# 点融网金融科技的大数据解决方案

单忆南 Sync 高级数据总监







信息安全

人工智能

机器学习

黑产

互联网金融(FinTech)

基础设施

团队管理

云计算

软件性能

硅谷

微服务

互联网架构

[上海站]



2017年10月17-19日 上海·宝华万豪酒店

→ 扫描二维码 开启软件开发新思路









EGO旨在组建全球最具影响力的技术领导者社交网 络,联结杰出的技术领导者学习和成长。

2017年6月30-7月10



# SPEAKER INTRODUCE

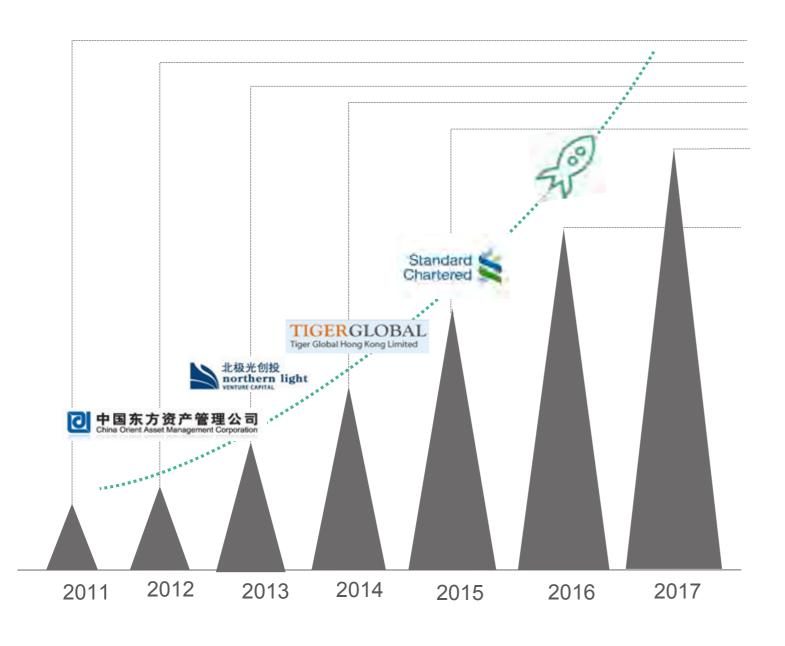
#### Sync 点融网 高级数据总监

- 在搜索引擎搜索广告以及电商等垂直搜索有丰富经验,对ranking,推荐,反欺诈,智能系统等领域的架构和建模都有深入的理解,曾就职于百度和eBay等大型互联网公司。
- 2015年加入点融网,独立设计实施了基于大数据的风控引擎,组建和完善了基于HDFS的数据仓库组和BI团队。





#### Dianrong History



- ➤ Founded in Shanghai, China with technology platform from Lending Club
- > We are Six years old
- VC investment from Northern Light Venture Capital, Tiger Global, Standard Chartered Private Equity, China Internet Fintech Fund, Bohai Financial, and Max Giant
- Over 2,600 employees and 28 offices across China
- Launched China's First Block chain platform with Foxconn
- ➤ As of end of Apr 2017, total lender volume reached 29 billion RMB, accumulated interest for lenders exceeded 1 billion RMB.







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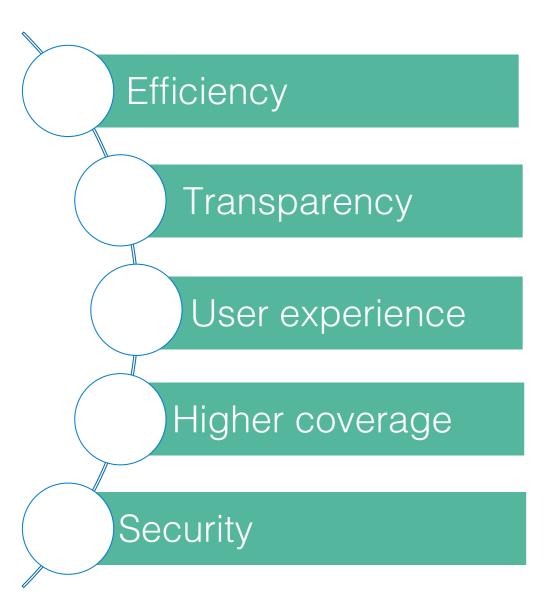
- Fintech Overview
- Loan business
- Lender management
- Intelligent business management
- Big data solution architecture overview







#### **Fintech Overview**



#### A Range of Technology Strengths

- Payments: Digital wallets, peerto-peer payments
- Investment: Peer-to-peer lending
- Insurance: Risk management
- Intelligent Advisory: Robo-advisor
- Retail Banking and Supply Chain Finance
- Financing: Crowdfunding, microloans and credit facilities
- Block Chain: Bitcoin







#### **Big Data Applications**

#### > Loan Business

- Fraud Detection
- Credit worthiness
- Intelligent collection
- Risk based pricing

