

Building a Sustainable Public Private Data Partnership – Bridging the Gaps, Addressing the Challenges

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About Telkomsel

Telkomsel as a leading digital telecommunications company has always been committed to opening more opportunities and possibilities by delivering pioneer solutions in digital connectivity, platforms, and services. For more than 27 years, Telkomsel prioritized the use of inclusive technology advancement in every aspect of Indonesian society's life.



Network Infrastructure

Number of BTS: **+255.000 unit + 204,900 3G/4G/5G BTS +2.000 4G BTS USO** Coverage: **96% Indonesia population**



Customer Base

Total: **+ 169,7 millions subs.** Internet Users: **+ 119 millions subs.** Reseller Outlet: **+300K outlets**

Data Size

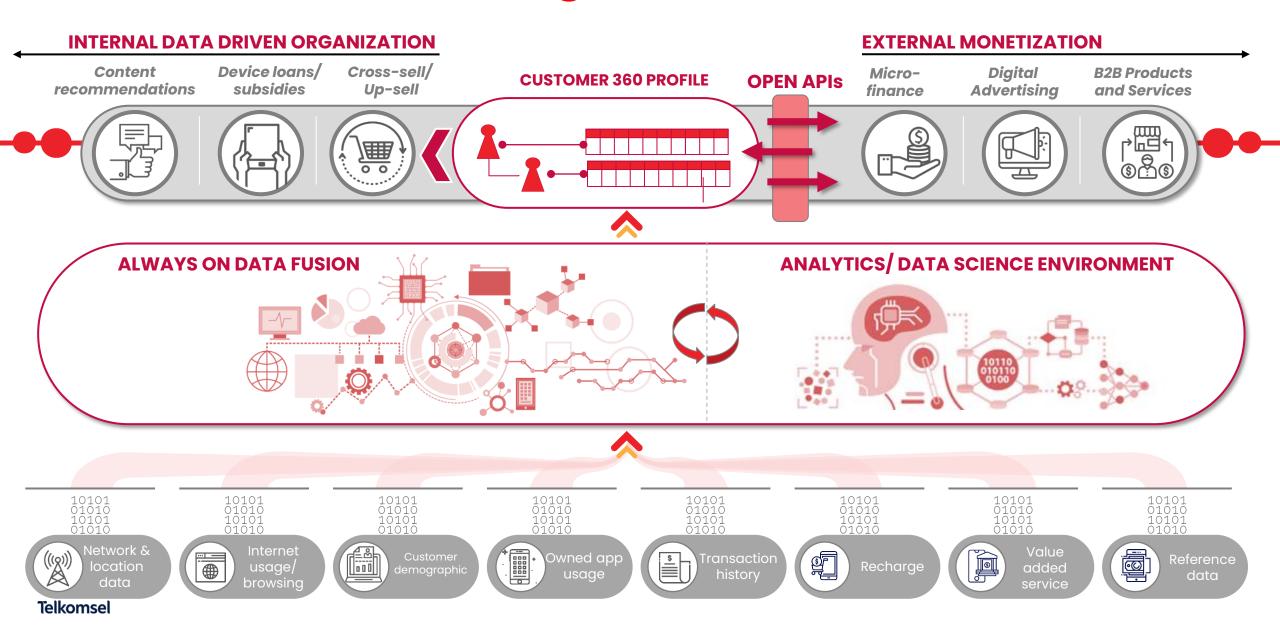
Number of Data feed:**+ 125** Payload processed: **+ 22 Peta Bytes/day** Internet transaction: **+ 995 Mio records/day** Number of Cell ID: **+ 900 thousands**

Product & Services



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Overview of Telco Big Data and Use Cases



Current and Past MPD Projects



Tourism Statistics for BPS (2018-current)

BPS (NSO) has a need to improve the conventional ways of collecting data for official statistics with a more effective and efficient methodology using telco big data to improve data accuracy, timeliness, observation coverage area, and in addition also to increase the productivity of BPS regional team.





Event Analysis: Asian Games 2018 (2018)

With MPD capability, we can also monitor traffic at the Asian Games event held in 2018. The data points that we monitor were the number of visitors at each venue, origin of visitors (domestic and overseas), destination after visiting the event and frequency of visits.

Palu Earthquake 2018 Displacement Tracking (2019)

Gaining an understanding of post-disaster displacement linked to the earthquakes and tsunami that impacted Kota Palu and surrounding areas (Sigi & Donggala) in the province of Central Sulawesi, Indonesia, on Friday, September 28, 2018.

Data ecosystem offer tremendous potential value for society and business. However, tapping it can be a challenge for companies

Data ecosystem have the potential to **boost digital competitiveness of a region/country** by tackling largest societal challenges including **financial inclusion, inequality, global health and economic resilience**.¹ Progress have been made; however, challenges remain:²



Trust & Privacy

Risk of data being **mishandled**, **misused**, **mis-shared**, and related financial and reputational ramification



Technological & Procedural Costs

Costs associated with technological

development, operational, and procedural hurdles



Competitive Concern

Risk of **exposing competitively sensitive information** especially in a highly competitive market



Loss of Financial Opportunities

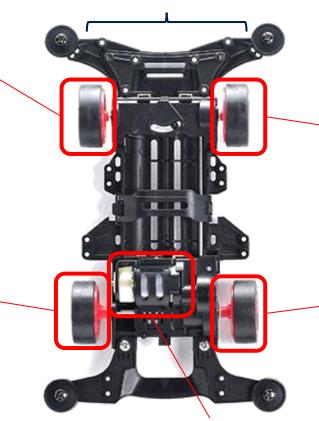
Risk of **potential financial opportunities** to be overlooked

To realize a **sustainable value creation** from data ecosystems, all challenges needs to be addressed Telkomsel

Establishing a Sustainable and Trusted Data Sharing Framework

To ensure sustainability, it is important to create an environment in which everyone wins, and the objectives of all stakeholders are aligned Enabling **trust** among data contributors and the public

Standardization to ensure data sharing interoperability



Clear legal & regulatory explanations and tools that build confidence in, and reduce

resistance to, data sharing and help companies navigate its complexities

Implementation of measures and mechanism designed to securely protect and safeguard information and data to enable a secure environment for data sharing

Build relevant skills and
capabilities for harnessing the power of data

Create a governance systems that make data sharing **attractive** by providing participants with **incentives (both monetary and non-monetary)** while **protecting their interests** (example: appropriate competition policy)

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Conclusion

Data sharing done right will increase region's competitive advantage, enable more innovative process, products, and services



Thank You