion, this is no simple task. MNOs still face major CAPEX and OPEX investments and specialized network expertise to extend their network reach into remote and rural areas to gain new subscribers. At the same time, they have to contend with risks associated with the usage gap, where people are restricted from the Internet because of financial, awareness, literacy and digital skill factors among others. Going after price-sensitive subscribers scattered across often expansive areas is challenging even before consideration of the network demands. These remote users want the Internet not just for voice, but increasingly for data-explosive applications such as video and social media. Considering the deployment costs against expected revenues, MNOs need quality solutions that are reliable and affordable in equal measure. This is exactly what Comtech EF Data is now able to provide. This shortlist will enable MNOs to cost-effectively extend their network reach.





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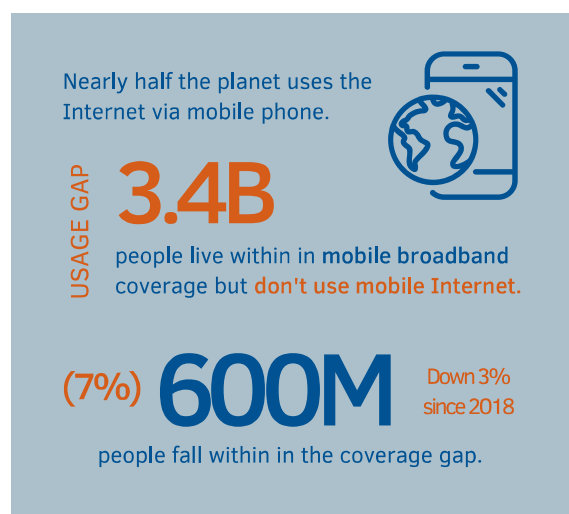
Social distancing and working remotely have been dubbed as “the new normal” but we are in an extraordinary point in time. Before the COVID-19 backdrop, there are numerous restrictions to everyday life, and new ways of doing things have emerged. The way we work, live and play has changed, and supporting this change is the Internet. The world is more reliant on the use of digital technologies than ever before, and the challenges facing MNOs are front and center.

Billions of people around the world now operate almost exclusively in the digital realm. Due to lockdowns or by choice, people use the Internet to work remotely, connect with friends and family, access academic instruction and avail healthcare. These activities together with usage trends, from mobile banking and mobile commerce to mobile social and mobile media, make it clear: Mobile is not a convenience but an indispensable lifeline.