#### Customer Management

- User profile
- Behavior analysis
- Behavior prediction
- Call center operation
- User segmentation
- Anti Econnoisseur

#### Business Management

- Risk management
- Portfolio management

Data requirement	Engineering	Algorithm
Borrower Profile Social network data PBOC Loan status	Third party data integration Extensible/flexible Near real time processing Support ML model	LR scorecard GBDT scorecard
Sessions, Views and Actions Lender profile	Behavior data extracting and cleaning Large scale data mining real time calculation/ searching	Clustering Categorizing
Business data Business relations	OLAP Dashboard Large scale data simulation	Statistic model Monte Carlo







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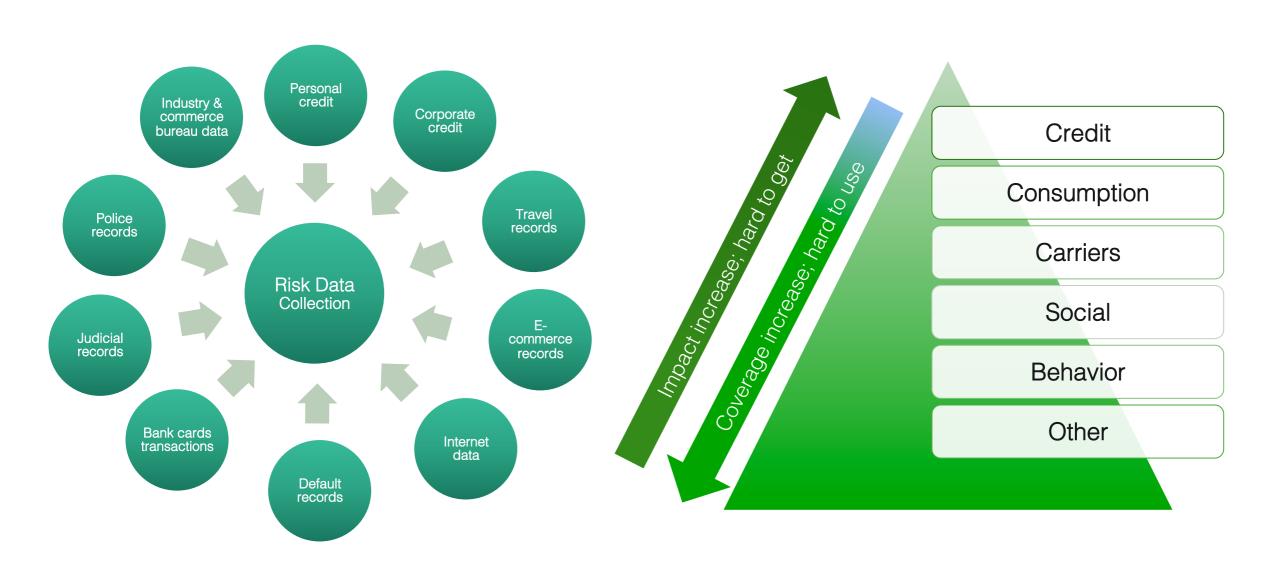
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#### **Loan Business - Data Collection**

