Greener, Inclusive, Resilient Path to COVID-19 Recovery

August 29 - September 1, 2022 - Thailand

PUSKOPCUINA

The Present and the Future Roadmap Of Credit Unions Networks In Indonesia

digital transformation

Tony *IT Manager PUSKOPCUINA Indonesia*

ABOUT PUSKOPCUINA

INDONESIA NATIONAL FEDERATION

540.351
CREDIT UNION MEMBERS

46
CREDIT UNION

2.882
CREDIT UNION ACTIVIST

30
PUSKOPCUINA MANAGEMENT

WHAT DO PUSKOPCUINA DO?

FINANCIAL SERVICES

Offering financial services to our Credit Union as savings and loans

TRAINING

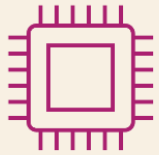
Strive to create a future high quality leaders with various soft and hard skill training

GOVERNANCE

Making sure Credit Union have good governance and operate acordingly

EMPOWERMENT

Empowering members of Credit Union to improve their business

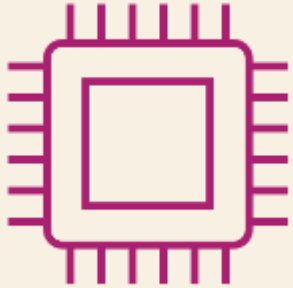


TECHNOLOGY

Provide state of the art technology tools and advices

PROCESS AND LEVEL OF DIGITAL TRANSFORMATION

Non Digital	Adopting	Basic Digital	Advanced Digital	Extreme Digital
• Paper Based	• Manual System • Core System (Offline Software) • Website (Profile)	• Website (SIM) • Core System (Online Software – Limited) • Social Media (Digital Marketing)	• Core System (Online Software – Connected) • Mobile System (User, Staff Apps) • Business Process (Digital Services) • Business Analytic	• Digital Cooperative • High Connectivity (Interconnection, Interoperability) • Internet of Thing (Smart Sensor) • Business Model (Fit to Digital Economy) • Big Data Analytic



Conventional

Slightly open to innovation

More open to innovation

Open to innovation

Very open to innovation

Source: Indonesian Consortium for Cooperatives Innovation (ICCI), Webinar Koperasi Virtual Expo 2021

DIGITALIZATION MOVEMENT

SIMO

In House central management system for Credit Union database

CORE ESCETE

Always connected online core banking application **collaboration with fintech**

ESCETE MOBILE

Mobile banking application for individual member as a part of **CORE ESCETE**

sMartCU

E-commerce for members business products from credit union integrating **CORE ESCETE**

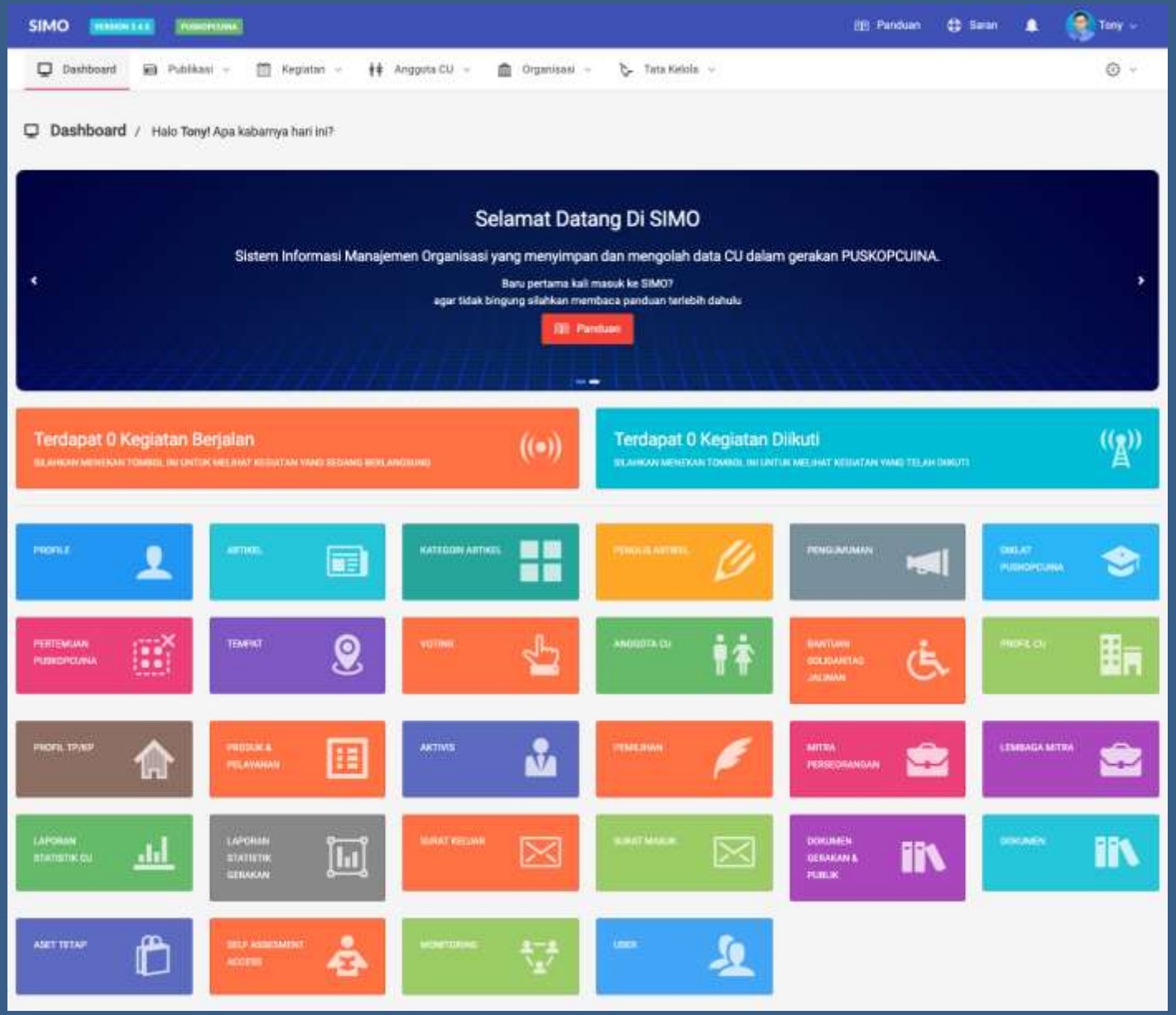
Advanced Digital

SIMO

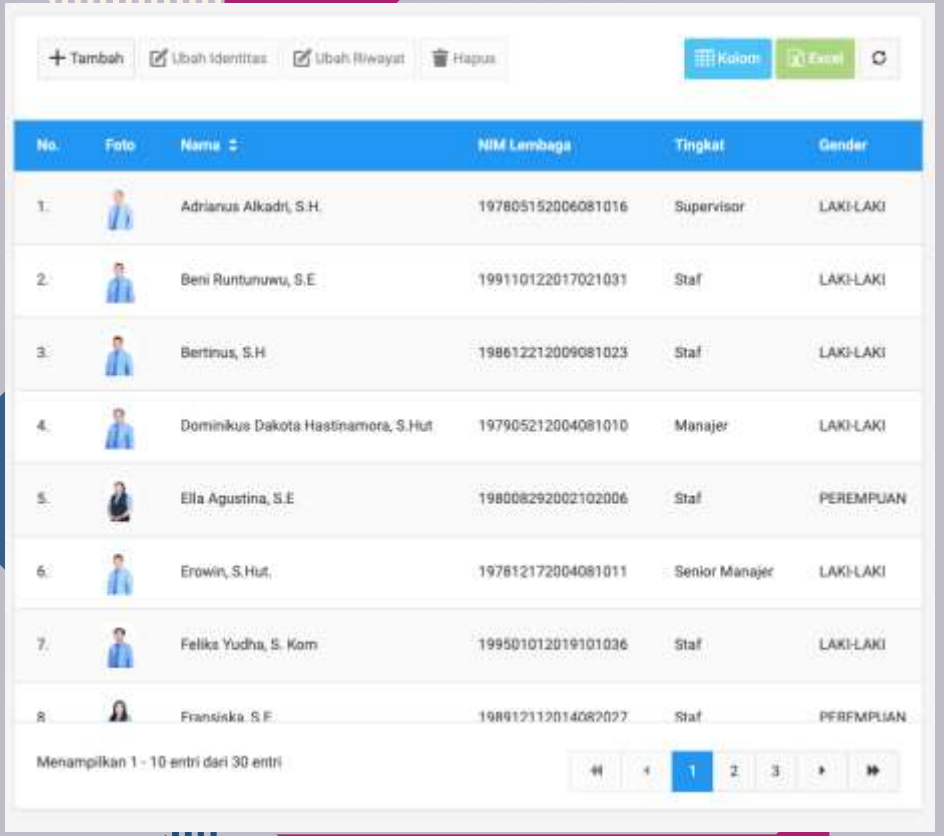
Storage

Sharing

Services



Storage



CREDIT UNION

Credit Union profile that reflected on public website

BRANCH

Credit Union branch profile that reflected on public website

HRM

Human Resource Management system for all Credit Union activist

PRODUCT

Credit Union product that reflected on public website

MEMBERS

Individual Credit Union member profile that separated by each branch and each Credit Union

Sharing

DOCUMENT

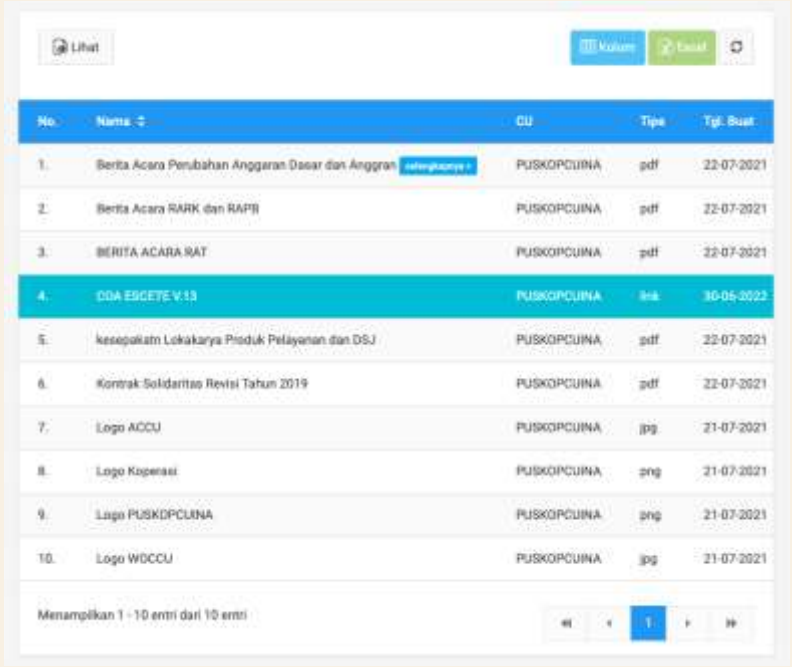
Document mangement services that can be shared for public / movement / internal

