Digital and Green Economy Transformation

Shaping the Future of the Financial Sector

Rahul Shah | 30 May 2022

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The GSMA
UNITES
the mobile industry
unlocking the power of connectivity, so that people, industry and society thrive

The GSMA in numbers

1987
The GSMA was founded

5.2bn+
unique mobile subscribers

2016
we're the first sector to commit to the UN Sustainable Development Goals

$600bn
annual 5G contribution to global economy in 10 years

75%
of the global fixed broadband market is represented by GSMA members

1.2bn
mobile money accounts

Connecting **23,000** experts through InfoCentre2 – our online community for members

10.1bn+
cellular connections worldwide (including IoT)

Nearly **200,000** attendees worldwide come to our MWC and Mobile 360 Series events

30m data points included in GSMA Intelligence's database

100m+
lives impacted through Mobile for Development

GSMA Membership:

750+
mobile operators

400
companies in the broader ecosystem

Over **600** meetings in the past year amongst the GSMA Working Groups

2.7m
visitors to MobileWorldLive.com

GSMA Services for Handset Insurance

Our high-accuracy TAC / IMEI mobile device data delivers

Fast and accurate mobile device identification and valuation to enable efficient new policy issuance

The ability to detect stolen and counterfeit devices to prevent fraudulent claims

Detailed device attribute checks to speed up claims, and repair and recycling operations. Analyse trends for business planning

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Mobile for Development

Driving innovation in digital technology to reduce inequalities in our world

OUR TEAM OF EXPERTS FOCUS ON 4 KEY THEMES

DIGITAL INCLUSION

Unlocking the power of mobile internet

FINANCIAL INCLUSION

Accelerating the development of an inclusive and innovative digital financial ecosystem

RESILIENCE TO CLIMATE CHANGE

Supporting climate change mitigation, adaptation and resilience strategies

HUMANITARIAN RESPONSE

Accelerating the delivery and impact of digital humanitarian assistance

Mobile for Development
programmes have impacted
100+
MILLION
LIVES

Digital Landscape in Indonesia

Mobile connectivity in Indonesia and regional peers

	Subscribers		Connections					
Country	Unique	% mobile internet	Total	% smartphone	% 2G	% 3G	% 4G	% 5G
Indonesia	18,47,90,014	83%	36,71,08,232	80%	6%	17%	76%	0%
Malaysia	2,65,25,580	85%	4,24,86,716	89%	3%	6%	91%	0%
Philippines	7,39,29,999	79%	15,86,76,180	84%	3%	53%	43%	1%
Bangladesh	9,18,84,344	57%	17,87,23,247	47%	43%	21%	36%	0%
India	75,24,00,982	70%	1,10,30,16,426	73%	28%	5%	68%	0%
Pakistan	9,66,34,342	70%	18,73,41,253	57%	43%	10%	48%	0%

Source: GSMA Intelligence, Q4 2021

- Mobile internet penetration and smartphone penetration in SE Asian countries is significantly higher than in South Asian countries
- 2G has almost disappeared from SE Asia but remains significant in South Asia

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Mobile Money in Indonesia and regional peers

Country	Prevalence	Number of services
Indonesia	Medium	11
Malaysia	Low	2
Philippines	High	4
Bangladesh	High	13
India	Low	7
Pakistan	Medium	5

Source: GSMA Mobile Money Metrics 2021

- Prevalence Index is a composite index that considers mobile money adoption, activity and accessibility at country level in order to facilitate comparisons between markets.

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Partnership Models for Mobile-Enabled Insurance