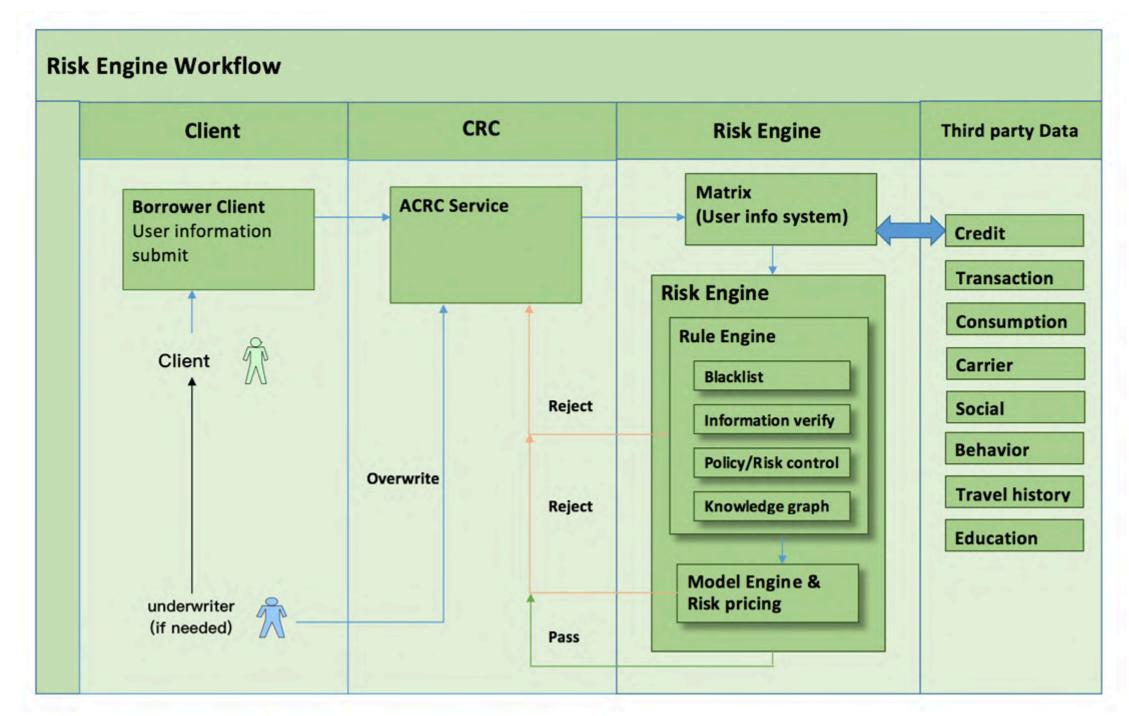








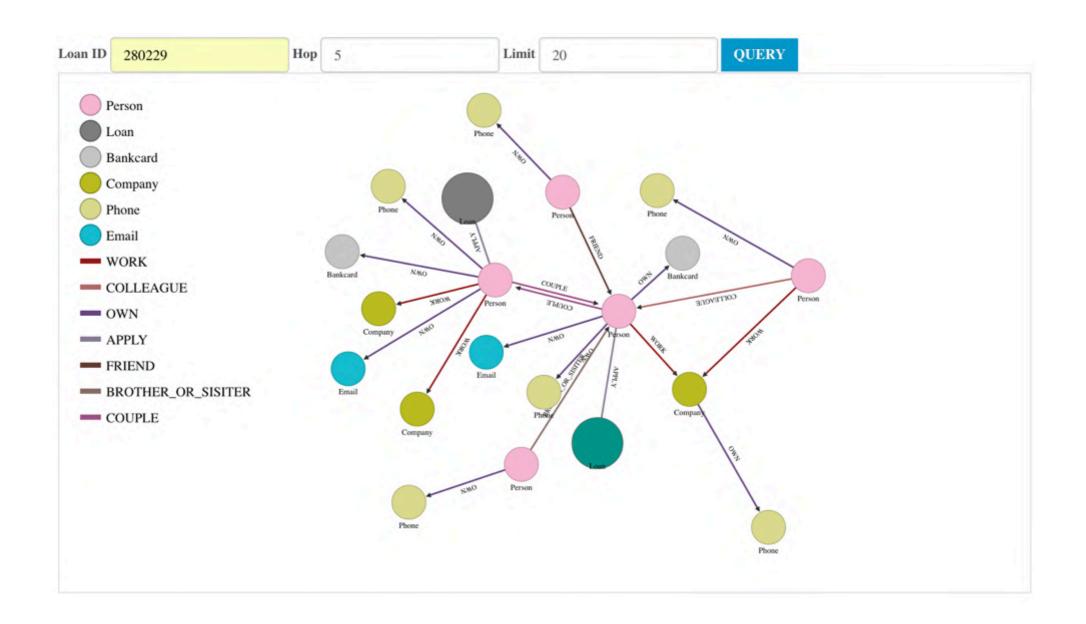
#### Loan Business- Online Risk Engine Workflow