REPORT

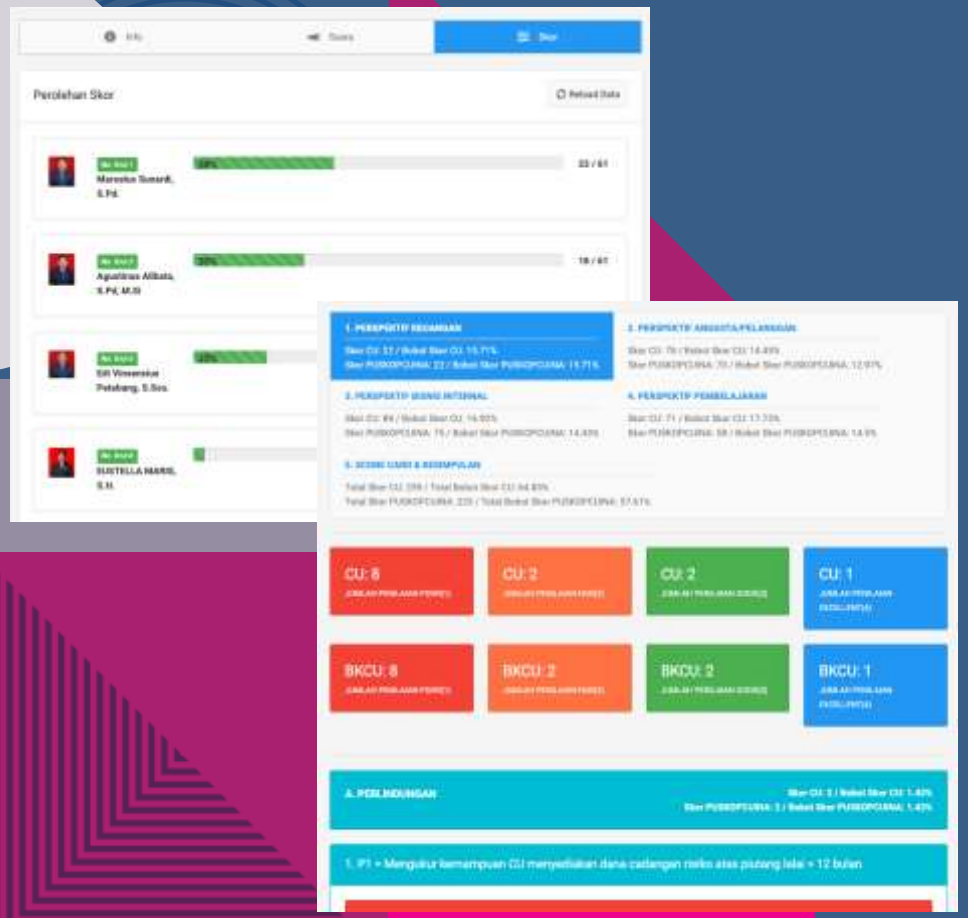
Credit Union statistic report that automatically calculated to be P.E.A.R.L.S report

PUBLIC SITE

Credit Union by default will have their own public page for publication that can be easily managed



SERVICES



TRAINING PORTAL

Portal for registering and managing training for Credit Union Activist

SOLIDARITY

Management and reporting for handling members solidarity compensation

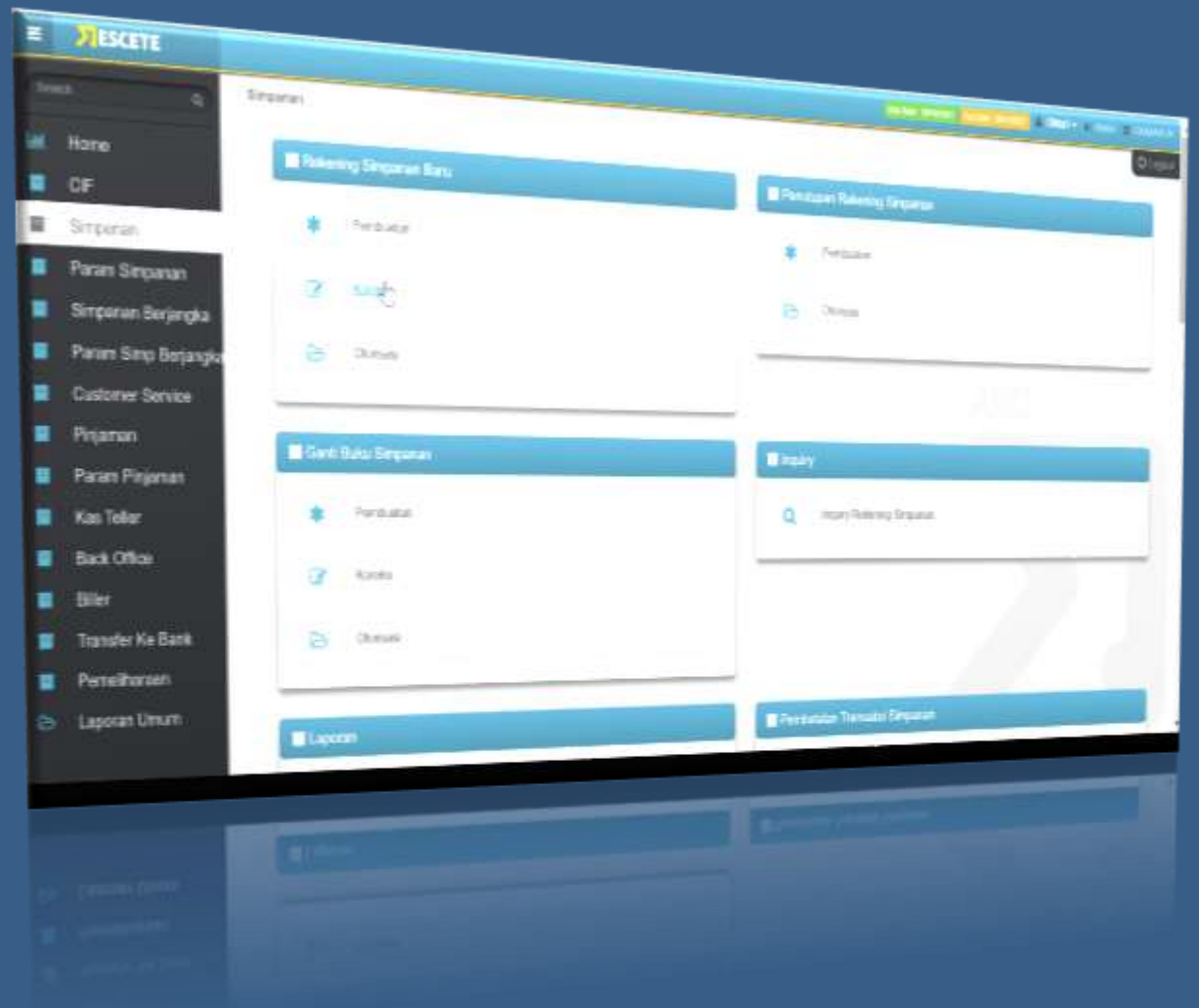
GOVERNANCE

Self assesment ACCESS for Credit Union and governance monitoring

VOTE & ELECTION

Voting and election that can be used for various cases

There are 0 Running Activities
PLEASE PRESS THIS BUTTON TO VIEW ONGOING ACTIVITIES
There are 0 Activities Followed
PLEASE PRESS THIS BUTTON TO VIEW THE ACTIVITIES THAT HAVE BEEN FOLLOWED
PROFILE
ARTICLE
CATEGORY ARTICLE
AUTHOR
ANNOUNCEMENT
PUSKOPCUINA TRAINING
PUSKOPCUINA MEETING
THE PLACE
VOTING
S OF CU
HELP SOLIDARITY INTERWOVEN
CU PROFILE
SIMO
TP/KP PROFILE
PRODUCTS & SERVICES
ACTIVIST
INDIVIDUAL PARTNER
PARTNER AGENCY
CU STATISTIK STATISTICS REPORT
MOVEMENT STATISTICS REPORT
LETTER OUT
LET-PASS
MOVEMENT & PUBLIC DOCUMENTS
DOCUMENTS
FIXED ASSETS
SELF ASSESMENT ACCESS
MONITORING
USER



BANKING PLATFORM

CORE ESCETE

COMMUNITY BANKING PLATFORM PRINCIPALS

Cautious

Financial Governance, Security, Audit

Togetherness

Applied to all CUs & Members

Adaptive

Adaptive to the Changes

Open

Open to Work with Other Parties

CORE ESCETE

CREDIT UNION

CORE FINANCIAL
- Customer Service & Teller
- Saving Account
- Time Deposit
- Loan
- Accounting and Reporting

MOBILE APPLICATION
- Account Portfolio
- Fund Transfer
- Bill Payment
- QR Payment
- Transaction History

CARDLESS CASH MACHINE/ATM
- Cash Withdrawal & Deposit
- Inter CU Cash Withdrawal

ADMINISTRATION
- Reconciliation
- Web Administration

MOBILE BRANCH
- Costumer Service
- Teller

ESCETE ECOSYSTEM

CORE FINANCIAL
- Customer Service & Teller
- Saving Account
- Time Deposit
- Loan
- Accounting and Reporting