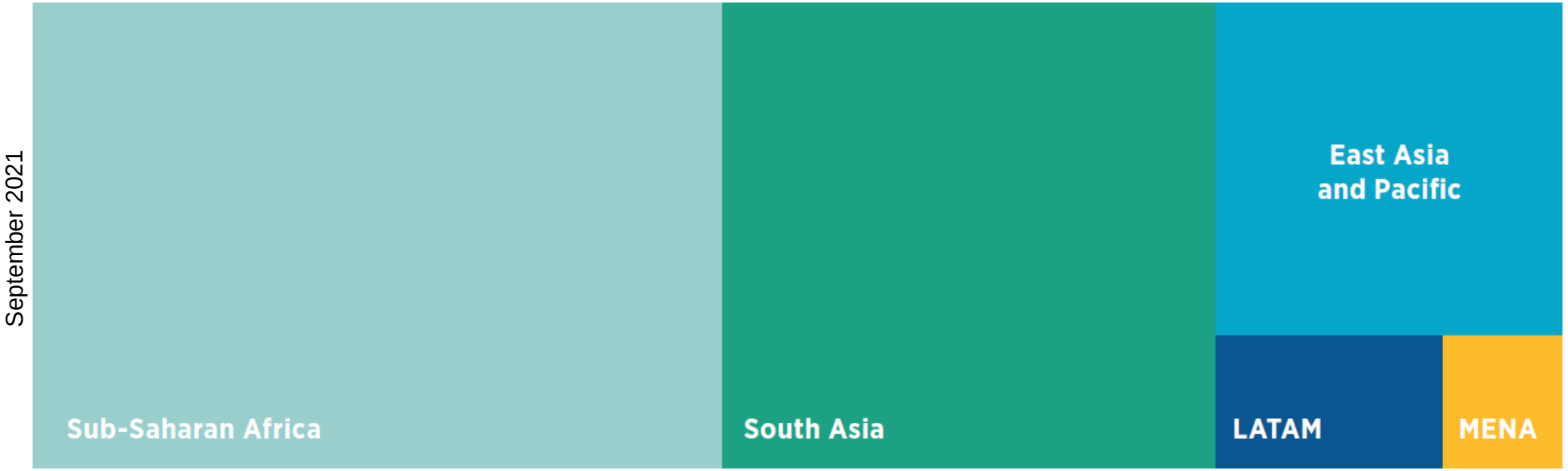
Mobile–Enabled Insurance Services Have Grown

28 COUNTRIES

135
SERVICES

43MN
POLICIES

Global spread of live mobile-enabled insurance services



- 135 mobile-enabled insurance services in 28 countries. Over 43 million policies have been issued
- While these services have seen growth in Sub-Saharan Africa and South Asia, mobile-enabled insurance products remain nascent across Latin America and the Caribbean, and the Middle East and North Africa

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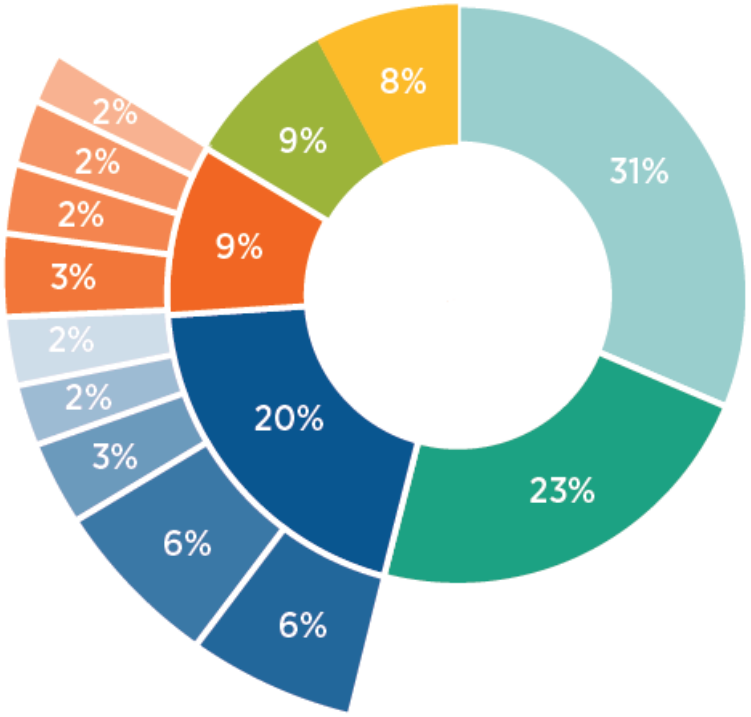
Breakdown of mobile-enabled insurance services by policy type



- Life/funeral insurance
- Health/hospital insurance
- Combination
- Other
- Accident/disability insurance
- Agri/crop/weather insurance

- Life and health
- Life and accident
- Life, disability, hospital
- Death and disability
- Other combinations
- Vehicle insurance
- Home insurance
- Loss of income compensation
- Education

