

Report summary

IoT for Development: Use cases delivering impact

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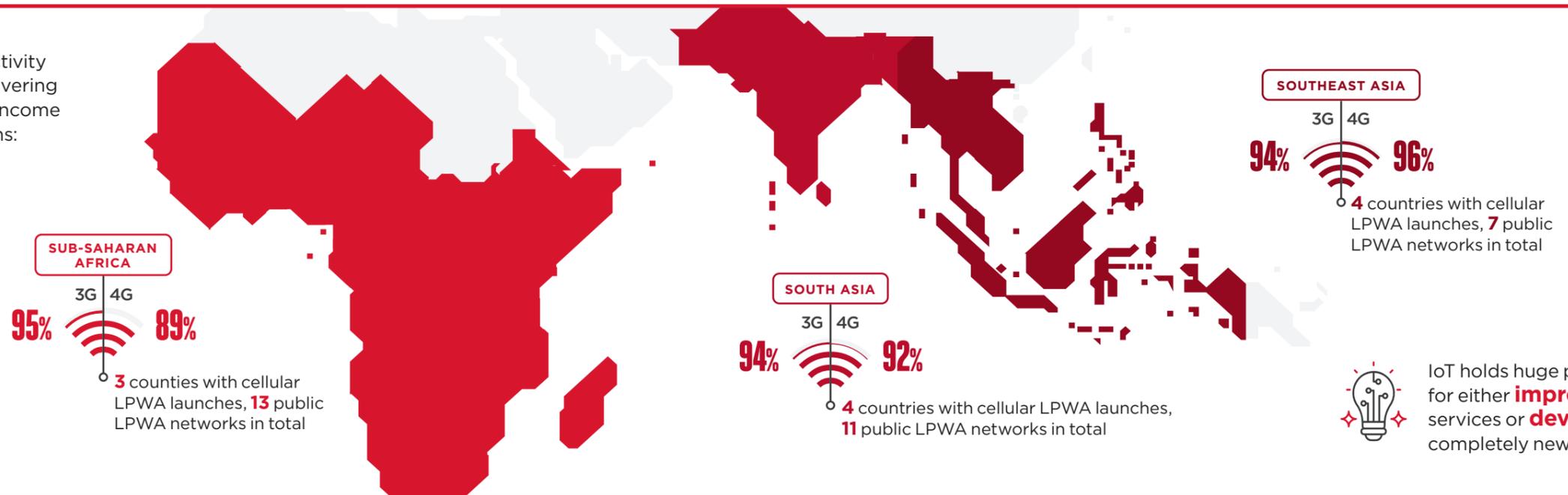
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GSMA Digital Utilities
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 The report examines the connectivity landscape and IoT use cases delivering impact across low- and middle-income countries (LMICs) in three regions:

 To highlight the opportunity, we discuss **10 purposively selected use cases** delivering development impact, drawing attention to the differing requirements of use cases and the organisations breaking ground in the ecosystem.



 IoT holds huge potential for either **improving** services or **developing** completely new ones.

2021 — — — — —  2030

GSMAi estimate that the total number of **IoT connections** will more than double between 2021 and 2030, reaching:

37.4bn **156m** cellular IoT connections

The IoT market in the focus regions will gather momentum across the next decade.

Cellular IoT connections across sub-Saharan Africa and South and Southeast Asia will more than double between 2021 and 2030, reaching:

A major trend for the coming decade is that enterprise IoT will overtake consumer IoT in terms of number of connections.

The role of IoT for development can be seen across **multiple use cases**.

IoT has the potential to tackle global challenges such as **climate change**, and address region-wide challenges in key sectors including **agriculture, energy, health and transportation**.



The use case analysis in this report shows that a wide range of sensing and actuating **devices, gateways and cameras** are present.



Accelerating adoption requires **collaboration** across the **ecosystem**.



Policy makers and regulators have a central role, and IoT use cases cannot gain traction without regulatory certainty and the support of national institutions.



Mobile operators can benefit from focusing on specific verticals, and for many strategic partnerships will also be critical to success. Operators should focus on adopting an appropriate pricing model across services.



Donor funding plays a catalytic role in spurring IoT innovation. Additionally, development actors can unite the ecosystem through brokering relationships and investing in long-term programmes.



The next decade offers enormous **opportunity to test and scale** innovative IoT solutions.



Enterprises and service providers should be clear about the outcomes sought, and how IoT deployments fit in business models. Service providers also have a role in educating users and building trust.



Financing partners need to take a long term view and innovate. Nascent innovations require patient capital to develop, and new technologies are creating new and innovative options for financing.



Hardware providers can develop joint go-to-market strategies with partners, designing with longevity at heart and adopting strong security hygiene.

The IoT market in LMICs is evolving to provide a rich array of **connectivity technologies**.



Low-power wide area (LPWA) networks will grow even faster, with compound annual growth rates of between:

32%-63%





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