MOBILE APPLICATION
- Account Portfolio
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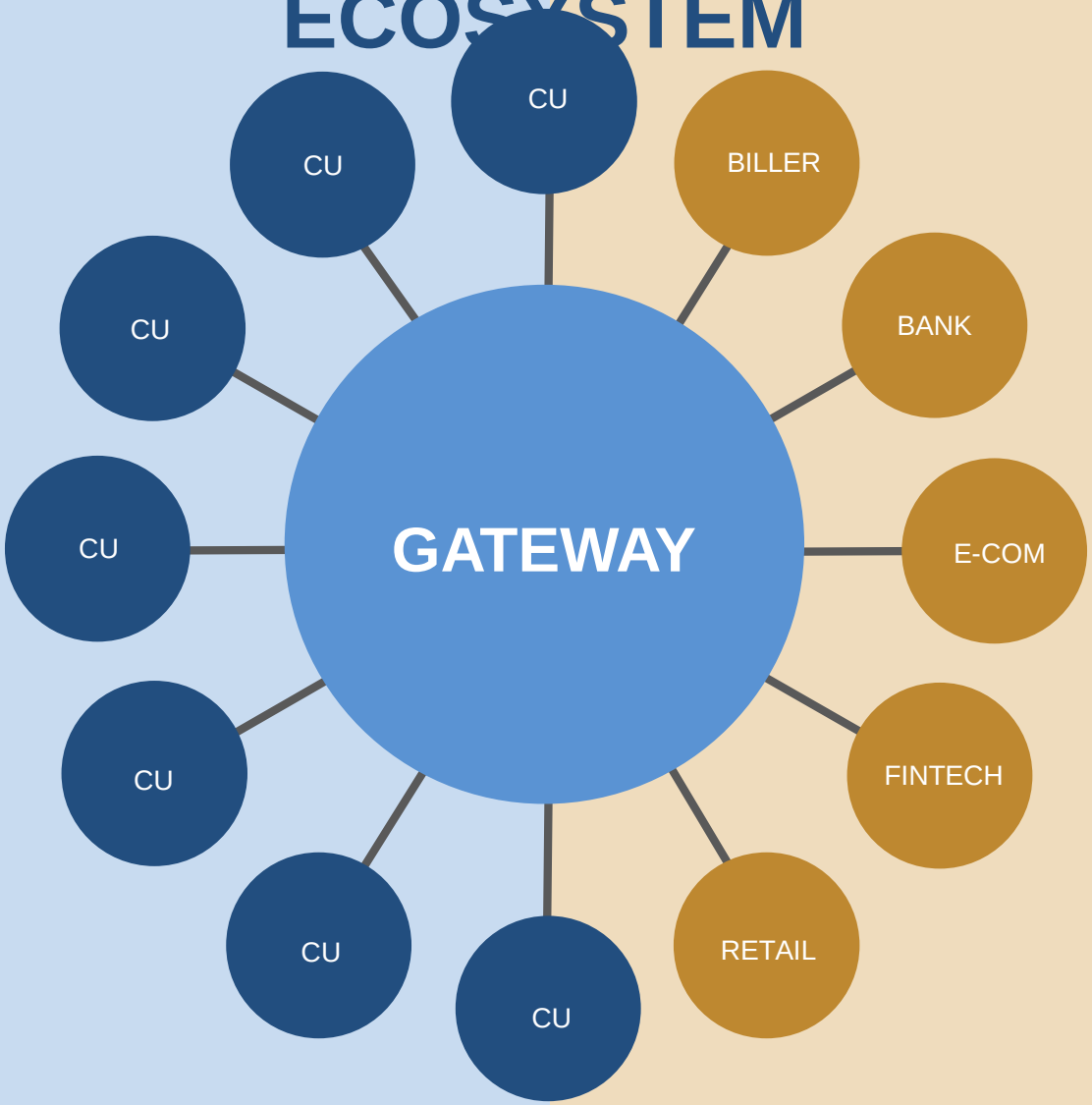


BILLER CONNECTIVITY
- Bill Payment
- Voucher Purchase

BANK CONNECTIVITY
- Transfer in/out from and to CU
- SKN/RTGS and online transfer

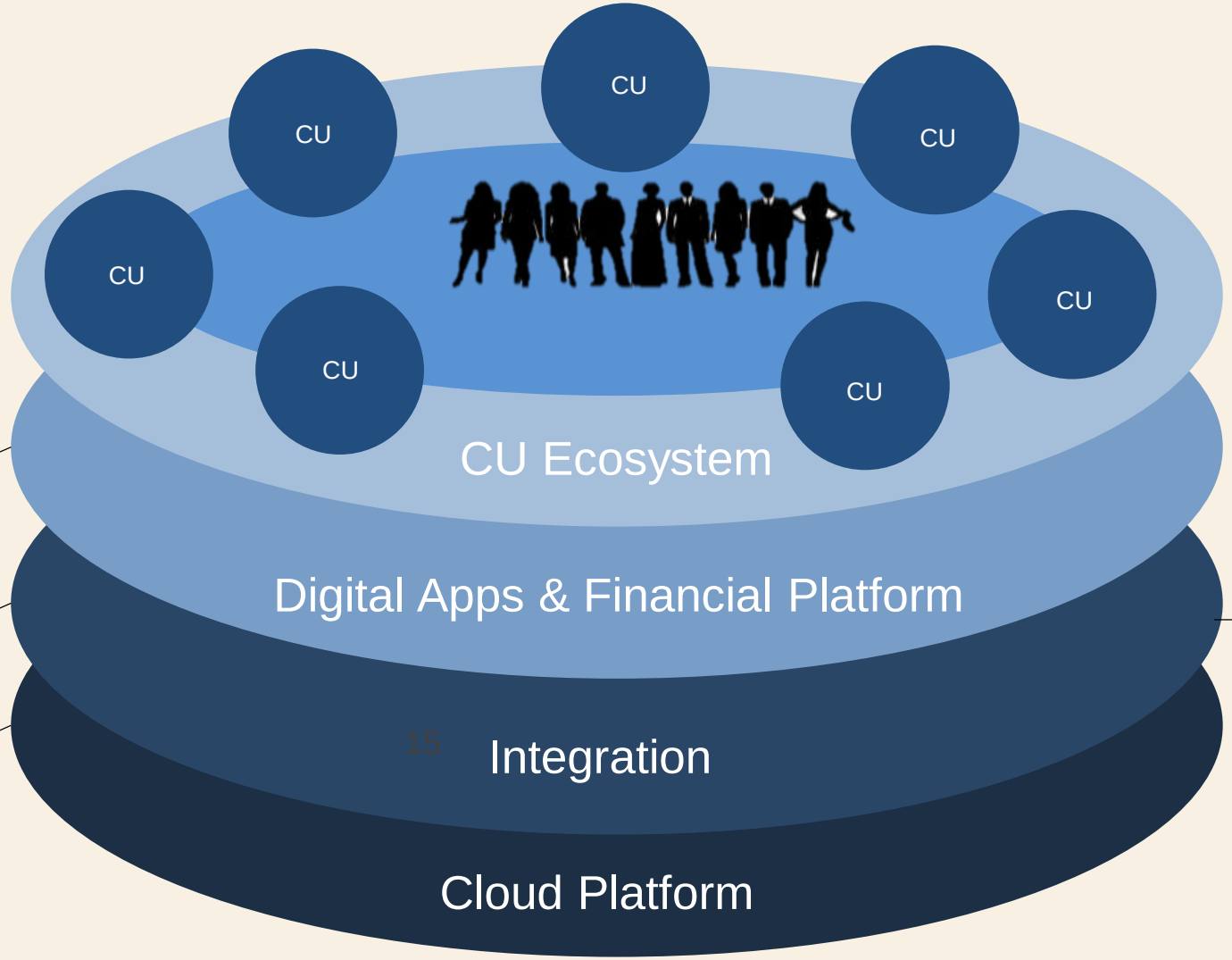
E-COMMERCE CONNECTIVITY
- Connect as seller
- E-Commerce payment

FINTECH CONNECTIVITY
- Fintech payment / top up

RETAIL STORE CONNECTIVITY
- Cash in/out at retail outlet
- Goods purchase and payment

ESCETE as Core Technology

Every 2 years audit by EY



Core Financial Mobility O2O

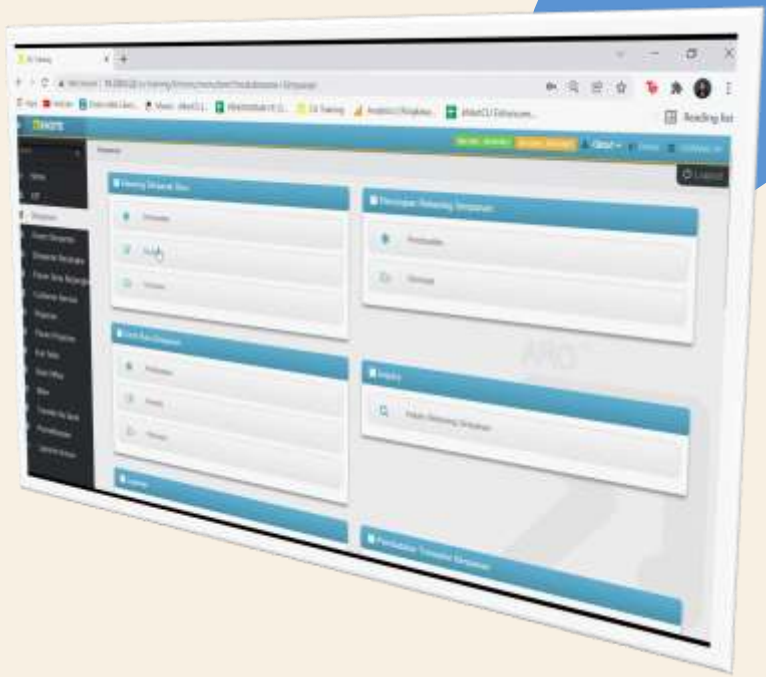
API Based Blockchain

Cloud Platform 7*24 Availability Security

- Biller
- Bank
- Other MFI
- Retail Stores
- Fintech
- E-Commerce

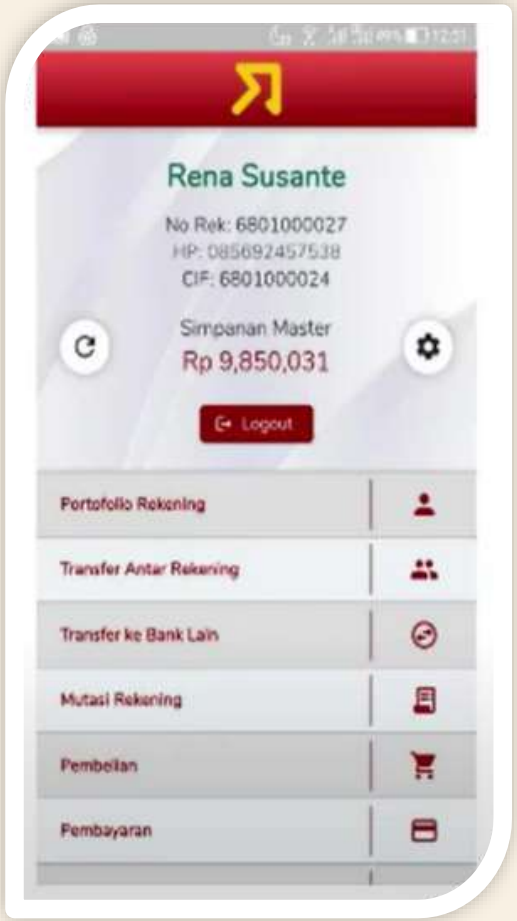
ESCETE as Core Technology

- Complete Credit Union Members Data
- Centralize financial core banking system with realtime transaction
- Standarized and integrated financial process and Reporting system
- Secured application, data center, audit, and penetration Testing by independent party.
- 4 eyes principal for every transaction based by role and responsibility
- Ready to connected to external party



