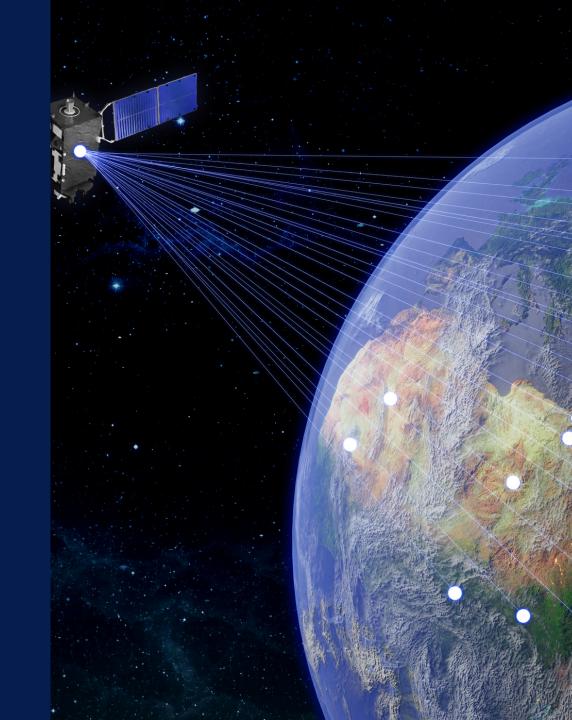


Leveraging IT Infrastructure for Financial Inclusion

Made and Presented by: BRI Research Institute, IT Infrasturcture & Operation Division PT Bank Rakyat Indonesia (Persero) Tbk





Leveraging IT Infrastructure for Financial Inclusion

IT Infrasturcture & Operation Division 2023







MEET ZAKARIA ZATA A

Assistant Vice President IT Infrastructure & Operation Spacecraft Operation Team Leader (2020 - Now)



Date Center Engineer

2010 - 2012



E-Channel Programmer

2012 - 2014



BRIsat Internship Program

2014 - 2016



Satellite Engineer

2016 - 2020







IT Infrastructure to Connect the Unbanked



The Importance of IT Infrastructure for Microfinance



IT Infrastructure Reliability



About Us.

Bank Rakyat Indonesia (BRI) founded December 16th, 1895

2025 BRI Vision "The Most Valuable Banking Group in Southeast Asia and Champion of Financial Inclusion"



Market Cap As of Mar 2023 IDR 709,71 T



Assets As of Mar 2023 **IDR 1.865,64 T**



Net Profit As of Mar 2023 IDR 51.41 T



Agent BRILink



0.852 Outlets











Global 2000 World's Largest Public Companies Forbes 2023

Bank Rakyat Indonesia (BRI) become the Largest Companies in Indonesia.





Reach Further

Provide convenience for the public in accessing BRI's financial services.

Provide Solution

Digital transformation to provide easy public access to banking services.

Grow Better & Stronger

Ultra Holding Micro (BRI, Pegadaian, & PNM) encouraging business to grow and become more resilient.



Reaching All Segments of Micro Customer Nationwide





The Daily Passer

Give up on a relatively difficult life. Work for tomorrow's meal, not much left to be saved. Rely on other people's help.



The Continual Fighter

Fighting hard for life, afraid of risk, and kee some money just in case there is an unexpected need.



The Newbie Prioritizer

Already need to keep some money in planned manner for particular purposes or the need of other people.



The Profit Maximizer

Having a high business spirit, familiar with risks, consider money to be more profitable if it is rotated rather than saved.



The Asset Hoarder

Live well, avoiding risks, saving money in the form of fixed assets for long-term investment.

The Important of the Satellite Communication







Indonesia is an archipelago country that best fit by satellite technology to cover especially rular area. Satellite plays an important role in connecting the country and serving the unserved area.







IT Infrastructure to Connect the Unbanked



The Importance of IT Infrastructure for Microfinance



IT Infrastructure Reliability

BRIlink Empower Indonesian Rular Economy







Gross Transaction Value (GTV)





Num. of Financial Transactions





Fee-based Income Generated

Rp728 Bn



Number of Agents

666,038



Villages Represented

59,705



Services Provided

- Payments
- Fund Transfers
- Int'l Remittance
- · Gold Savings
- Insurance
- Logistics
- Loans
- Travel



Many More





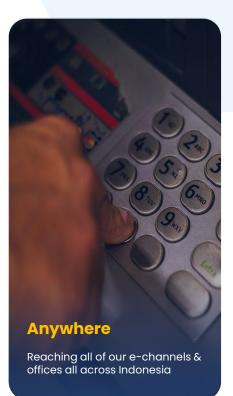


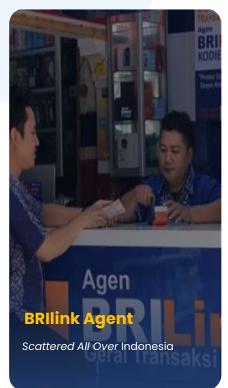
Source: BRILink Division BRI Q2 2023

Flexibility in BRI Network

















Regional Office





Merchant EDCs



E-BUZZ BRI



Increase network bandwidth after using BRIsat Satellite







IT Infrastructure to Connect the Unbanked



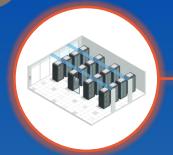
The Importance of IT Infrastructure for Microfinance