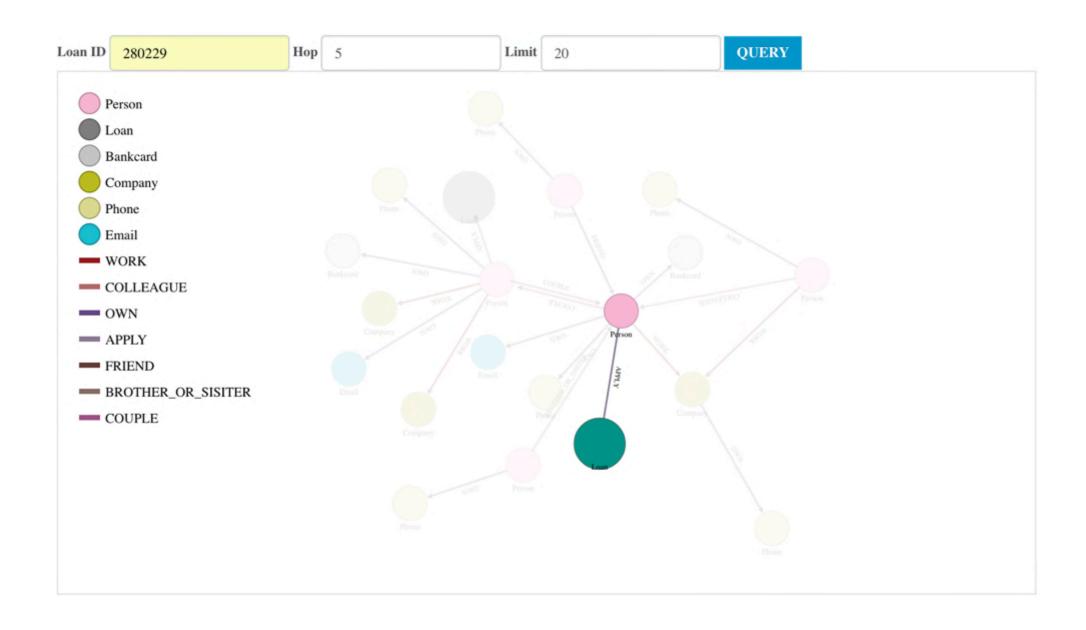








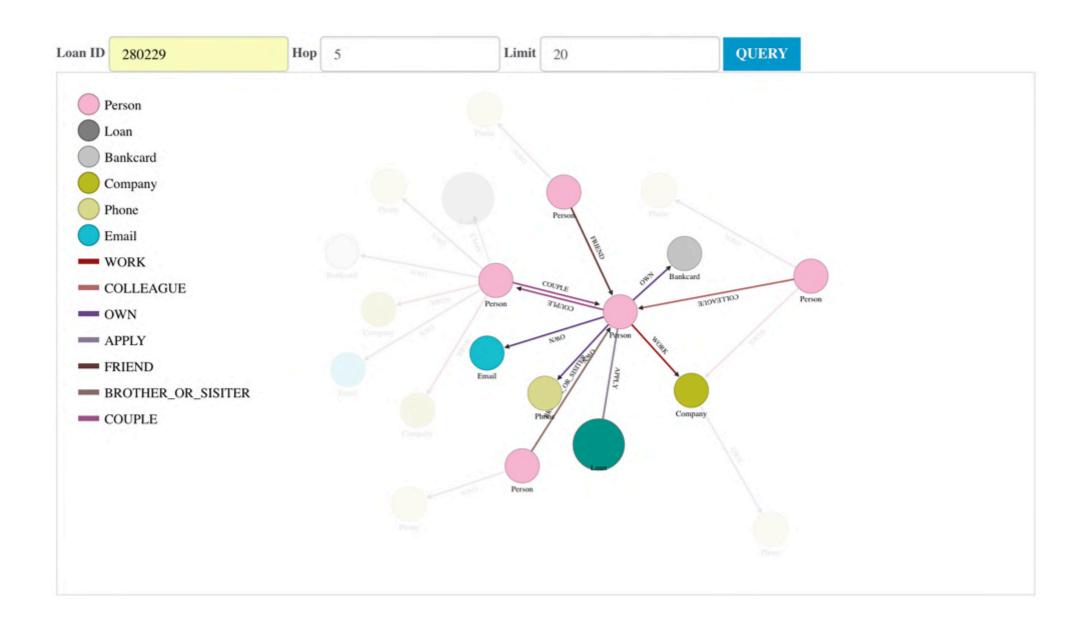








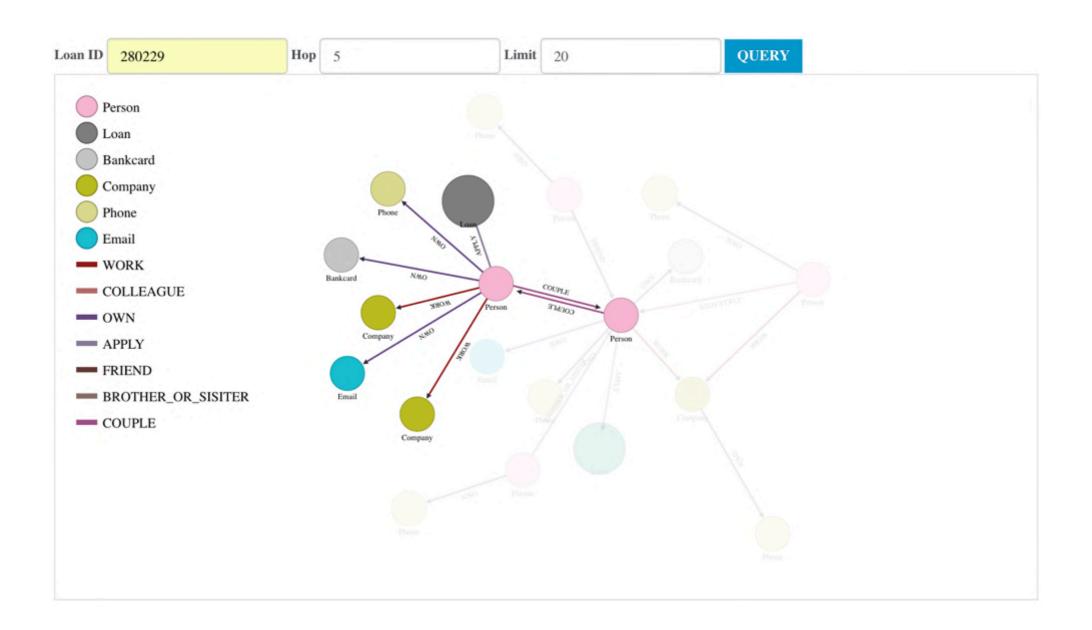








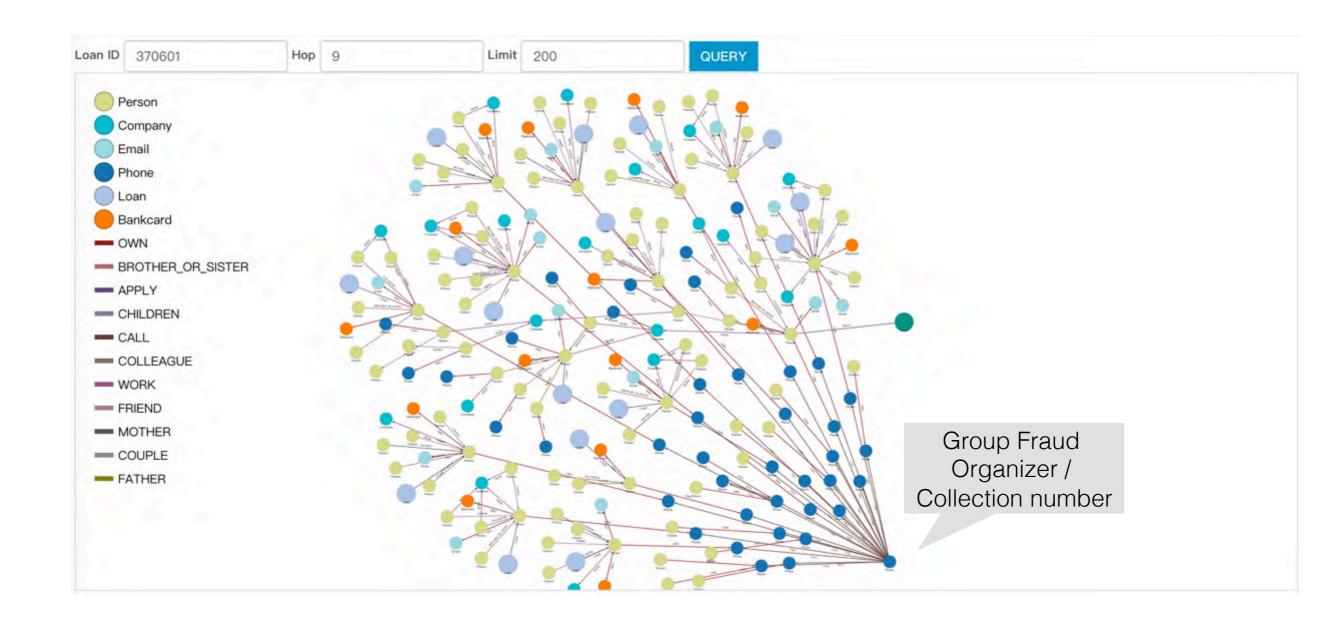












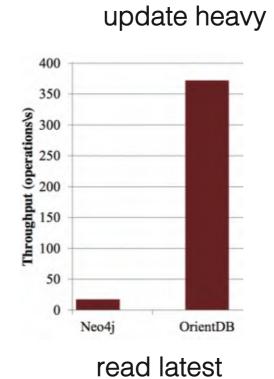


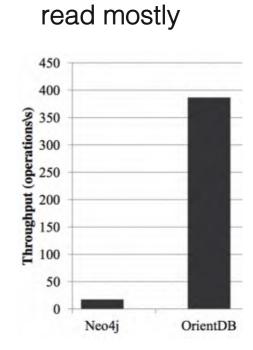


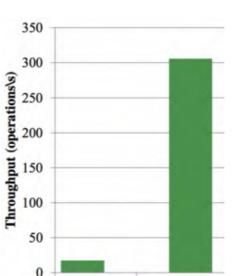


Features & Capabilities	OrientDB Community	Neo4j Community
Graph Database	✓	✓
ACID	✓	✓
TinkerPop Compliance	✓	✓
Java Hooks	✓	✓
Sharding	✓	
Multi-Master replication	✓	
SQL*	✓	