MOBILE ESCETE

FEATURES



- ACCOUNT PORTFOLIO
- FUND TRANSFER
- BILL PAYMENT
- ONLINE LOAN APPLICATION
- WITHDRAW AND DEPOSIT FROM MACHINE
- WITHDRAW AND DEPOSIT FROM RETAIL STORE

CORE FINANCIAL
- Customer Service & Teller
- Saving Account
- Time Deposit
- Loan
- Accounting and Reporting

MOBILE APPLICATION
- Account Portfolio
- Fund Transfer
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CARDLESS CASH MACHINE/ATM
- Cash Withdrawal & Deposit
- Inter CU Cash Withdrawal

MOBILE BRANCH
- Costumer Service
- Teller

ADMINISTRATION
- Reconciliation
- Web Administration

Blockchain

ESCETE

android

iOS

Alfamart

20,000+ Outlets

BILLER CONNECTIVITY
- Bill Payment
- Voucher Purchase

BANK CONNECTIVITY
- Transfer in/out from and to CU
- SKN/RTGS and online transfer

E-COMMERCE CONNECTIVITY
- Connect as seller
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FINTECH CONNECTIVITY
- Fintech payment / top up

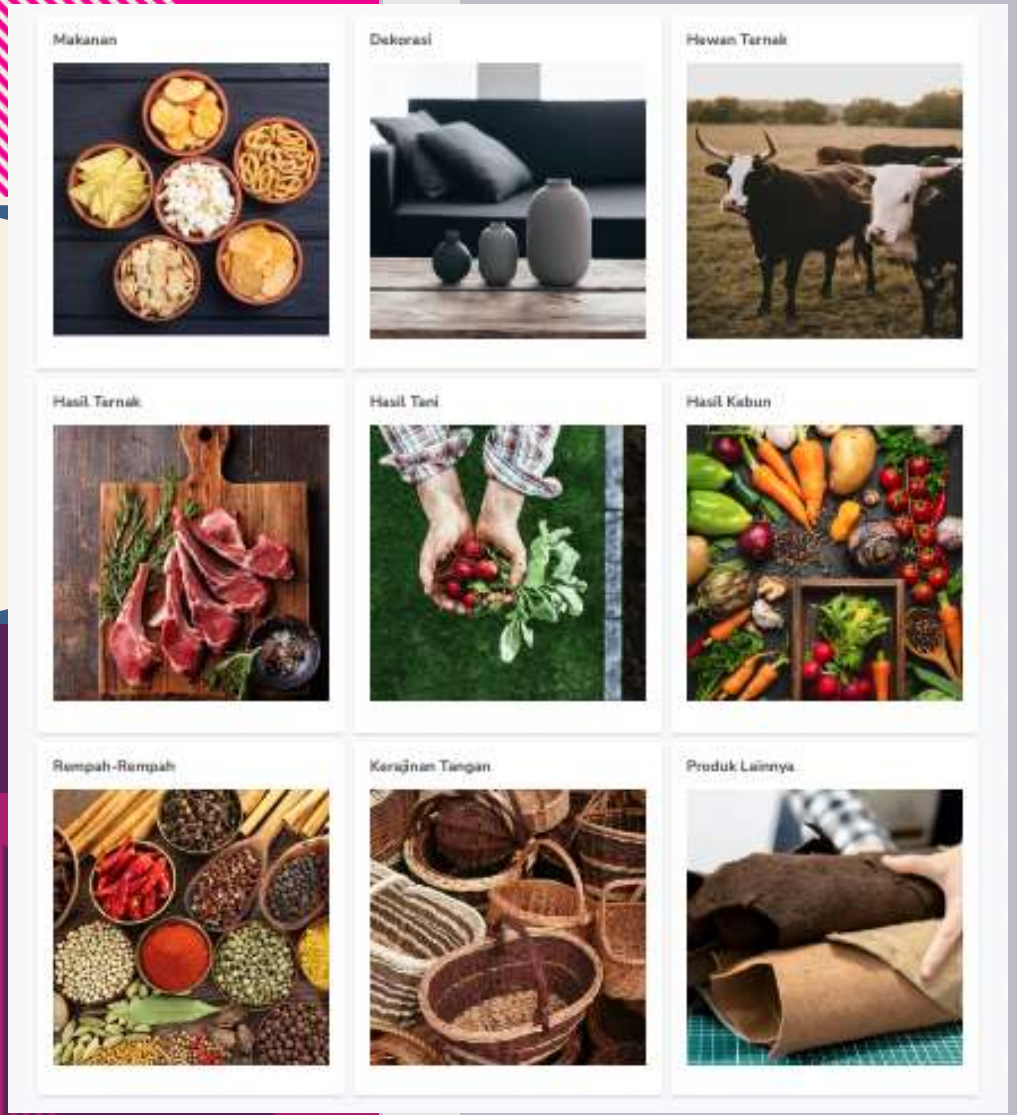
RETAIL STORE CONNECTIVITY
- Cash in/out at retail outlet
- Goods purchase and payment

MARKETPLACE sMartCU

sMartCU
Berdaya Bersama

SCAN ME

SMARTCU.ID



GOODS FROM MEMBERS

- FOOD
- DECORATION
- LIVESTOCK
- CROPS
- GARDEN
- HERB AND SPICES
- HANDYCRAFTS

SCAN ME

SMARTCU.ID

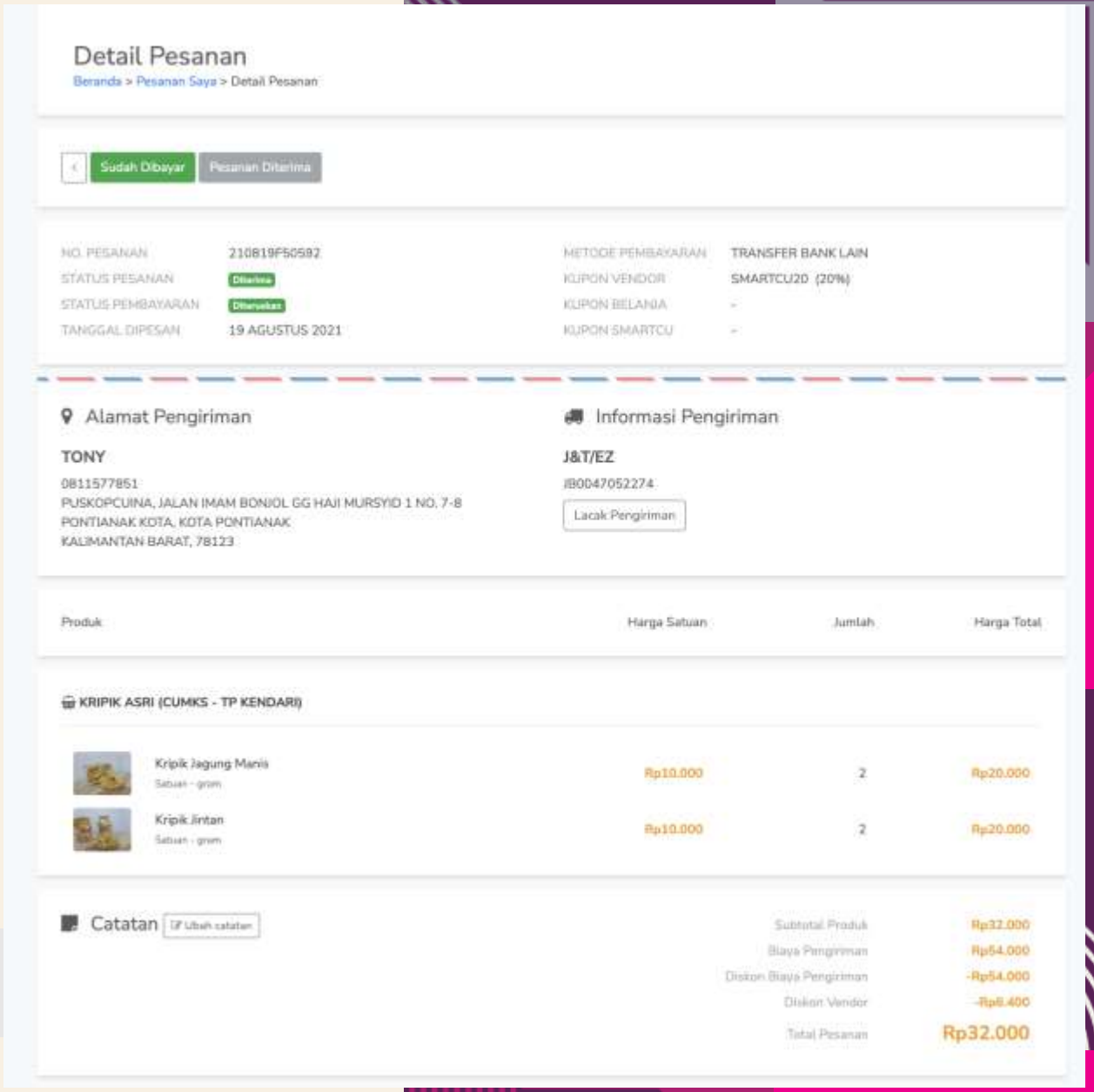
- CLEANING
- ELECTRONIC REPAIR
- RENOVATION
- COURSES
- CONSULTATION
- BEAUTY
- TRANSPORTATION
- ANIMAL CARE
- EVENT ORGANIZER