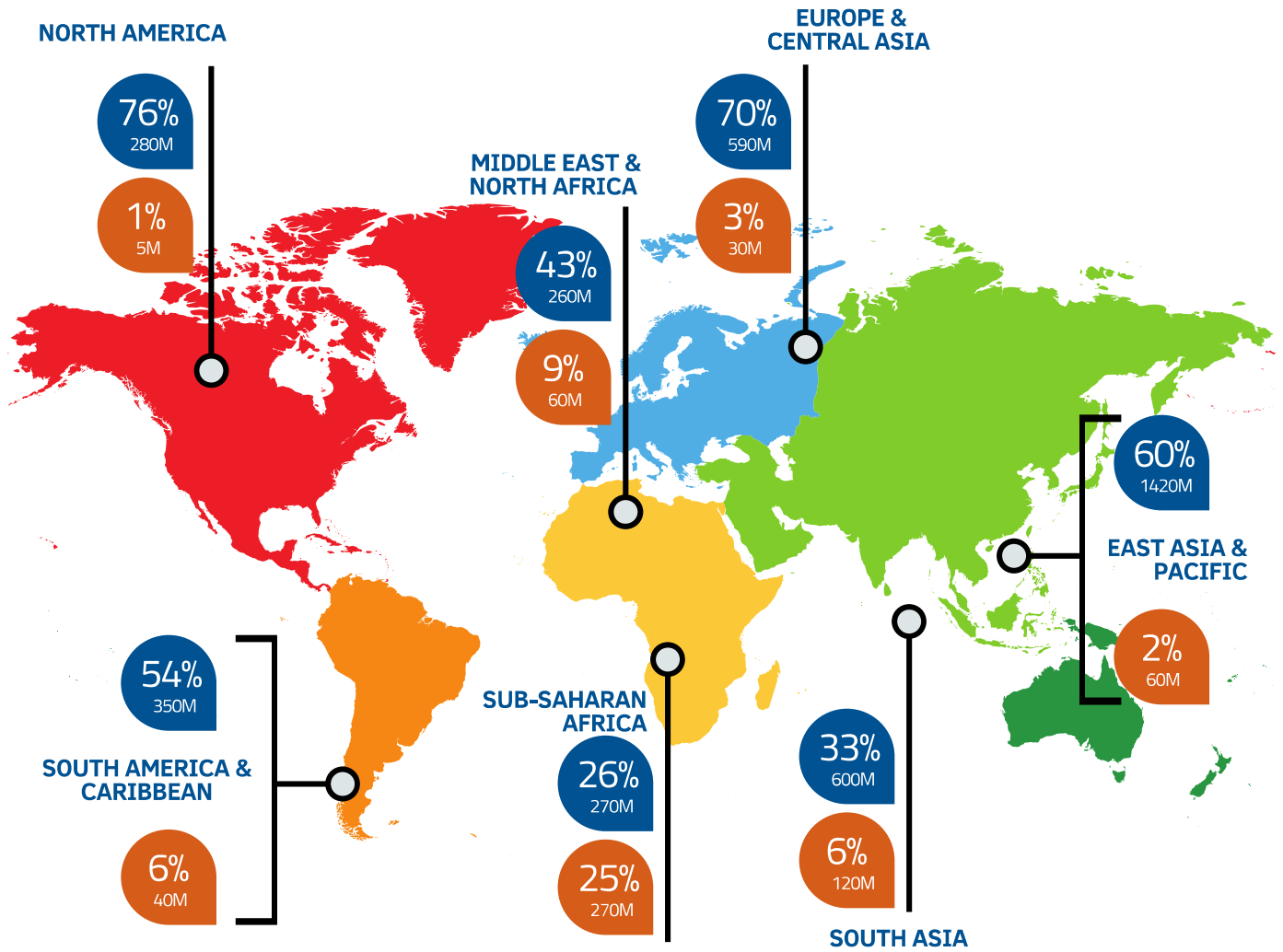
There are approximately 3.8 billion mobile Internet users, a number that is almost half of the world population. While MNOs have to contend with this half’s surging data traffic and prove network resilience, they are also faced with the question: What about the rest of the planet? What about the other 4 billion? Bridging the digital divide to provide mobile Internet access is exceedingly important in the current context. And here, the burden that MNOs carry is made even heavier. Even with mobile backhaul over satellite solutions readily available, which can offer a lower-cost solution than terrestrial and microwave expansion, this is still no simple task. MNOs typically face major CAPEX and OPEX investments and specialized network expertise to extend their network reach into remote and rural areas to bring the unconnected online.

The unconnected world can be viewed with two lenses: The “coverage gap” and the “usage gap”. The first; the people who live outside of the areas covered by mobile broadband networks. The latter; those who are restricted from the Internet not because they’re located too far from a base station, but for economic, literacy, digital skill, awareness and content relevance factors to name but a few. This means that those within the usage gap have coverage, but still don’t connect to the Internet. This unconnected world comprises approximately 3.4 billion people within the usage gap, and just under 600 million people within the coverage gap. Therefore, the usage gap is six times larger than the coverage gap.

While the usage gap is expected to close over time, the coverage gap continues to narrow at a greater rate. Currently, the 600 million represent 7%, down from 10% in 2018 when some 750 million people within the coverage gap were left unable to connect. A significant portion of this growth in coverage is attributable to South Asia, most notably India, where around 99% of the population has 4G coverage, and Sub-Saharan Africa, where 2G sites have been upgraded to 3G and 4G.



# Connected Vs. Coverage Gap



## Global Figures

49%  
3.8B

Online

7%  
600M

Coverage Gap

Base is the total population.  
Sum of totals does not reach 100%  
as usage gap is not included.  
Source: GSMA Intelligence

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## Economics is Key

The growth in mobile Internet use is encouraging. Since 2015, 1 billion people have gained access to the Internet via a mobile phone, showing that mobile continues to accelerate digital inclusion, and helping to tilt the scale close to the halfway mark of the world population seen today. But, when looking back to the unconnected world, there is a third and very important lens: Socio-economics.

The fact that the unconnected tend to be poorer, typically have lower levels of education and many live in rural areas make this challenge increasingly difficult.

Of all the barriers to mobile Internet use in low- and middle-income countries, the biggest barrier is affordability. If MNOs are not able to overcome the challenge of extending their network reach in an economically viable manner, it means that more than 40% of the population in low- and middle-income countries will remain unconnected in 2025, based on the growth rates achieved since 2015.

