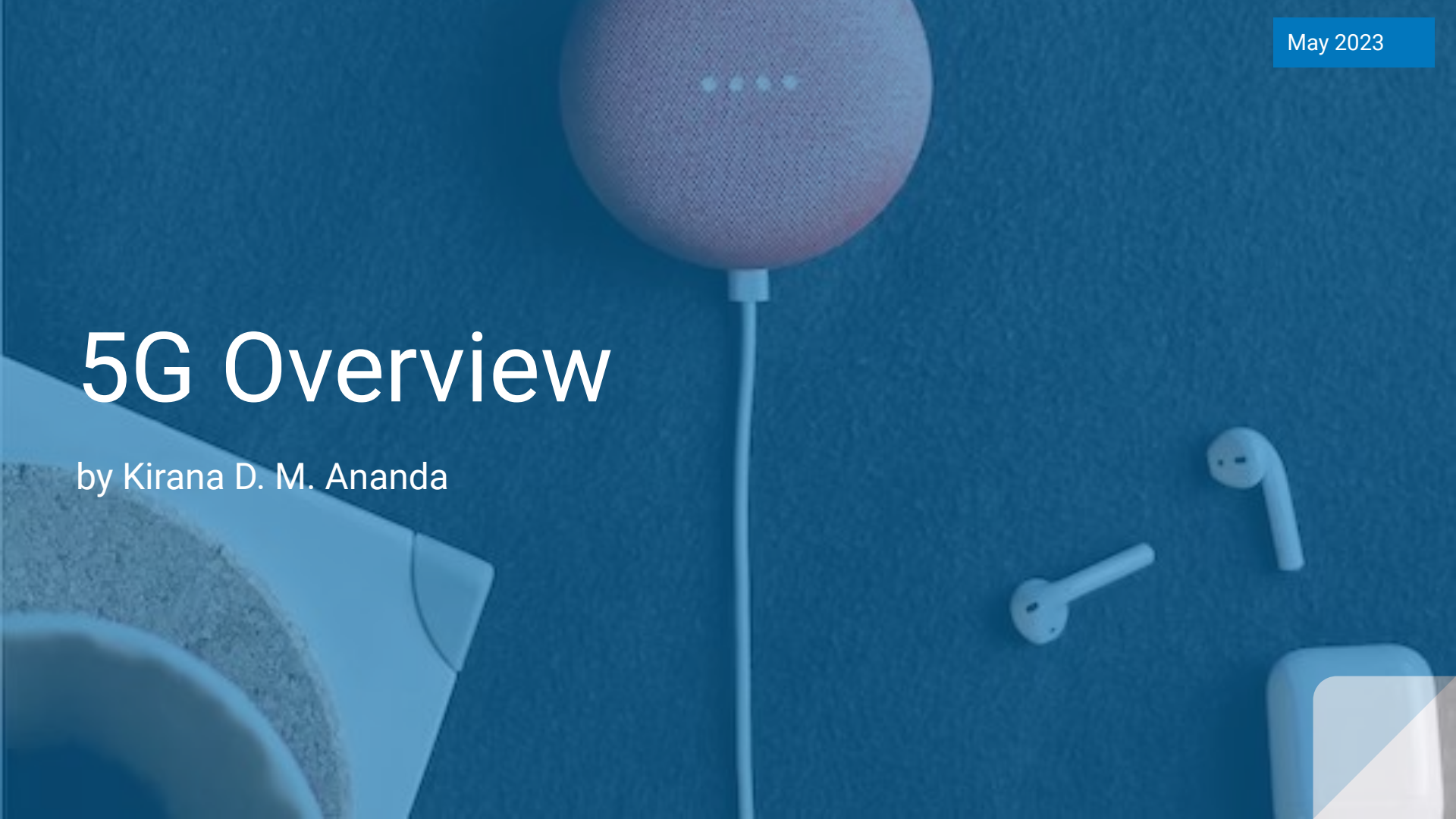


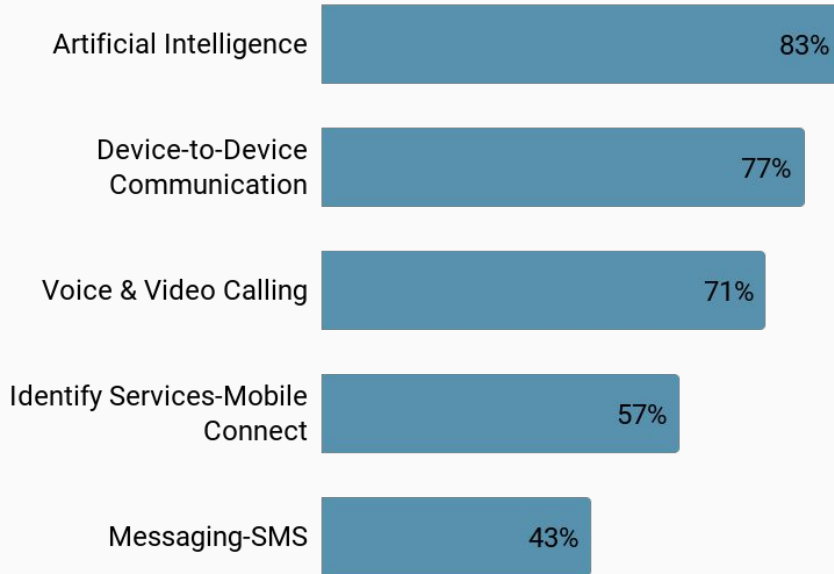
# 5G Overview

by Kirana D. M. Ananda



# How 5G affects live?

A CEO survey of possible 5G applications  
(Obiodu & Giles, 2017, as cited in Attaran, 2021)



Mainstream adoption lies in IoT.

Autonomous cars and IoT devices are expected to be major revenue drivers for 5G networks (i-SCOOP, 2018, as cited in Attaran, 2021).

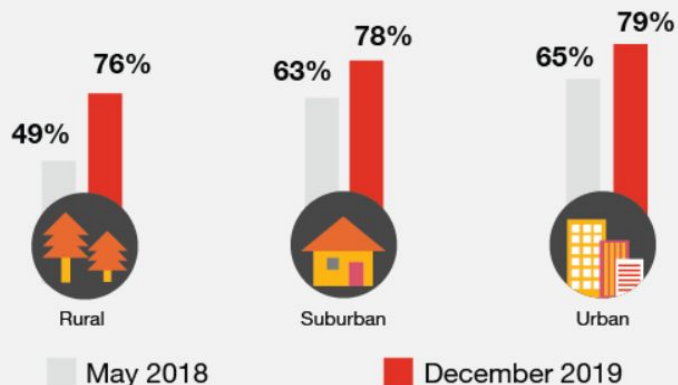


# 5G adoption so far

5G awareness nudges 80% among consumers.

## 5G awareness penetrates the far reaches

>25 point increase in rural consumer awareness



Younger men most aware, older women least aware



Q. Are you familiar with the term "5G"?

Base: 800

Source: PwC, 2019 5G Consumer Intelligence Series flash poll

# 5G adoption so far

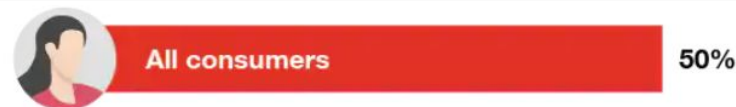
Improved mobile service excites consumers...



... while emerging tech is perceived as less exciting



They are less enthusiastic about innovations that they consider less **relevant to their daily lives**—such as drone delivery and hologram video calling.



In total, **half** of consumers are willing to pay more for 5G service. The average cost mentioned is \$15 extra per month, in addition to the cost of existing telephone service plans.