SCAN ME

SMARTCU.ID

SERVICES FROM MEMBERS

NATIONWIDE DELIVERY + BANKING AND ESCETE PAYMENT

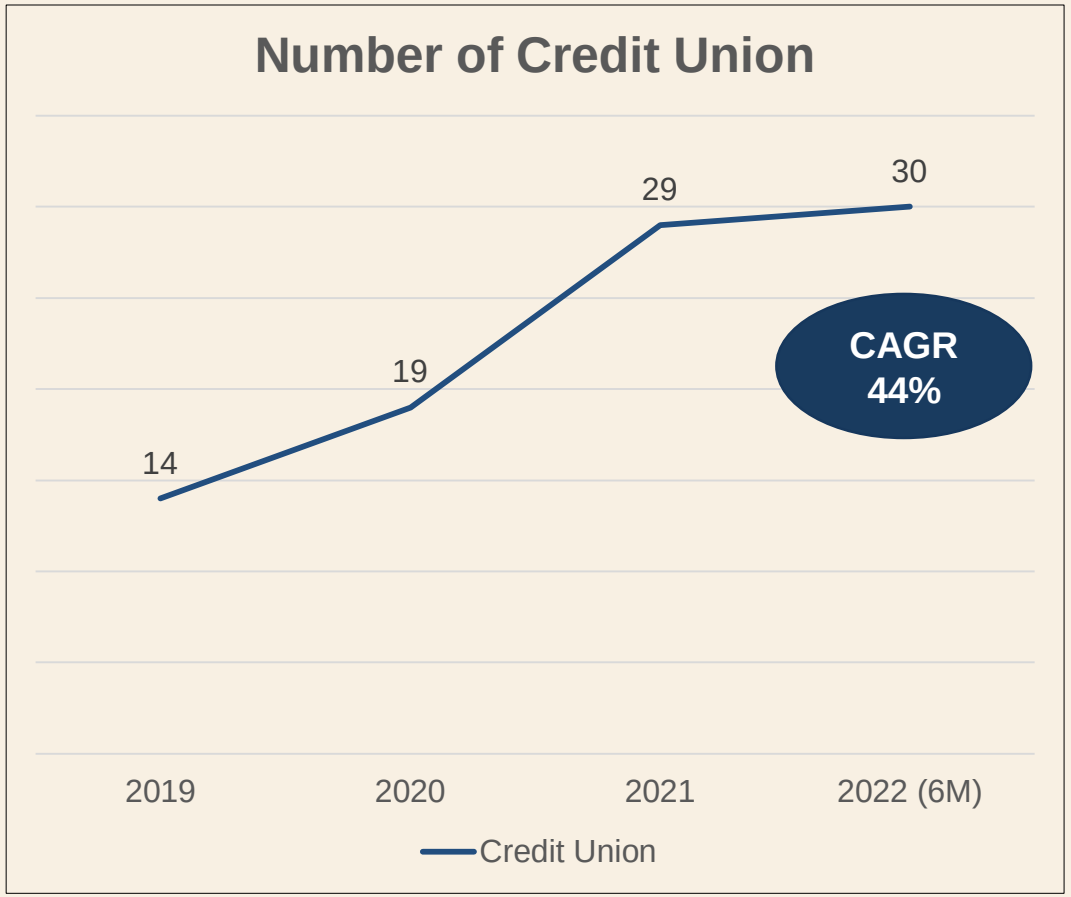


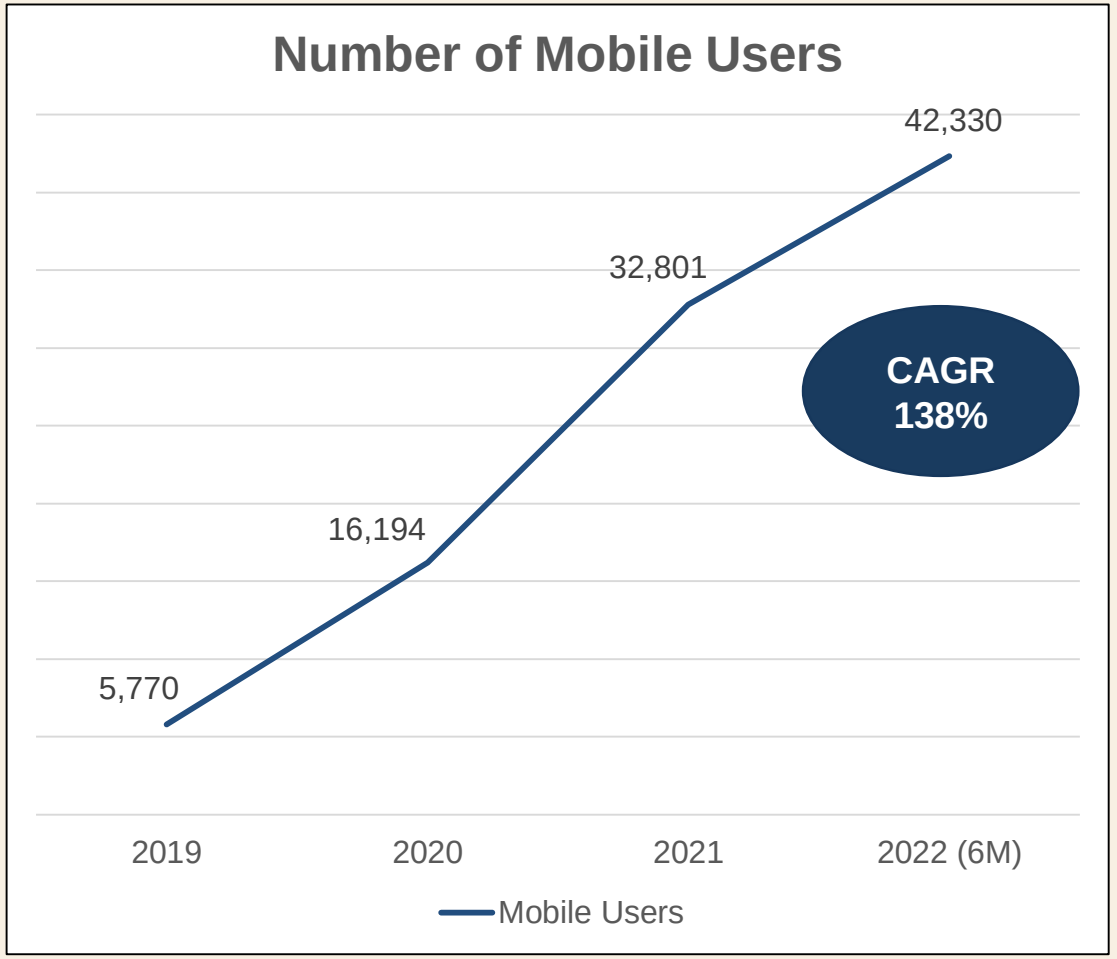
SCAN ME

SMARTCU.ID

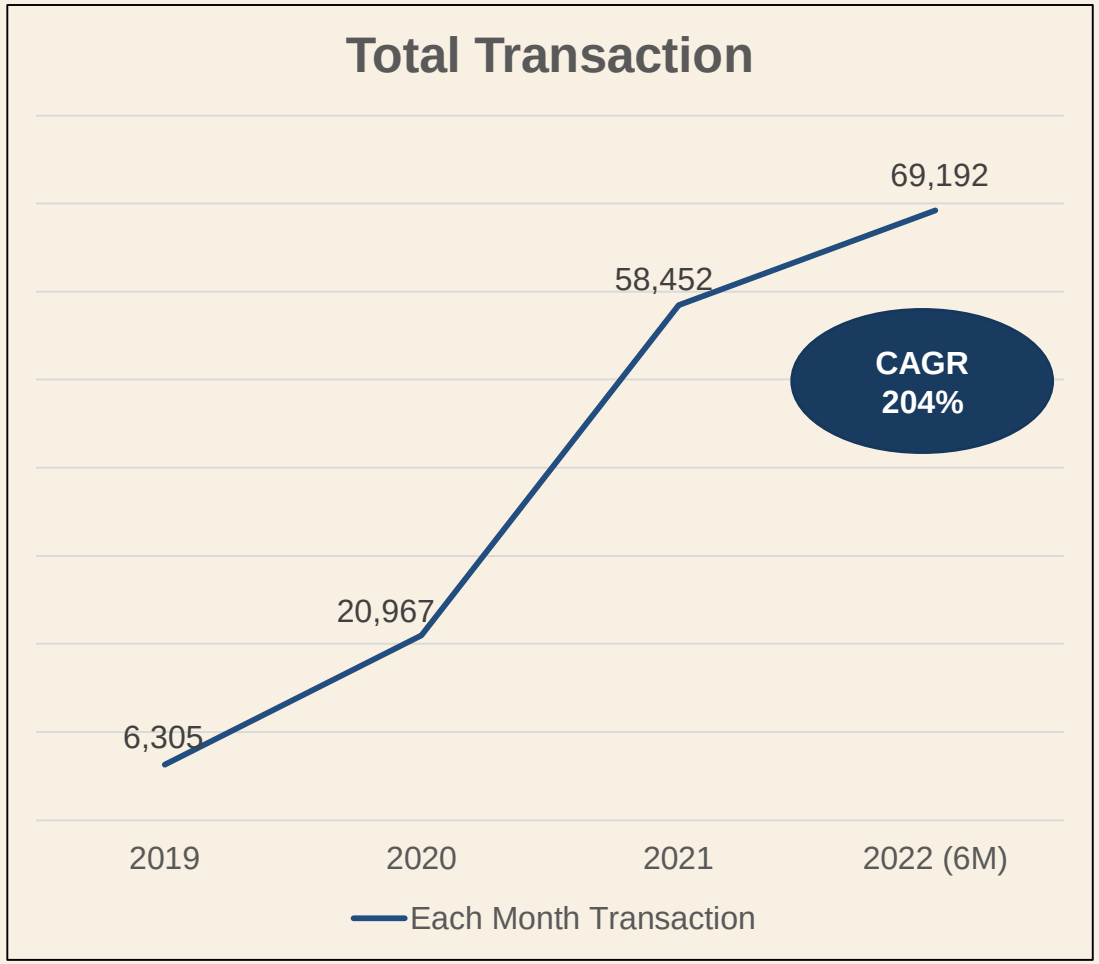
DIGITALIZATION IN NUMBERS

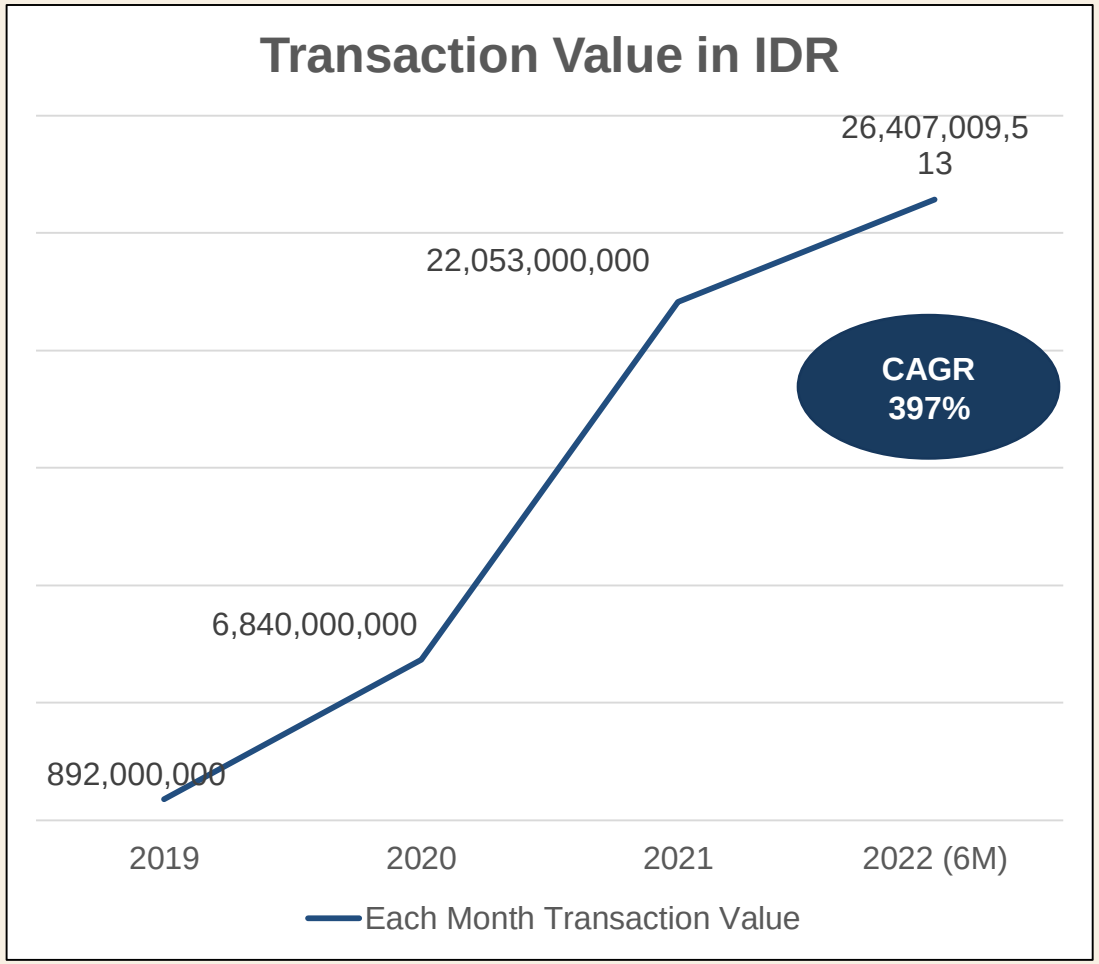
ESCETE MOBILE 2019-2022



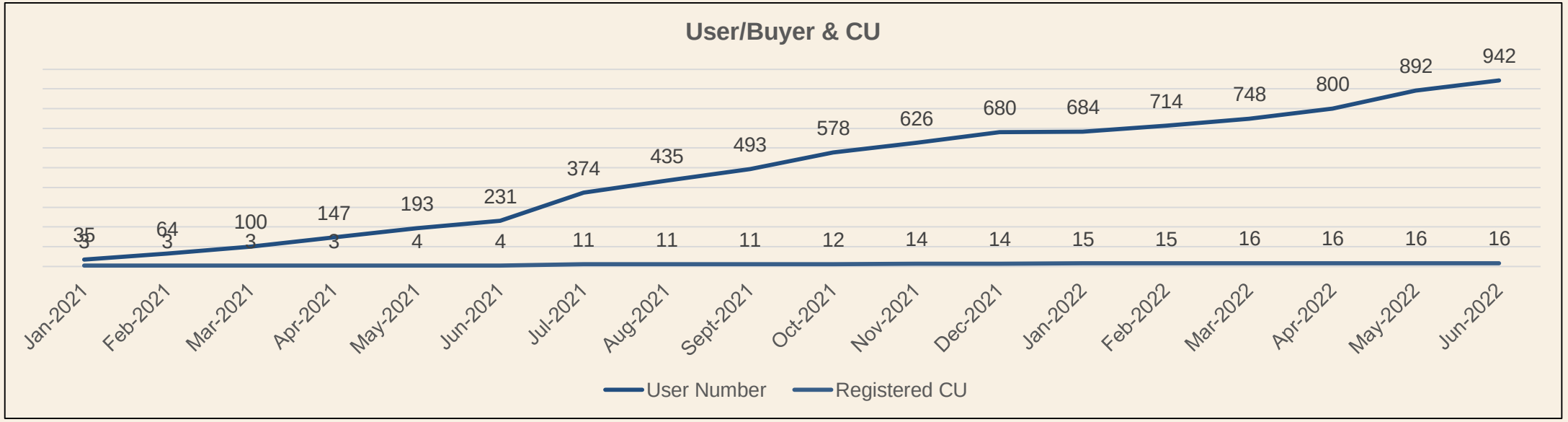


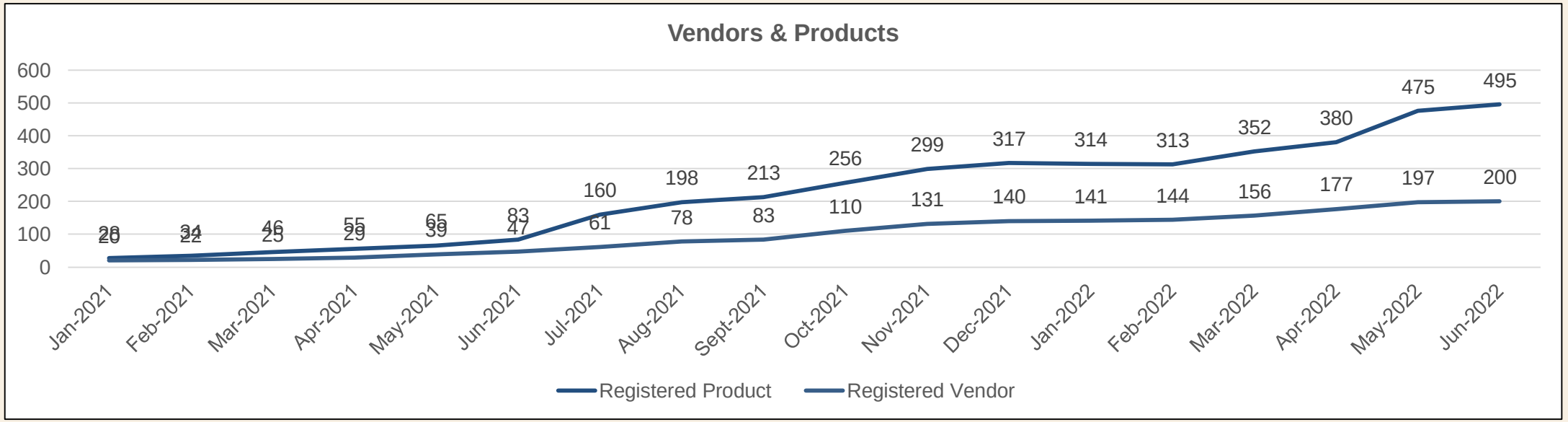
ESCETE MOBILE 2019 - 2022



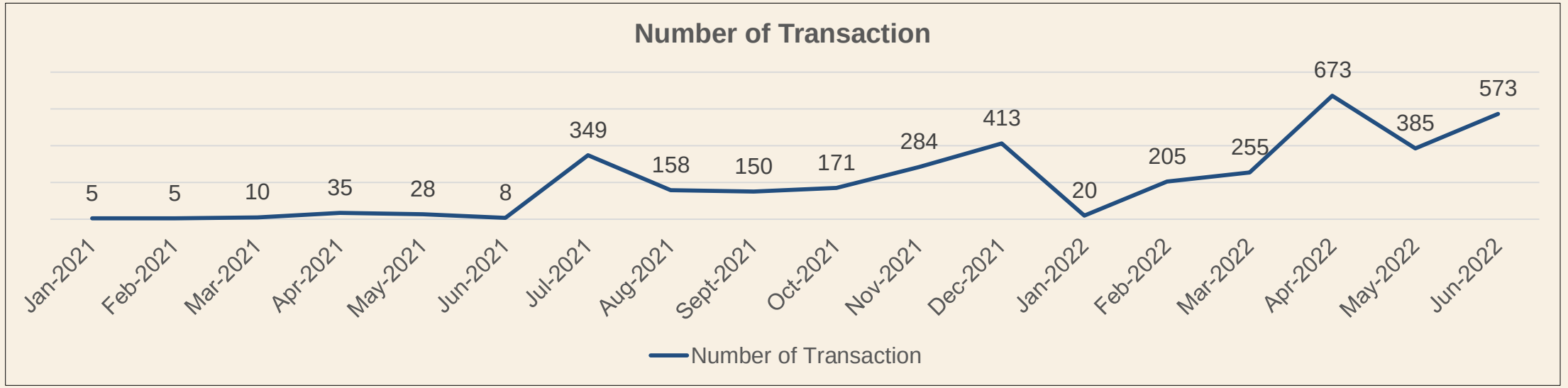


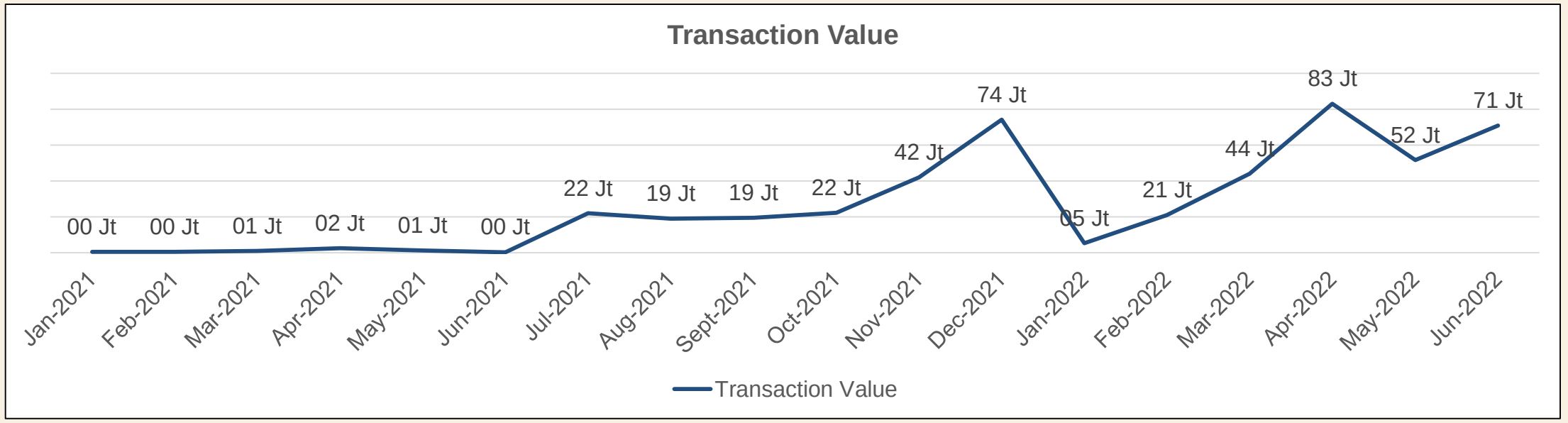
sMartCU 2021-2022





sMartCU 2021-2022



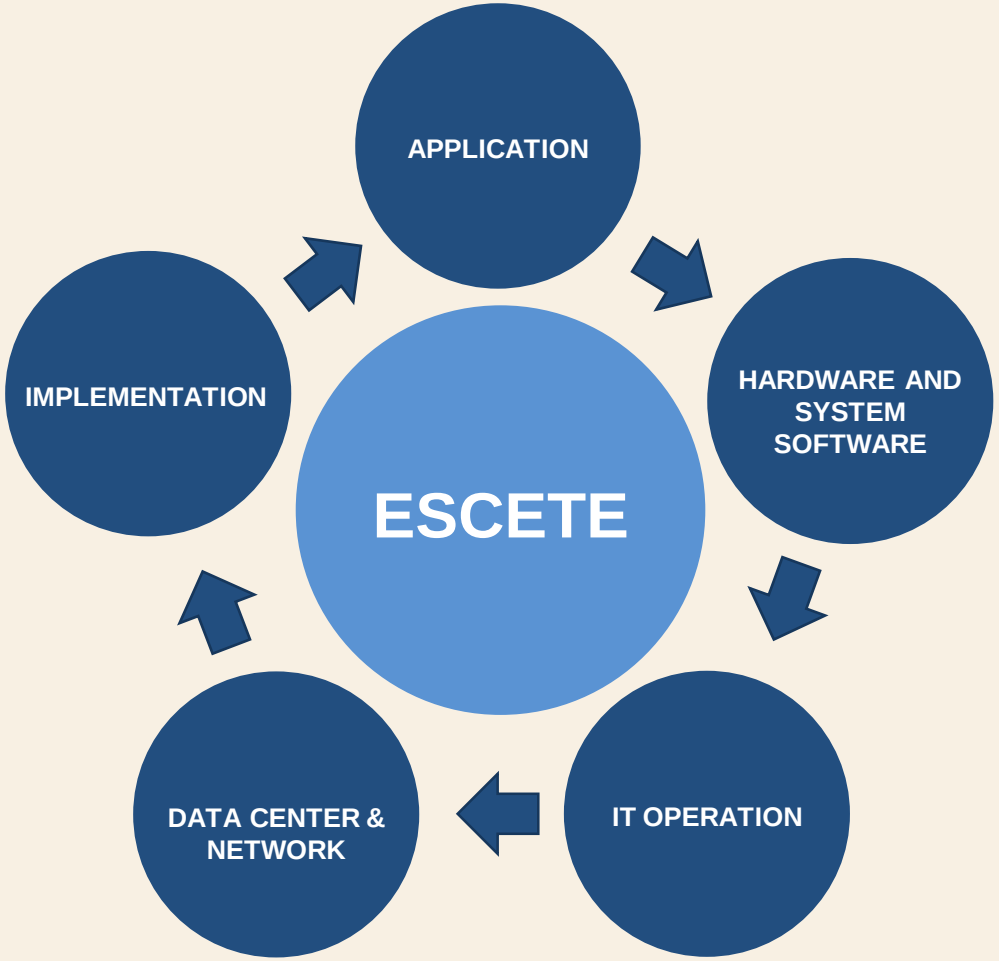


PARTNERSHIP WITH FINTECH

Partnership with ARO as a Service Provider

End-to-end Solutions from the service provider

- **Application** : Core and Digital Banking Application Licenses and Annual Maintenance
- **Hardware and System Software** : Application & Software License, Hardware and Device Investment and Maintenance
- **IT Operation** : Day to Day IT Operation, Security, Data Center, Mirroring
- **Data Center & Network** : Production & Disaster Recovery Sites and Mirroring Link between two sites
- **Implementation Services** : Implementation of Core System and other Applications