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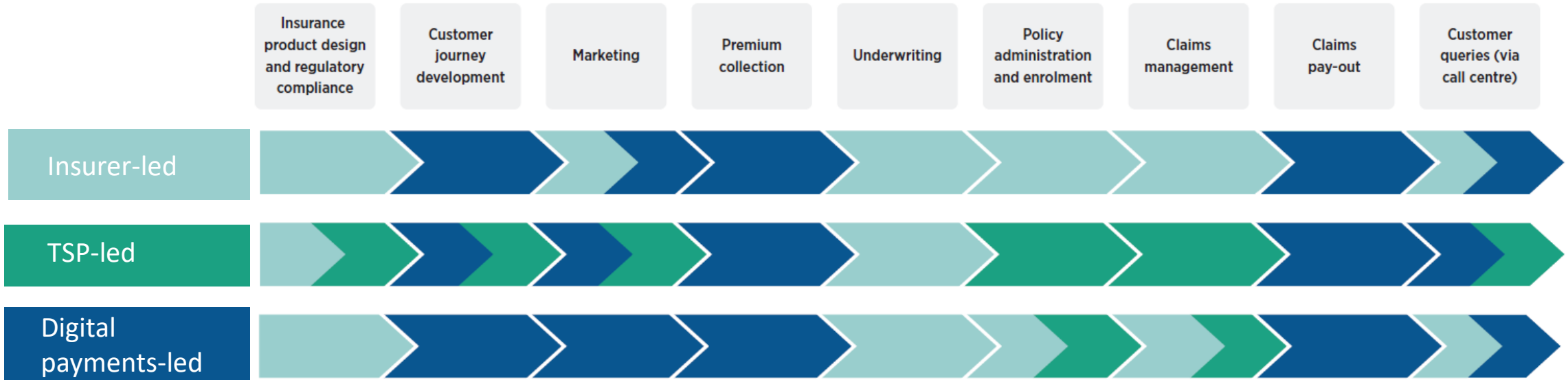
Insurance value chain responsibilities by operational model



As the inclusive insurance industry sector has evolved, the technical service provider (TSP)-led partnership approach has proved popular in providing mobile-enabled insurance. 58 per cent of mobile-enabled insurance services involve a TSP.

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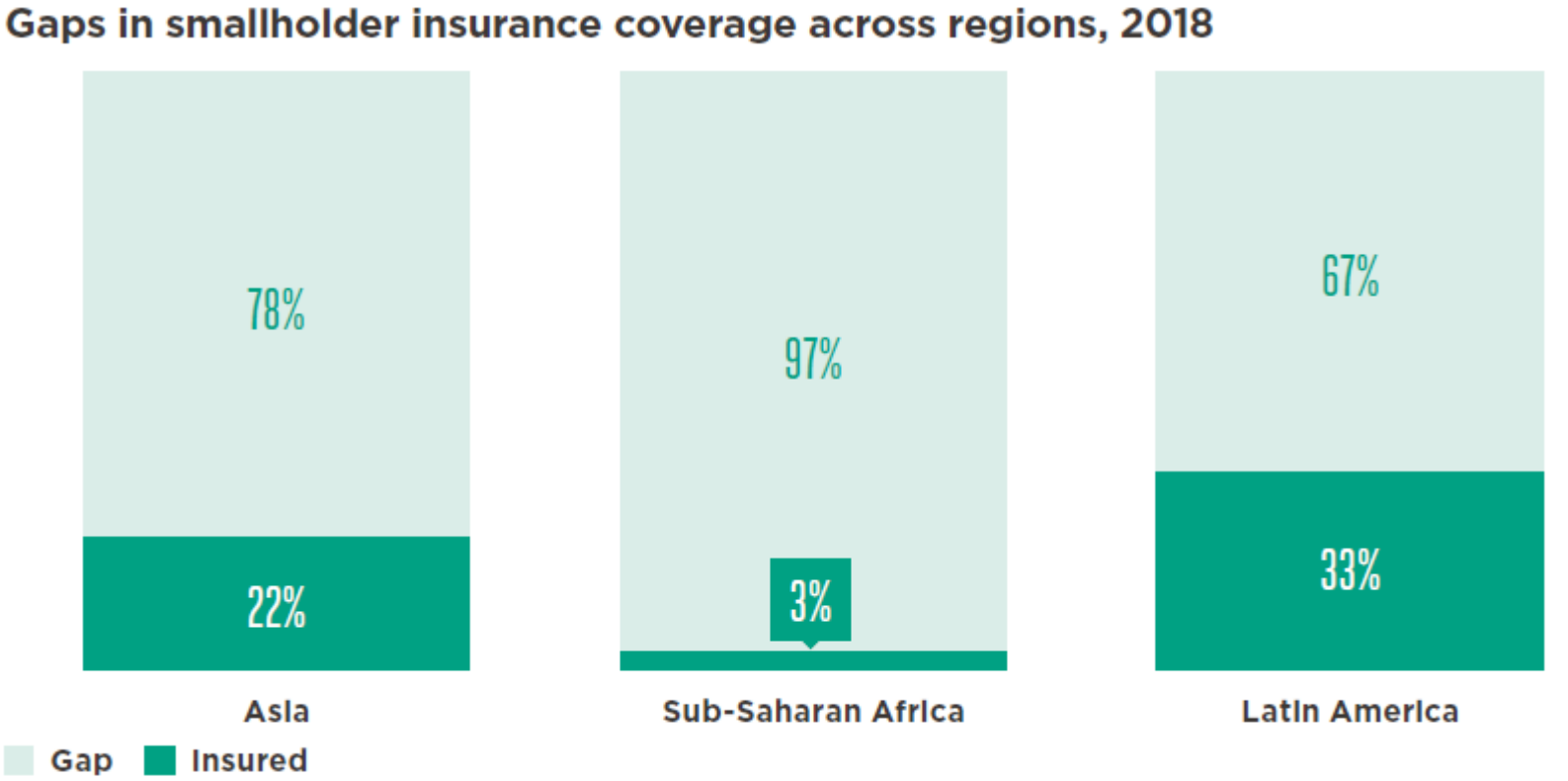
Agri Insurance for Smallholder Farmers