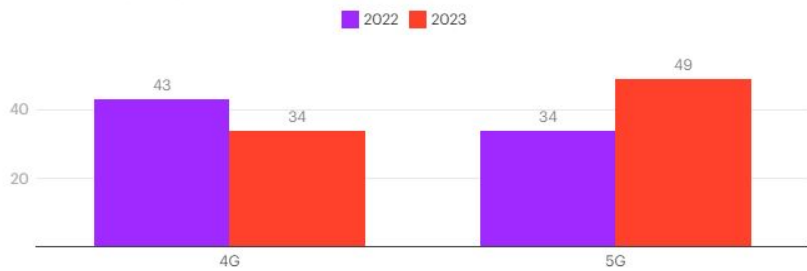
# 5G adoption so far in Telco

A recent YouGov (2023) study uncovers a fact: 5G adoption in US mobile phones has grown, but this is not necessarily followed by consumers consideration.

This implies that their update was prompted by external events such as natural device replacements or network enhancements.

## 5G data connections leapt from 34% in 2022 to 49% in 2023

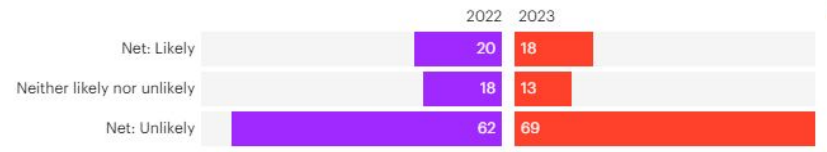
Which, if any, of the following mobile data connections is the highest your phone is capable of? If you have more than one mobile phone, please think about the one you use the most. (% of US adults who chose 4G or 5G)



YouGov  
YouGov Profiles | Apr 2022 - Apr 2023

## Consumer willingness to upgrade their phones to access 5G has fallen since 2022

How likely, or unlikely, are you to upgrade your mobile phone to be able to access 5G in the next 12 months? (% of US)

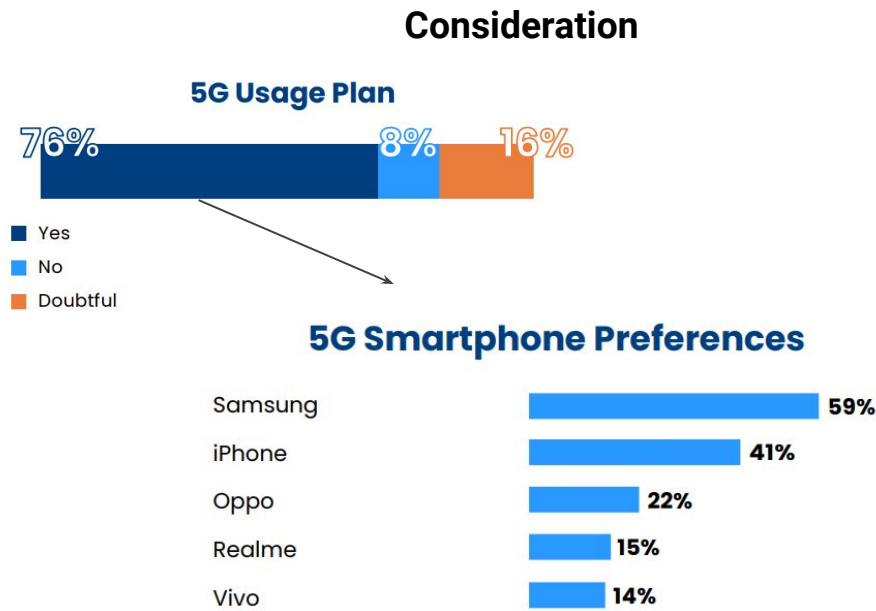
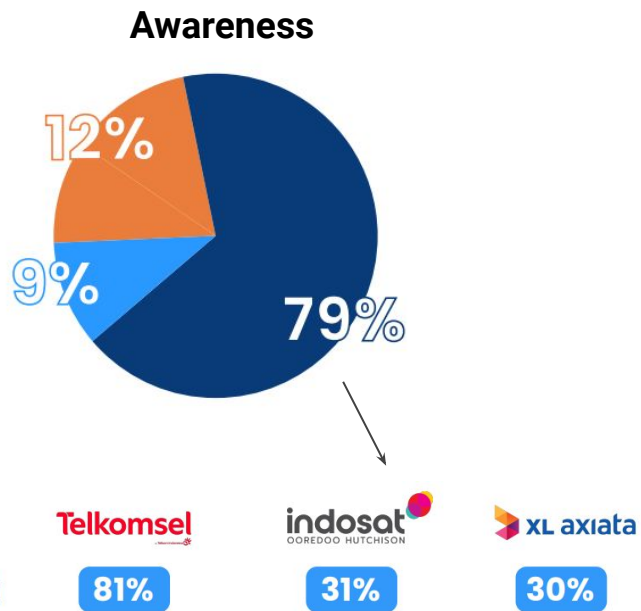