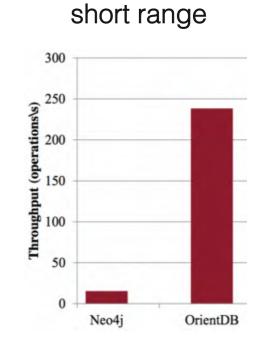
Other options: Titan, GraphDB







Neo4j







OrientDB



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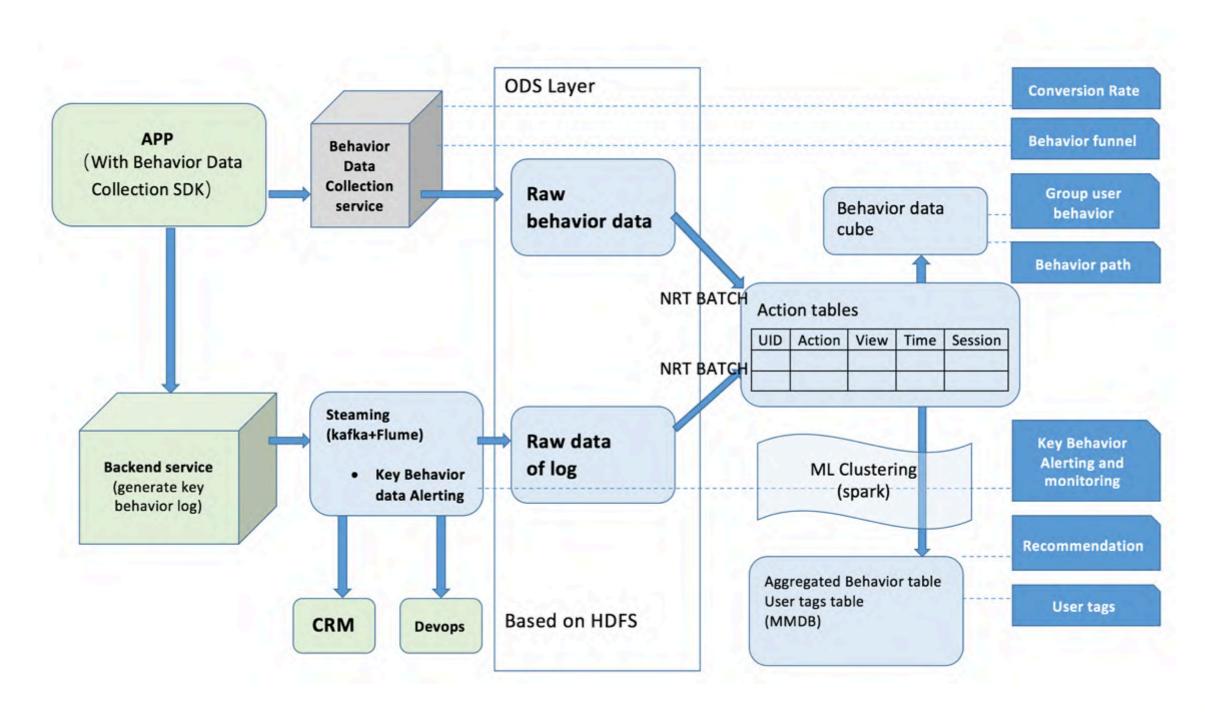
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#### **Customer Management – Behavior Data**