Digital Innovations for Scale

Less than 20% of farmers globally have insurance to cover against the impact of unforeseen shocks



Source: ISF Advisors (2018), *Protecting growing prosperity.*

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Farmers are unable to access indemnity-based services that require farm-level loss assessments

Demand- and supply-side barriers to the uptake of agricultural insurance

Demand-side barriers	Supply-side barriers
Low awareness of insurance	Insurance services for smallholder farmers can be costly and complicated to design
Low trust in the provider and the chance of receiving a payout	Distribution and operations: smallholder farmers are expensive customers to acquire and serve
Poor understanding of how insurance works	Low profitability potential due to low premiums
High cost of premiums and lack of government subsidy	Difficult to provide some policies without government support and subsidies
Difficult to register and claim, which requires travelling to a nearby town	
The insurance cover on offer is not needs-specific	

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Index insurance has overcome some of the challenges of indemnity-based models

Characteristics of different types of agricultural insurance

	Set-up costs	Operational costs	Claim settlement speed	Risk of moral hazard and adverse selection	Basis risk	Actuarial difficulty
Indemnity-based	Medium	High	Slow	High	Low	Low
Area-yield index	Low	Medium	Slow	Low	Low	Low
Weather index	High	Low	Fast	Low	High	High

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Mobile networks can be used to observe rainfall events by monitoring fluctuations in signal strength

Characteristics of CML rainfall observations

- Measure rainfall between signal transmitter and receiver along commercial microwave links (CMLs)
- Algorithms convert reductions in signal strength into rainfall intensity
- Rainfall is interpolated onto a spatial grid of 1km^2 or less
- CML data can be extracted at intervals of as little as 1 second