YouGov  
YouGov Profiles | Apr 2022 - Apr 2023



How about Indonesia?









# 5G adoption so far in Telco

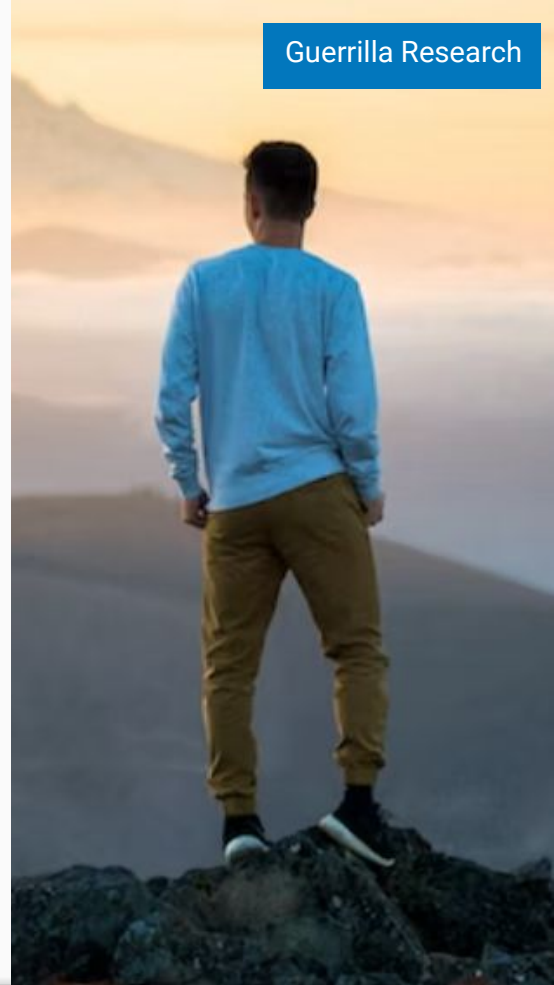
Meet Raka; he is a buyer but a lapsed user of 5G. He uses an iPhone 12 and lives in Yogyakarta.

