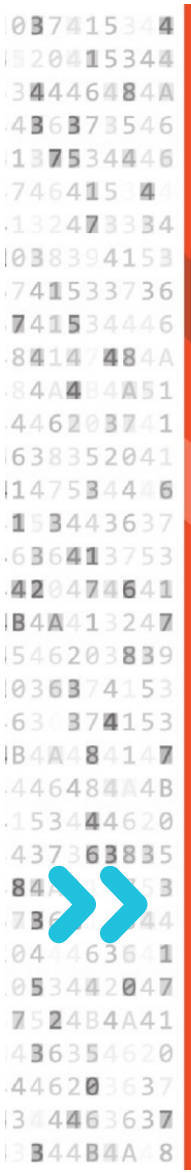


# Digital Transformation – Case Studies

K2VIEW » *Data without delay.*

CASE STUDY OVERVIEW DTCM101

# Customer Data Hub delivers unified experience for North American wireless company to meet merger deadline

SOLUTION → Digital Transformation

INDUSTRY → Communications

*K2View Fabric solution delivered in just 3 weeks, besting other options by 6 months.*

| | | |
|---|---|---|
| CHALLENGE | Merger deadline to achieve common customer operations for $5B acquisition. | • $5B acquisition of 2 wireless competitors<br>• Desire to move to common systems but needed an immediate solution to serve all customers across the combined channels to meet government mandates for the merger.<br>• Previous partners failed, leaving only weeks to deliver a solution. |
| SOLUTION | K2View Fabric integrating data across 3 companies to create a Customer 360 solution supporting sales and service for 15M across 1000 retail stores. | • K2View Fabric as the single source of customer data across the three companies.<br>• Sourced data across acquired companies in real-time, exposing it for retail and call center.<br>• Supporting 15M customers in 1000 locations. |
| RESULTS | Met merger deadline and achieved cost savings in excess of $2.75M. | • **Speed:** Solution was delivered in just 3 wks<br>• **Strategic Value:** Protected $5B investment by meeting government requirements<br>• **Cost Savings:** Saved $2.75M in infrastructure and manual work, and accelerated achievement of merger synergies. |

CASE STUDY TECHNICAL OVERVIEW DTCM101

# Customer Data Hub delivers unified experience for North American wireless company to meet merger deadline

SOLUTION → Digital Transformation

INDUSTRY → Communications

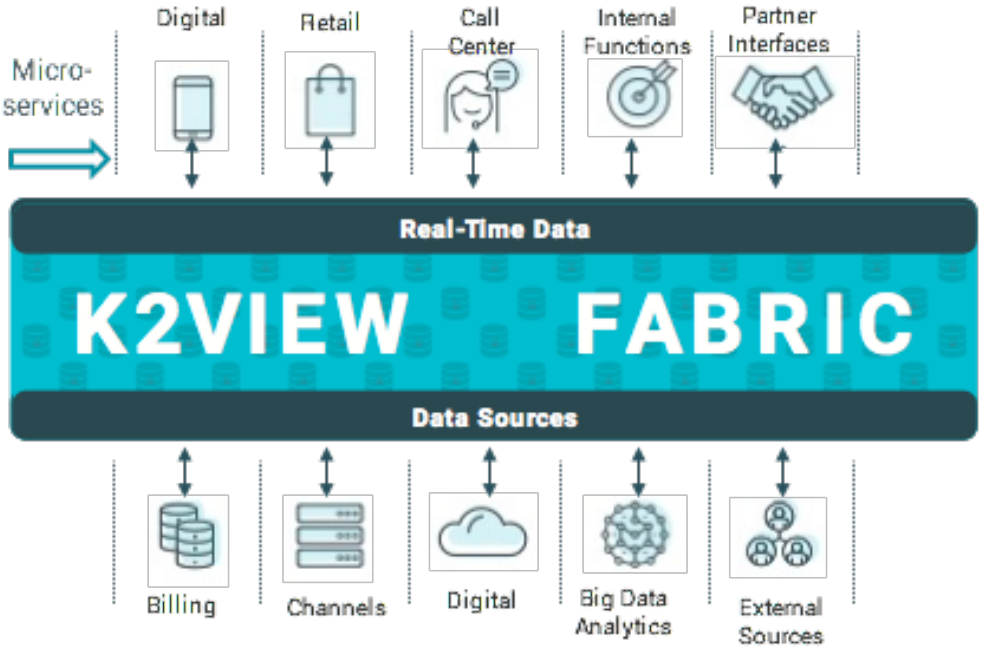
*K2View Fabric integrated data across legacy and new systems and deployed an embedded web-services layer to enable micro-services architecture*