Joint Responsibility with ARO

	Current	PUSKOPCUINA	Credit Union	ARO
Delivery	Ongoing	V	V	V
First Level Support	Ongoing	V	V	
Marketing and Socializations	Ongoing	V	V	V
Compliance and Standardization		V		V
Security		V		V
Switching	Ongoing	V		V
Partner Management		V		V
IT Operation Management	Ongoing			V

Comparison

CHARACTERISTICS	OTHER DIGITAL COOP	ESCETE
Entity	Digitization in 1 Cooperative Entity	Digitization in the Credit Union Community
Core Financial Practices	Current and Old Practices	Modern approach such as maker – checker, accrual basis accounting, daily financial reporting
Digitization Principles	Online access/ digital services	Togetherness Governance, Security Online access/ digital services Open Collaboration with other parties
Collaboration	Collaboration between cooperative members	Collaboration between CU Collaboration between CU members Collaboration inter CU and CU members
Service Range	Narrow Services Mobility	Wide Services Mobility, Branch Services, Inter CU transfer, Third Party Collaboration
The Dimension of Opportunity	Opportunity limited to 1 coop	Opportunity to CUs as community
Digitalization Capability	1 coop entity Limited Technology Roadmap and Adoption	Togetherness in CU community Modern and State of the art technology such as mobility, API, blockchain, etc Continuous Technology Roadmap and Adoption

WHAT'S NEXT?

TREND IN INDONESIA BANKING

Connector between technologies

Application Programming Interface (API)

User eXperience (UX)

Personalized user experience

Cloud

Digital Banking

Digital Core Banking

Robotic Process Automation/ Artificial Intelligence (RPA/AI)

Automated process for advanced services

Source: IDC, The Top 5 Technology Trends in Indonesia Banking Industry 2020-2022

Cooperatives must adapt to the technological trends of the financial world to remain a major player in the microfinance market.

2020-2025

Data	Technology	Risk Management	Collaboration	Institutional Arrangements
Data Protection	IT Governance	IT Risk Management	Platform Sharing	Finance & Investment
Data Transfer	Technology Architecture	Outsourcing	Collaboration between financial institutions and non-financial institutions	Culture
Data Governance	Emerging Technology and Application a.l: - Machine Learning - Artificial Intelligence - Cloud Computing - Open API - Blockchain/Dis-tributed Ledger Technology - Regtech/Suptech	Cybersecurity		Leadership
				Organizational Design
				Talent