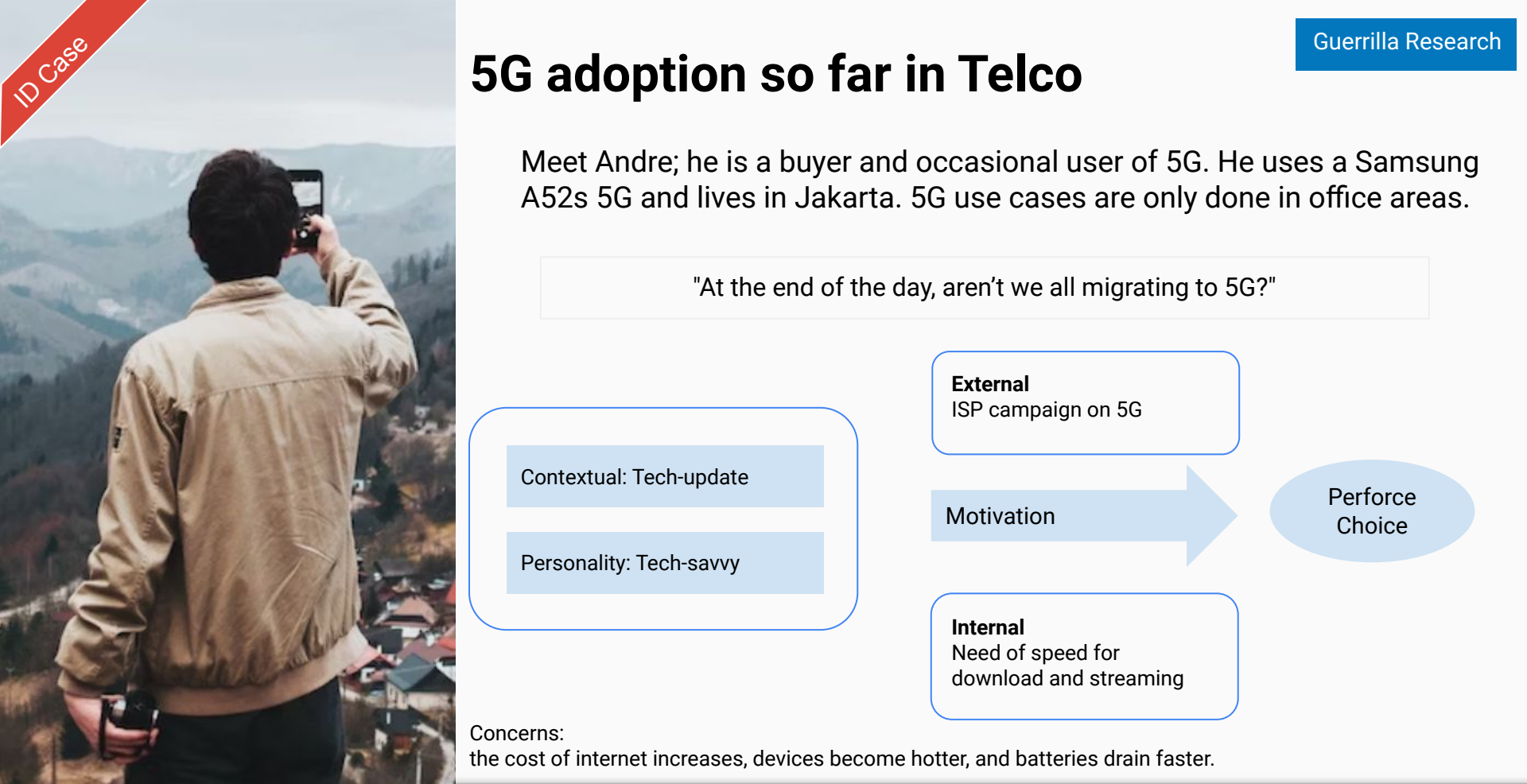
Change of importance analysis: from complementary to hygiene feature

Opportunities	Key driver
Low priorities	Hygiene

"Although I first tried due to hype, recently I saw that most cell phones support 5G. So, why not repurchase the same 5G feature as a must-have? Isn't it **industry standard**?"

Losses	Small Gains (Past Experience)
The feature is overkill; you will not get an adequate differentiator if it is only used for daily usage.	Streaming and consuming HD contents, such as FHD VOD or online meetings
The service is exclusive to certain areas only.	Online gaming





# Readiness for 5G

Interview with **Moch S. Hendrowijono**, as cited in Kompas.com (2022).

Cellular operators both **"do not want"** and **"cannot" make it happen** because the infrastructure support is not ready. However, after governments complete the digital transition of television, 5G will be on the agenda following the spectrum auction.

Interview with **Ivan Samuels**, as cited in CNN (2023).

Consider the customer experience when marketing the product: "If the customer normally uses 5G, which is faster, then using 4G may feel uncomfortable."

However, Ivan believes that the current use-case of 5G might more relate to industry automation, so B2B is more prioritized, as nodded by Telkomsel itself in a CNBC interview (2023).