IT Infrastructure Reliability

IT Infrastructure Organization





Computing Services & Operation

Satellite Services & Operation







Network
Services & Operation

Infrastructure Assurance & Development





BRI Data Center











Data Center Ragunan







Data Center Tabanan







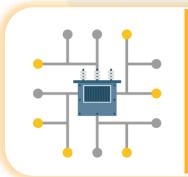
Off-Site Data Center
Sentul



BRI Data Center







Data Center Power Avalability





Server Avalability



Providing Continuous Availability

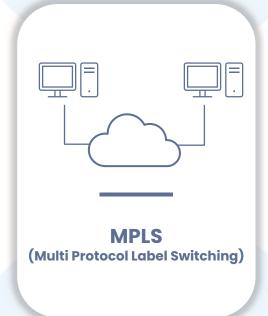


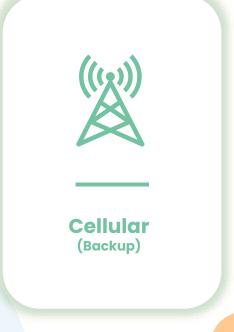


BRI Network









BRI Network





82.5%

Branch Office



BRIsat Satellite

17.5%

Branch Office



MPLS

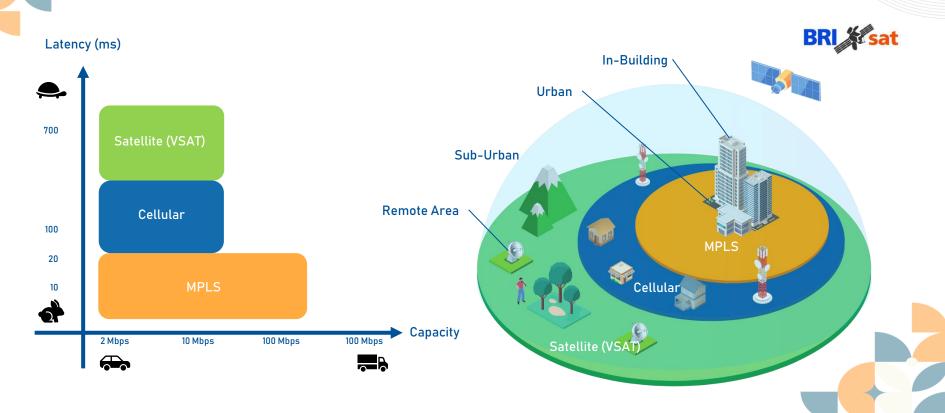
All Branch Office have Cellular Backup



Cellular (Backup)

BRI Network





BRIsat Satellite





Manufacture SSL/MAXAR Launcher Ariane 5, Arianespace **Spacecraft Separated** Mass Contract 28 April 2014 mass 3500 Kg 150.5° E **Position** Age 15 Years **Above Equator** Launch 36 x 36 MHz **Transponder** Kurou Location 9 x 72 Mhx

Attitude Control

Attitude Control

Propulsion

Thermal

Data Handling

FDIR



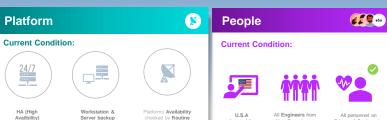


Satellite Teams



BRI pioneer world's first dedicated satellite to regain Indonesian banking





Switchover

Internship

New Recruitment

[PPS/BLFP]

Primary & Backup site

sudah memadai

Operational Timeline 201 BOL Beginning of Year Life BRIsat Extended Life* BRIsat Extended Life* Years * BRIsat initiation contract agreed until 15.1 Years that will end on 2031

Site Location



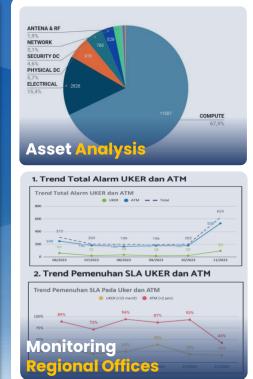


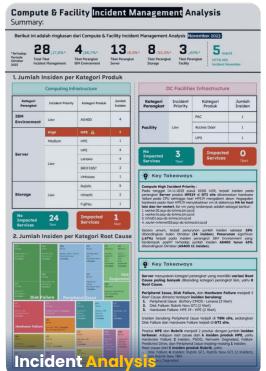
| PSCF | | BSCF | |
|-----------|----------------------|------|------|
| Personnel | | PSCF | BSCF |
| • | Satellite Engineers | 5 | 0 |
| • | Payload Engineers | 4 | 0 |
| • | Ground Engineers | 6 | 3 |
| • | Regulatory Engineers | 5 | 0 |
| • • | Controller | 17 | 4 |
| • | Technician | 11 | 4 |

IT Infrastructure Monitoring Using Machine Learning



- 01 IT Asset Management Analysis
- 02 SLA Provisioning Server Analysis
- 03 Incident Management Analysis
- 04 Change Management Analysis
- 05 Data Center Cooling Analysis
- 06 Monitoring Team Kanwil NOC
- O7 SLA Pasang Baru Jarkom VSAT Unit Kerja





BRI Network Management: Integrated Network Monitoring System















BRI Network Management: Integrated Network Monitoring System









BRI IT Infrastructure



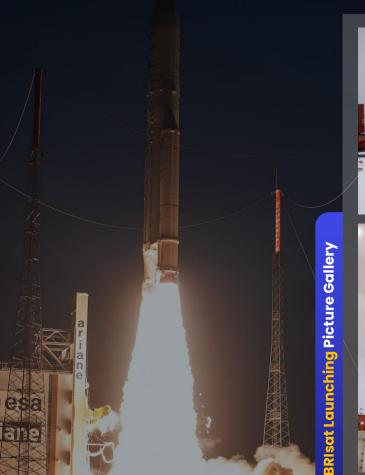






No One Left **Behind!**













IT Infrastructure Organization