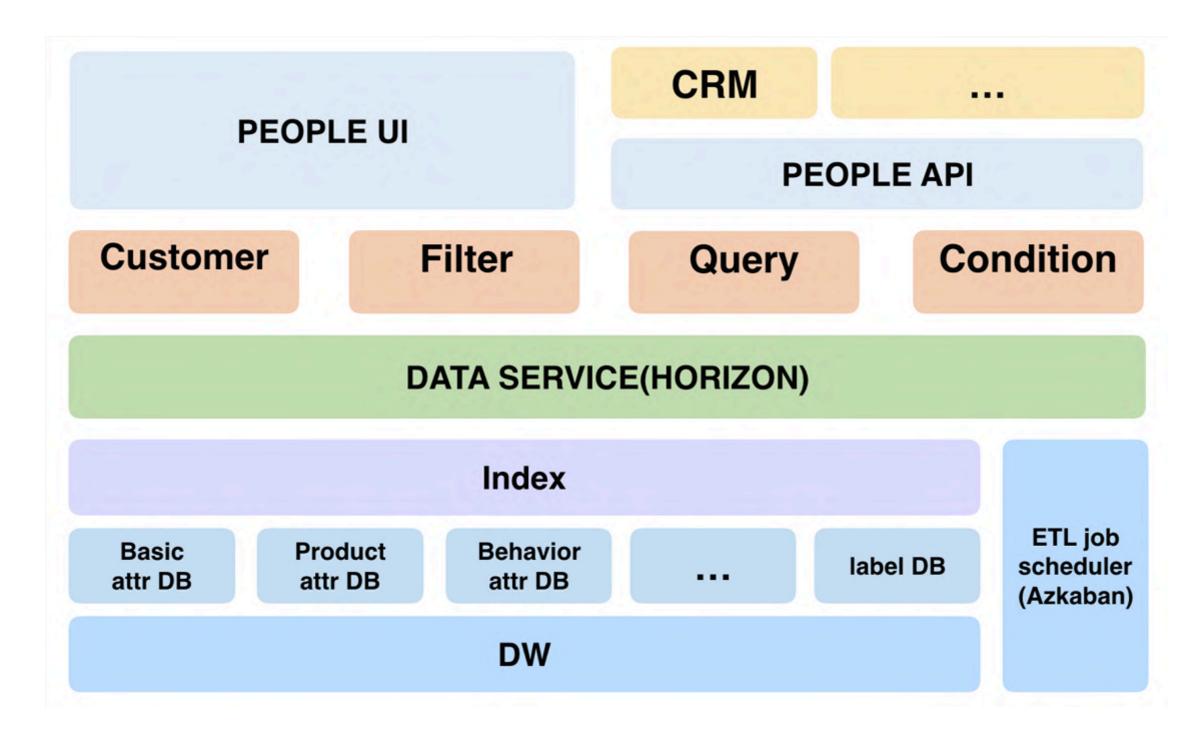








#### **Customer Management – Profile Data**









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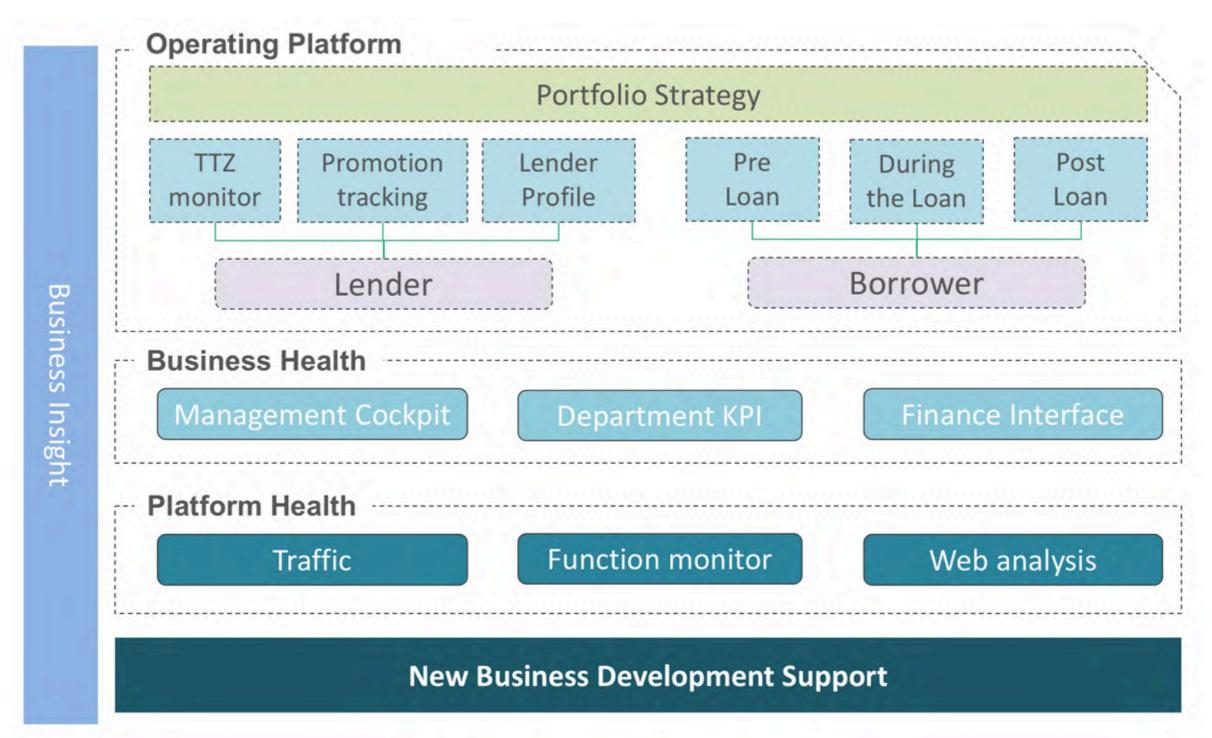
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## Intelligent business management

