Lippo Group BIG DATA
How to Develop a Deep Understanding of Your Customers by Connecting All of Your Data Sources

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Our touch points are serving Indonesian consumers

We bring technology and new experience to customer lifestyle and influence their behavior, and tune with customer mind to meet their expectation and improving their life.
OVO is a digital lifestyle concierge platform

An ecosystem that allowing customer to have single loyalty conversion across brands, do payment and financial services

Thousands of outlets have committed to join OVO loyalty and accept OVO payments
OVO connects customer transactions across merchants. When we transform data as 360 degree customer profile and actionable insights thus we can engage with Customer with new and better experience.

Slice and dice customer profile per individual or as aggregated insight:

- Gender
- Loyalty Segment
- Age
- Churn Score
- Age Group
- Product Tendency
- Loyalty Segment
- Total Purchase Value
- SES (Social Economic Status)
- Brand Tendency
- Spending Class
- Most Visited Merchant

Who Information
- Emotional and Attitudinal Profile
  - Cross Channel Behavior
    - CRM, Demographic, psychographic, behavioral, geographic
  - Brand Image, sentiment, social, customer relations
  - Purchase Behavior
    - Social Media, video, audio, digital, viewership and interaction
    - E-commerce, e-wallets, loyalty

Slice and dice customer profile per individual or as aggregated insight:
360 degree of Customer Profile
a multi dimensions of customer attributes to describe their behavior

Customer Profile:
- Age 27
- Single
- Young Professional
- Medium Income
- High Spender
- Promo Seeker

Visit Behaviour:
- Visit 7 times this month.
- Favorite time of visit: 3-8 PM
- Parking time avg: 1 hrs 30 min
- Likelihood to visit in next 7 days: 45%

Merchants visited at this location:
- Dailybread – spend IDR 50000
- Ace Hardware – spend IDR 270000
- Maxx Coffee – spend IDR 19000

Purchase Behaviour:
- Buy milk 2x per week
- Has cat as pets
- Favorite product is instant noodle

Lifestyle:
- Sporty
- Healthy Lifestyle
- Brand-minded

Face Recognition:
- The same person appear in many of our premises

Face Recognition: Tensorflow, Keras
Basket Fingerprint: Clustering
Socio Economic Status: Clustering
Analytic API on top of Hadoop
(Initial plan)

Big Data Cluster
- HDFS
- YARN
- Spark
- Hive
- Impala
- Kafka
- Vibe Data Stream
- Big Data Quality
- Intelligent Data Lake
- Enterprise Information Catalog

ETL Tools
- REST API
- Database Connection
- Data Stream
- JSON
- XML
- FTP
- Log Files

API Cluster
- API Aggregate
  - Impala
  - Hive
- API Granular
  - HBase

API Consumer
- Dashboard Visualization
- Mobile Apps E-Commerce
- Point of Sales
- Campaign Channel
- Backend System

Lippo Group data source

Big Data Platform (data lake)

Big Data API Layer

API for Internal & External Lippo Group
Analytic API on top GPU and Kinetica

Lippo Group data source

Big Data Platform

CUDA/Keen API on top GPU and Kinetica

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Kinetica

- NVIDIA

API analytic

- Aggregate
- Granular

Event trigger

- Campaign
- Fraud Detection

Modeling

- Machine learning

API Consumer

- Dashboard Visualization
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API for Internal & External Lippo Group
Thank you