source: identim/Shutterstock

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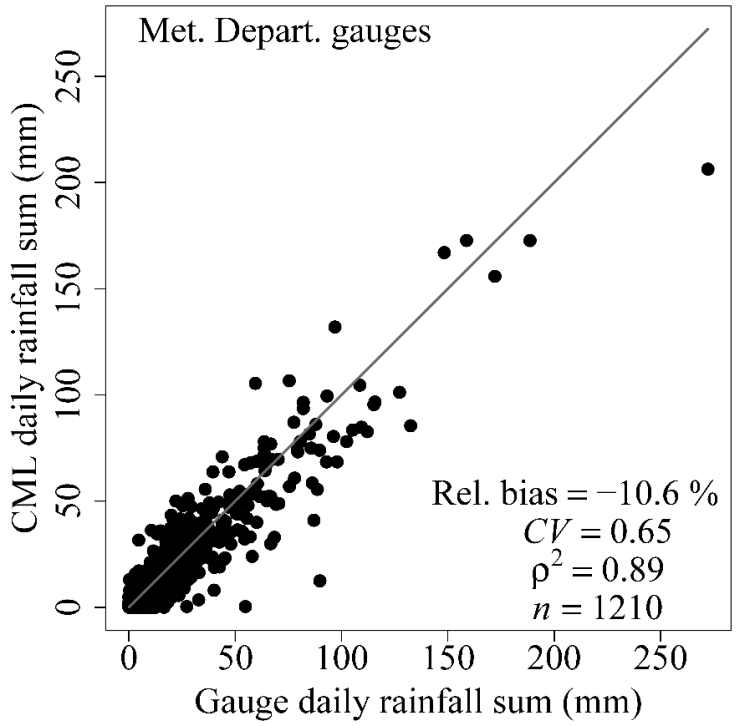
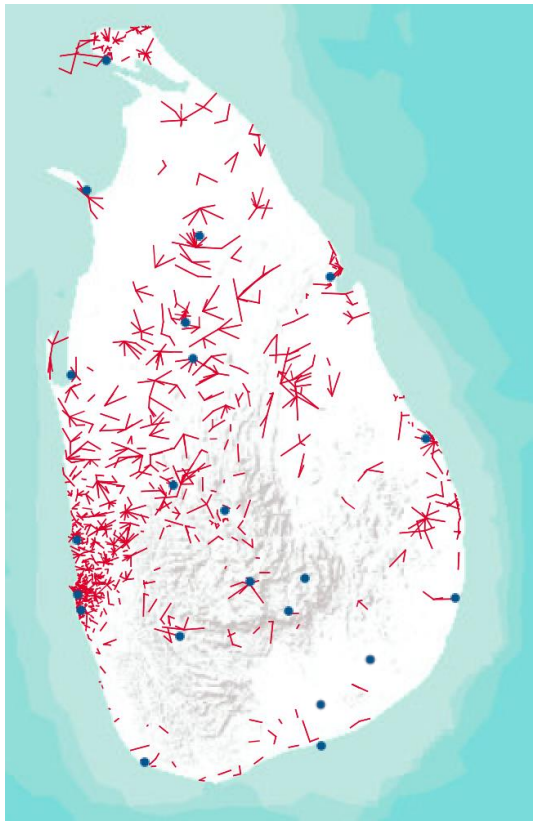
CMLs provide more extensive and very reliable data compared to automated weather stations

Comparison to rain gauges MD (nearest CML on average < 5 km)[1]
Data collected 12 Sep – 31 Dec 2019



CML vs. rain gauge distribution, Sri Lanka



CMLs, Dialog

Rain gauge, Sri Lanka Department of Meteorology

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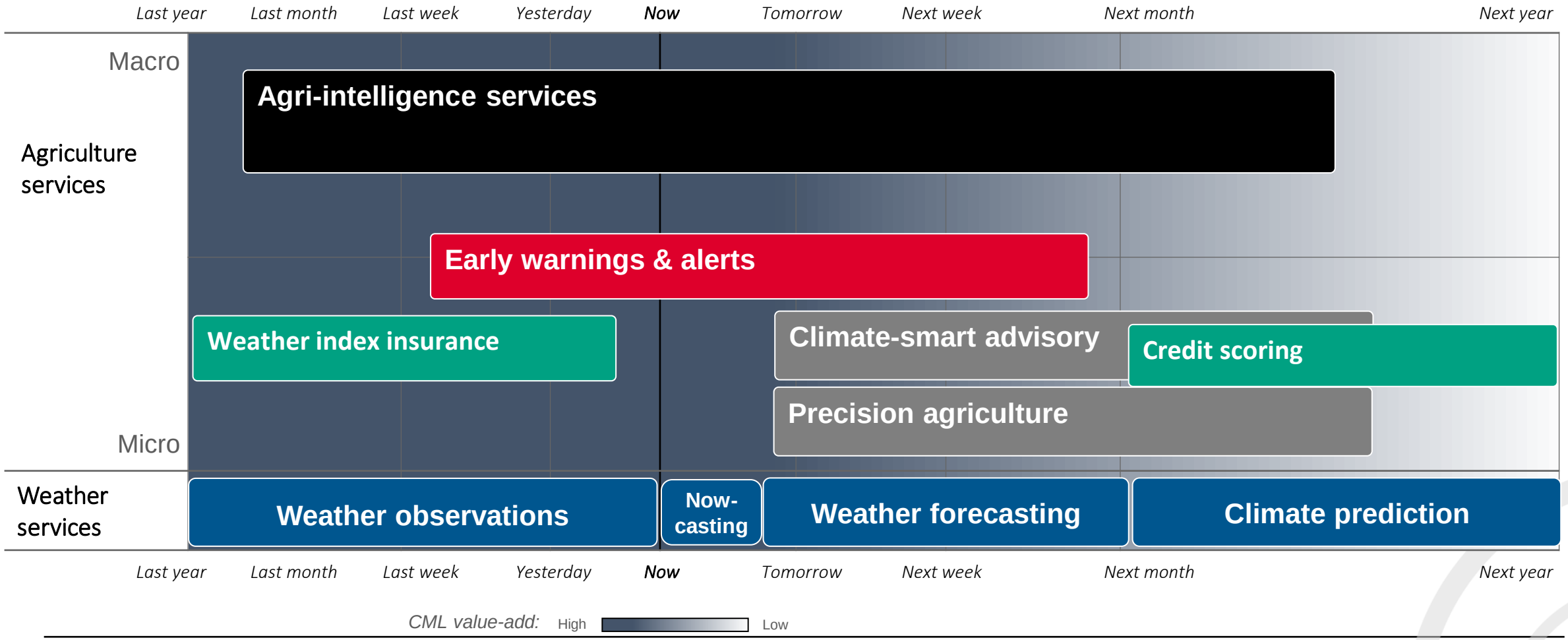
CML data can support weather and agricultural services covering a range of applications