# Readiness for 5G

## Operator is waiting acts from policy maker.

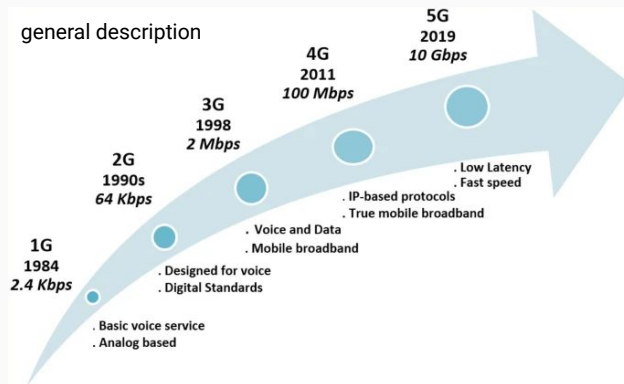
Kominfo is targeting 5G to be available nationally around 2024–2025, as cited by Telkomsel, which might be overpromising as 4G development finished in 2022 after 8 years running.

## B2C usage still has a long way to go, as 5G needs a new business model to make money.

- Gaming and VR (however, Nokia believes that this model won't be a big moneymaker.)
- Other use cases are still in development.

## Indonesia's internet speed does not reach half of the description.

Faster as a selling point: claimed to be 20x faster than 4G; might be an attraction as the current speed is 14.6–17.7 Mbps.



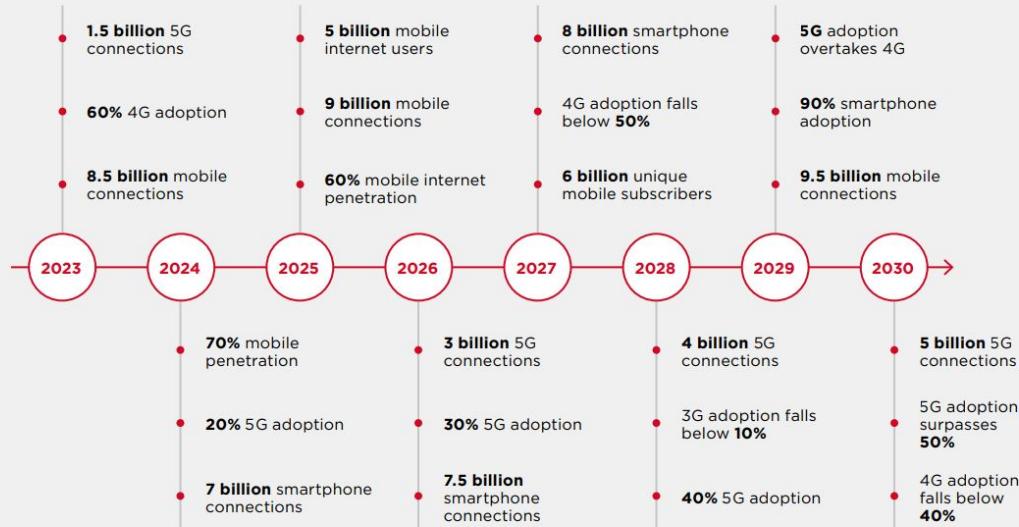
The background is a blue-tinted photograph of various electronic devices. At the top center is a round, fabric-covered smart speaker with four small indicator lights. A white cable extends from its bottom. To the right of the speaker, two white earbuds are lying on the surface. In the bottom right corner, a portion of a white smartphone is visible. The overall aesthetic is clean and modern, with a monochromatic blue color scheme.

# The Future of 5G

# 5G is forecasted positive, as consumer's outlook expects the same

## Key milestones for the mobile industry to 2030

Global



GSMA intelligence

5G Mobile Subscribers Forecast to Represent 43.5% of All Subscriptions in Indonesia by 2027 ([businesswire.com](https://www.businesswire.com))



# Way Forward

If infrastructure is nearly ready...

## **Telco brands**

People are wary of wasting use cases, so advertisements should cater to the situation in order to boost 5G relevance.

## **IoT brands**

B2C IoT would not be able to grow if 5G penetration was low. The marketing strategy must guarantee that the timing is consistent with the telecom trend.

# Thank you!

reach me at



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