## ACCESS

- Micro-service
- 1000 retail stores
- 1500 calls/secon

## CONFIGURATION

- 20M micro-databases
- 5 nodes
- 8 cores
- Replication factor 3




Results:

- No impact on legacy systems
- 100% availability since deployment
- New sources and channels added in days

CASE STUDY OVERVIEW DTCM102

# Customer 360 view created for self-service portal in 3 days

SOLUTION → Digital Transformation

INDUSTRY → Communications

*Global media & entertainment brand wins big with customers while cutting costs*

## CHALLENGE

Poor customer self-service experience due to significant latency issues associated with retrieving data for portal from scattered systems.

- Customer data was scattered across multiple countries and systems
- Customer had poor experience with self-service portal because of significant latency
- Issues with data retrieval
- Legacy architecture, costly licensing fees and long development cycles were creating a high TCO

## SOLLUTION

K2View Fabric integrated data from across multiple countries & systems to improve customer self-service experience & cut costs.

- **Speed:** Quicker time to market and improved customer experience
- **Know your customer**: A normalized, 360 master view for 1M customers was created in 3 days
- **Performance:** Data latency from core systems was cut from minutes to milliseconds
- **Cost-Savings:** Immediate and on-going cost reduction of more than $5M/annually
- **Efficiencies:** Customer Care cost reduction; efficient development; licensing fee savings


## RESULTS

Customer 360 view created in 3 days; improved experience; >$5M saved annually

- K2View Fabric was implemented to integrate and store data from three countries and a number of legacy technologies
- Customer-facing applications were integrated directly into Fabric
- Data masking was applied to appropriate data to improve security

CASE STUDY TECHNICAL OVERVIEW DTCM102

# Customer 360 view created for self-service portal in 3 days

SOLUTION → Digital Transformation

INDUSTRY → Communications

*Fabric integrated data across multiple countries and systems, then deployed an embedded web-services layer to enable a positive self-service experience*