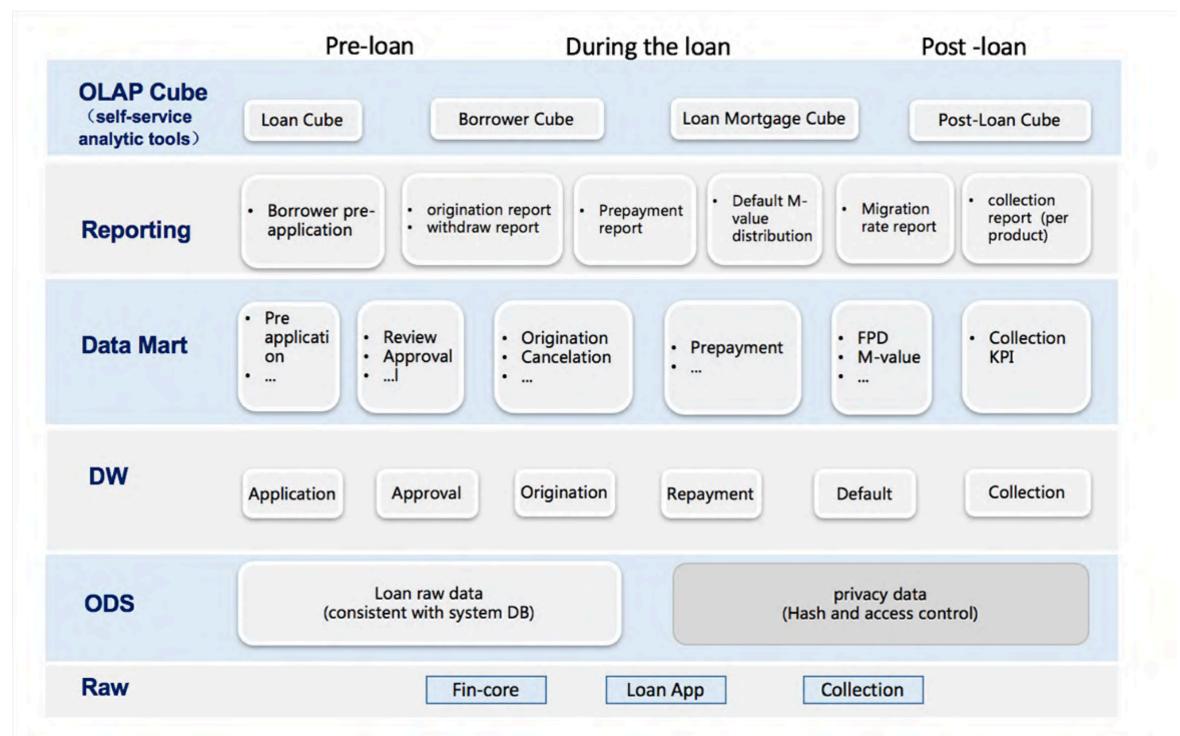








## Intelligent business management









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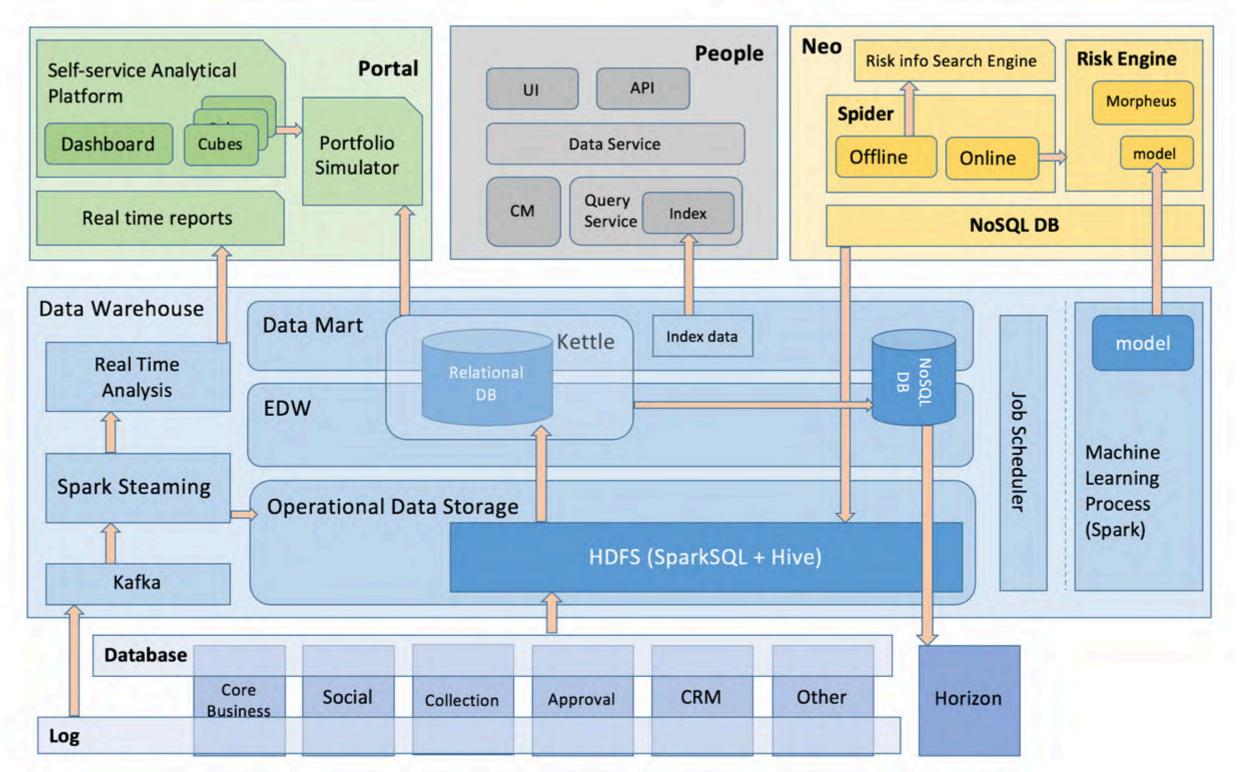
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#### **Architecture Overview**









# THANKS!











#### 让创新技术推动社会进步

HELP TO BUILD A BETTER SOCIETY WITH INNOVATIVE TECHNOLOGIES

# Geekbang). 极客邦技



专注中高端技术人员的技术媒体



高端技术人员学习型社交平台



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