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The Mobile Innovation Hub Indonesia

Driving the Green and Digital Twin Transition

Why Indonesia?

- Mobile technologies are transforming Indonesia into the largest and fastest growing digital economy in the region.
- Powerhouse of digital economy in ASEAN. In 2020, local start-ups raised nearly $6 billion, large tickets going to sectors like e-commerce, fintech, edtech, and SaaS companies
- However, it is confronted by significant climate issues
- Top-third of countries in terms of climate risk and home to a large population with high exposure to multiple types of climate hazards
- Indonesia regularly among to top 10 CO_2 emitting countries
- President of G20

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The Mobile Innovation Hub Indonesia

The hub will become an essential part of the GIZ Digital Transformation Centre in Indonesia. It supports Indonesia's efforts to unlock the power of digital technology to achieve sustainable, low-carbon and climate-resilient development outcomes.

Areas of Collaboration

Sustainable energy and green economic development

Digitisation of waste management (with a focus on plastic recycling and e-waste)

Natural resource management (NRM)

Duration: January 2022 - June 2023

Key activities

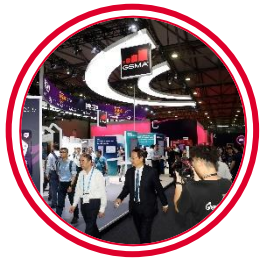
The Mobile Innovation Hub will bring together central agency, city government, local innovators, startup and MNOs and other key stakeholders to work on areas that sit at the intersection of mobile, digital innovation, sustainable development, and climate action.

Landscaping study and insights documentation

Workshop and cross-sector dialogue

Active dialogue on climate role in Indonesia

Piloting and scaling of solutions



Showcasing efforts of Indonesian mobile ecosystem

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THANK YOU

APPENDIX

Links to reports

- Download the “Partnership models for mobile-enabled insurance” report here
- Download the “Agricultural insurance for smallholder farmers: Digital innovations for scale” report here
- Download the “Digital Innovation for Climate-Resilient Agriculture” report here

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Key Features and Benefits of GSMA Device Data for Insurance

Representing the worldwide mobile communications industry, the GSMA is the source of all device identifiers which support each mobile device across all GSM networks globally.

Global Reach

Contributed by over 120 mobile operators and hundreds of commercial, regulatory and law enforcement organisations around the world, our data is easy to access, always up-to-date and 100% accurate.

Device Valuation

Instantly identify the make, model, age, capabilities, and thus the value of a device, before insuring it.

Identify Stolen or Fraudulent Devices

View up to 10 years of a device's history to see if it has been reported as lost or stolen. Check to see if it is a fraudulent or counterfeit device.

Streamline your Processes

Onboard new device insurance customers efficiently and accurately. Resolve claims quickly and smoothly, while protecting your business against fraudulent claims.

Customer Success Story

An Asian insurance company uses the highly-accurate GSMA TAC data to quickly and easily match the IMEI of the customer's device to a manufacturer and model. Find out more >

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