**ACCESS**

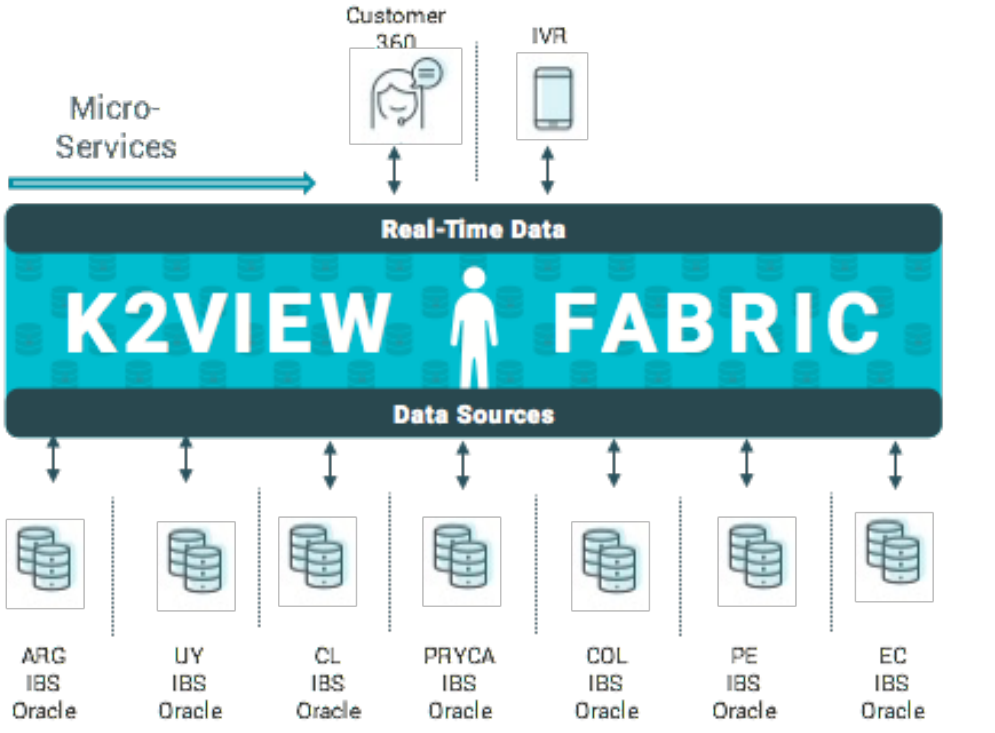
- Micro-service
- Rest API
- 1.3 WS/hr

**CONFIGURATION**

- 20M micro-databases
- 3 data centers
- 1 Cassandra cluster
- 9 nodes
- 72 cores
- Replication Factor 3

**SOURCES**

- Real-time synchronization
- 7 distinct sources of data
- Across multiple countries.




- No impact on legacy systems
- 100% availability since deployment
- New sources and channels added in days

CASE STUDY OVERVIEW DTCM103

# Fortune 10 Telecom deploys Fabric DaaS, providing real-time access to customer information

SOLUTION → Digital Transformation

INDUSTRY → Communications

*Fabric powers digital transformation with micro-service based access to customer data.*

**CHALLENGE**

Replacing Oracle DB with 200B records to improve performance, reduce cost, and improve time to market.

## Challenge

- Massive centralized customer DB was costly and slow to maintain and couldn't keep up with the demands of the business.
- DB was the single gateway to data for 120M customers and had become a bottleneck.
- Big data and MDM solutions wouldn't work because data had to be current.

**SOLUTION**

Deployed a fully distributed Data as a Service solution providing operationall access to customer facing channels

## Solution

- Access and organize data from 100's of systems into 120 customer micro-dbs.
- Replace 500 Oracle stored procedures with simplified web-services.
- Enterprise access via micro-services.

**RESULT**

Dramatic improvement in performance and time to market for new services.

## Results

- **Performance:** Fabric performance is orders of magnitude faster than the existing solution.
- **Strategic Value:** Client adopting Fabric as the foundation for their transformation to a micro-services based architecture.
- **Cost Savings:** Fabric will reduce the hardware infrastructure size and cost by 80% and dramatically reduce the time and cost for new projects.
- **Speed to Market:** New services delivered in days vs 6 months average TTM.