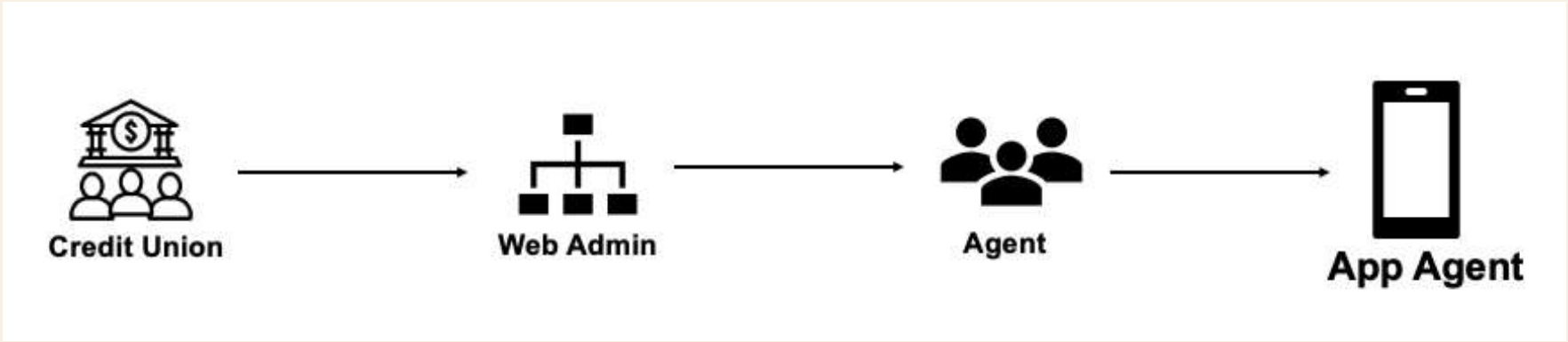
Customer

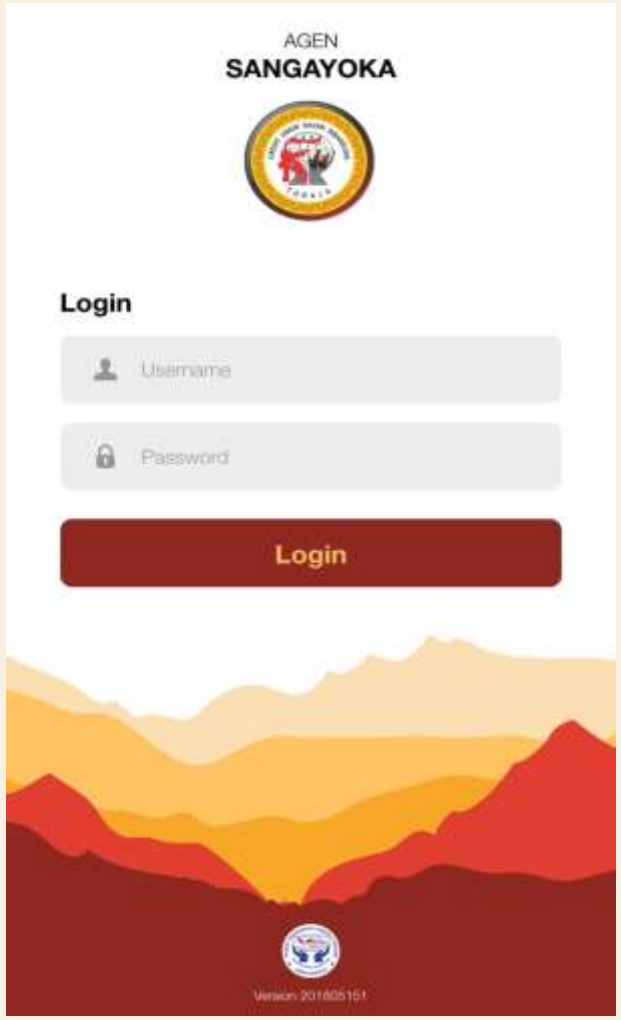
Customer Engagement	Customer Experience	Customer Insight	Customer Trust and Perception	Customers with Disabilities

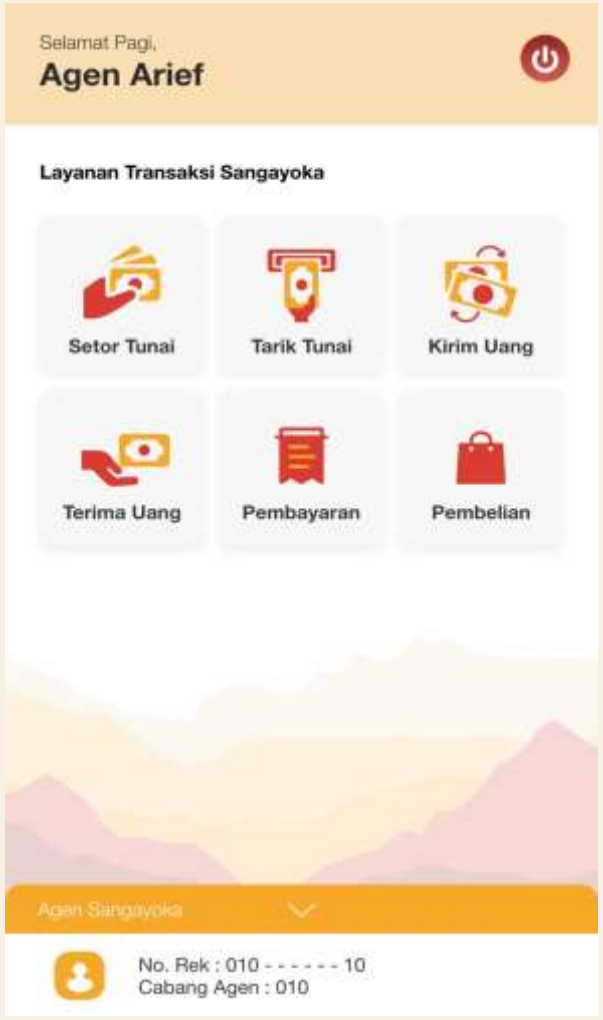
FUTURE ROADMAP

AGENT CU

Branch
Members
Mobile Branch
Mobile ESCETE
CU Activist
Credit
Union (CU)


Credit Union
Web Admin
Agent
App Agent

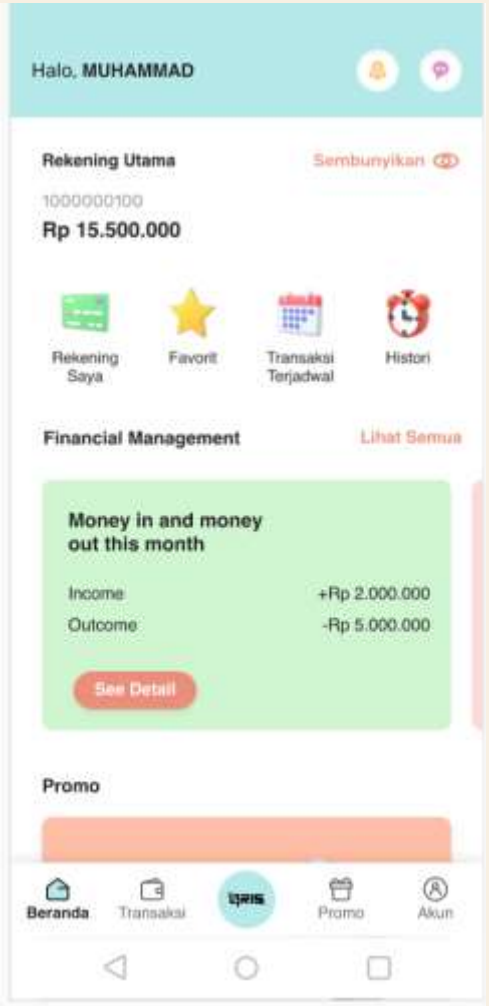


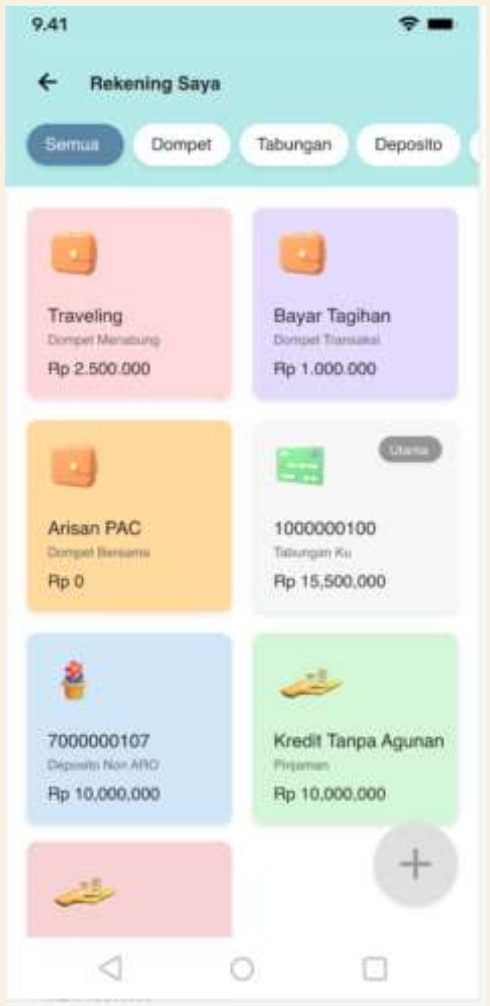


AGENT CU APPS

- DEPOSIT
- WITHDRAWAL
- ONLINE ON BOARDING
- ONLINE LOAN APPLICATION
- BILLER PAYMENT

MOBILE ESCETE





2.0

- ONLINE ON BOARDING
- BIOMETRIC AUTHENTICATION
- MENU COSTUMIZATION
- PROMOTION BANNER
- PUSH NOTIFICATION
- PERSONAL FINANCIAL MANAGEMENT
- BUY NOW PAY LATER

FRAUD DETECTION

1. FINANCIAL BEHAVIOR

- Frequency of debit transactions that exceed the threshold in one day
- Transactions beyond the threshold of number and frequency
- High transaction frequency after account opening

2. LOGIN BEHAVIOR

- Excessive logins within a certain period of time

3. MULTIPLE ACCOUNTS

- Transactions from multiple account sources to 1 account
- Transactions from 1 account source to multiple accounts

4. REPEATTING TRANSACTION

- The same transaction over and over
- Transaction failed with the same response code

5. PREPAID CELLULAR TOP UP

- Excess prepaid cellular top up for a certain period of time

FRAUD DETECTION

6. TRANSACTION IN UNUSUAL TIME

- Frequency with unusual timing like near EOD

7. DEVICE IDENTIFICATION

- Transaction started from different device ID
- Transactions start at the same time from 2 or more than several IDs
- Activation / Reactivation with a different cellphone number from the existing cellphone number

8. BALANCE INQUIRY

- Excess balance checking over a period of time

9. LOCATION AND TIME DIFFERENCES

- Transactions with illogical time and location dimensions (City)
- Transactions with illogical time and location dimensions (Cities in different countries)
- Transactions from known hacker IP locations
- Multiple user IDs from one IP

10. SUSPICIOUS CUSTOMER

- Transactions with destination accounts that are on the negative list

DATA ANALYTICS

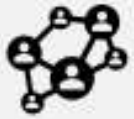
Input	Analytics	Context	Output

Sumber Data Internal:
Core Database, MB Database

Sumber Data Eksternal:
Website crawling, social media, survey, dll

Analytics:

Data Streaming



Modelling/Profiling

Tools:

AI/Machine Learning

Business Intelligence, Analytics Modelling dan Visualisasi

Members Demography

Branch Demography

Product Recommendation

Output dapat dilihat di channel/dashboard yang dimiliki oleh user Puskopcuina

Contoh output:

Report

Recommendation

Alert

PUSKOPCUINA

DIGITAL TRANSFORMATION

- SIMO
- CORE ESCETE
- MOBILE ESCETE
- sMartCU

PUSKOPCUINA

THANK YOU

PUSKOPCUINA.ORG

SCAN TO GET IN TOUCH WITH ME