CASE STUDY OVERVIEW DTCM103

# Fortune 10 Telecom deploys Fabric DaaS, providing real-time access to customer information

SOLUTION → Digital Transformation

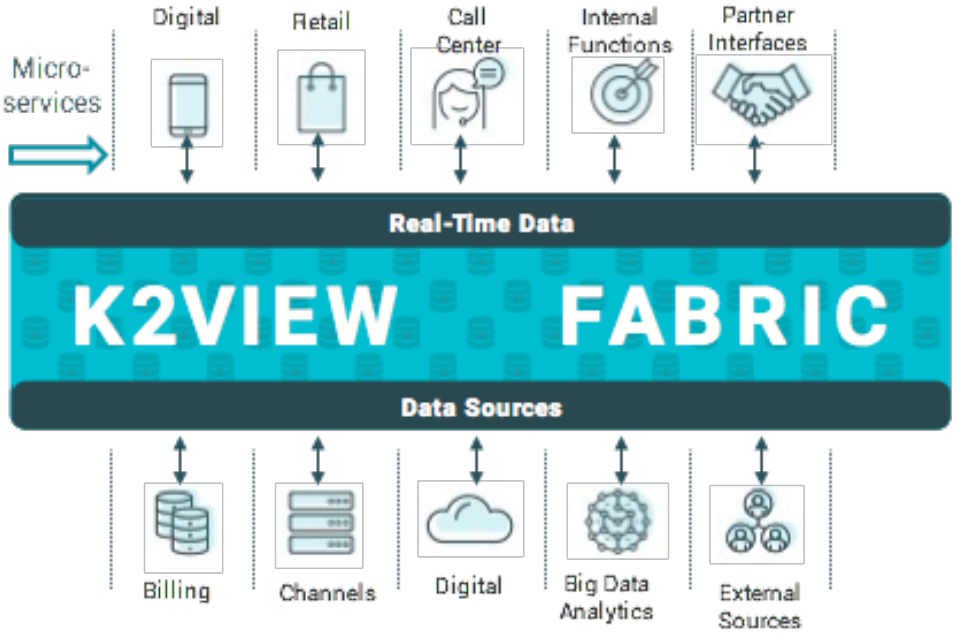
INDUSTRY → Communications

*Fabric modernized IT's delivery of customer data by mobilizing data from hundreds of systems and exposing it through micro-services*

**ACCESS**
- 500+ webservices
- Enterprise Bus
- All front-end applications
- 5B calls/month

**CONFIGURATION**
- 120M micro-databases
- 3 Data Centers
- 84 Nodes
- 672 Cores

**SOURCES**
- 100s of systems
- Golden Gate
- Data Router
- FTP




## Statistics:

- 10k simultaneous calls in 26 milliseconds
- Fabric performance is 5 orders of magnitude faster
- Running on commodity HW

CASE STUDY OVERVIEW DTCM104

# K2View Fabric take's Israel's largest player from zero to Customer 360 to support M&A activity in just 3 months

SOLUTION → Digital Transformation

INDUSTRY → Communications

*Fabric integrates data from multiple systems to support Salesforce transformation*

**CHALLENGE**

M&A data integration from multiple complex sources to support cloud-based Salesforce transformation effort.

Challenge:

- Israel's largest quad player operator (3M customers) acquired one of the 3 biggest ISPs
- Customer Data spread over large number of complex legacy systems & sources
- Needed to implement transformation to new CRM Salesforce Cloud application (Vlocity)

**SOLUTION**

K2View Fabric to integrate, store and expose data as an end-to-end Customer 360 solution.

Solution

- cloud application (Vlocity) and IVR to create an end-to-end Customer 360 solution
- Real-time sync updated products, services, financial & Billing information
- Implemented by customer with minimal support

**RESULTS**

End-to-end implementation in just 3 months to support Salesforce transformation

Results

- **Speed:** E2E implementation based on multiple complex systems in just 3 months
- **Ease of Implementation:** Simple integration with Salesforce cloud application (Vlocity)
- **Performance:** 400 TPS with real-time sync for ~150 tables running on 3 nodes (6 cores each)

CASE STUDY TECHNICAL OVERVIEW DTCM104

# K2View Fabric take's Israel's largest player from zero to Customer 360 to support M&A activity in just 3 months

SOLUTION → Digital Transformation

INDUSTRY → Communications

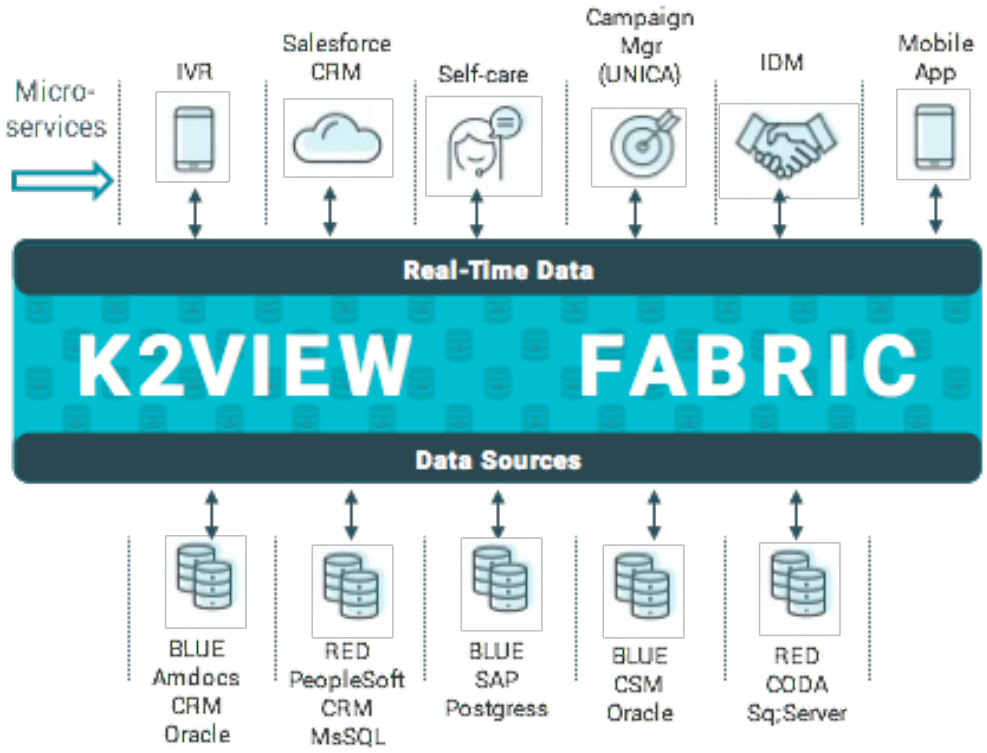
*Fabric brings together complex data from multiple source systems to support lightening-quick Salesforce transformation effort.*

## CONFIGURATION

- 6 business entities
- 1 Cassandra cluster
- 1 data center
- 4 nodes
- 24 cores

## SOURCES

- 5 source systems (Phase 1)
- 9 source systems total
- Billing, Account, Product, Case, Network and Business account data




EXPECTED PERFORMANCE >>

- 500 TPS
- Response time <200MS

CASE STUDY OVERVIEW #DTCM105

# Modernizing applications & data service layers using a micro-services approach

SOLUTION → Digital Transformation

INDUSTRY → Communications

*K2View Fabric delivers big cost savings and improved speed to market, performance & security for Major U.S. Telco*

**SITUATION**

Rising costs associated with updating hardware, software and licenses for legacy systems with limited agility

- Customer required to update legacy hardware, software and licenses at escalating costs.
- Current data infrastructure outdated and the processes being run (SQLs, Real-Time) also outdated and have not been reviewed for redundancy in the last 10 years.
- Current process to update the platform with multiple vendors required every 3 to 5 years minimum.
- K2View Fabric solution presented an opportunity to stop the required upgrading of multiple platforms and vendors by implementing a micros-services approach.

**SOLUTION**

K2View Fabric as data overlay to legacy systems that organizes data around what matters, then rapidly exposes it to micro-services layer

- Client's processes converted to modernized micro-services through the use of K2View Fabric's proprietary approach to:
  - Organizing data around the business entity
  - Storing it in individually-encrypted micro-databases that are refreshed in real-time
  - Then rapidly exposing the data to the client's multiple external applications that use the platform via Fabric's auto-generated web services

**RESULTS**

- Cost savings projected at >$15M every 3-5 years
- Improved agilty
- Improved performance
- Improved security

- Solution delivers modernized development through micro-services, unlimited scale, improved performance and security.
  - K2View solution runs on 80% fewer cores, generating significant savings
  - Speed to market, agility significantly improved
  - Individually-encrypted micro-database methodology virtually eliminates risk of mass breach
  - Cost savings projected over $15M every 3 years to 5 years in reduction of modernizing platform

CASE STUDY TECHNICAL OVERVIEW #DTCM105

# Modernizing applications & data service layers using a micro-services approach

SOLUTION → Digital Transformation

INDUSTRY → Communications

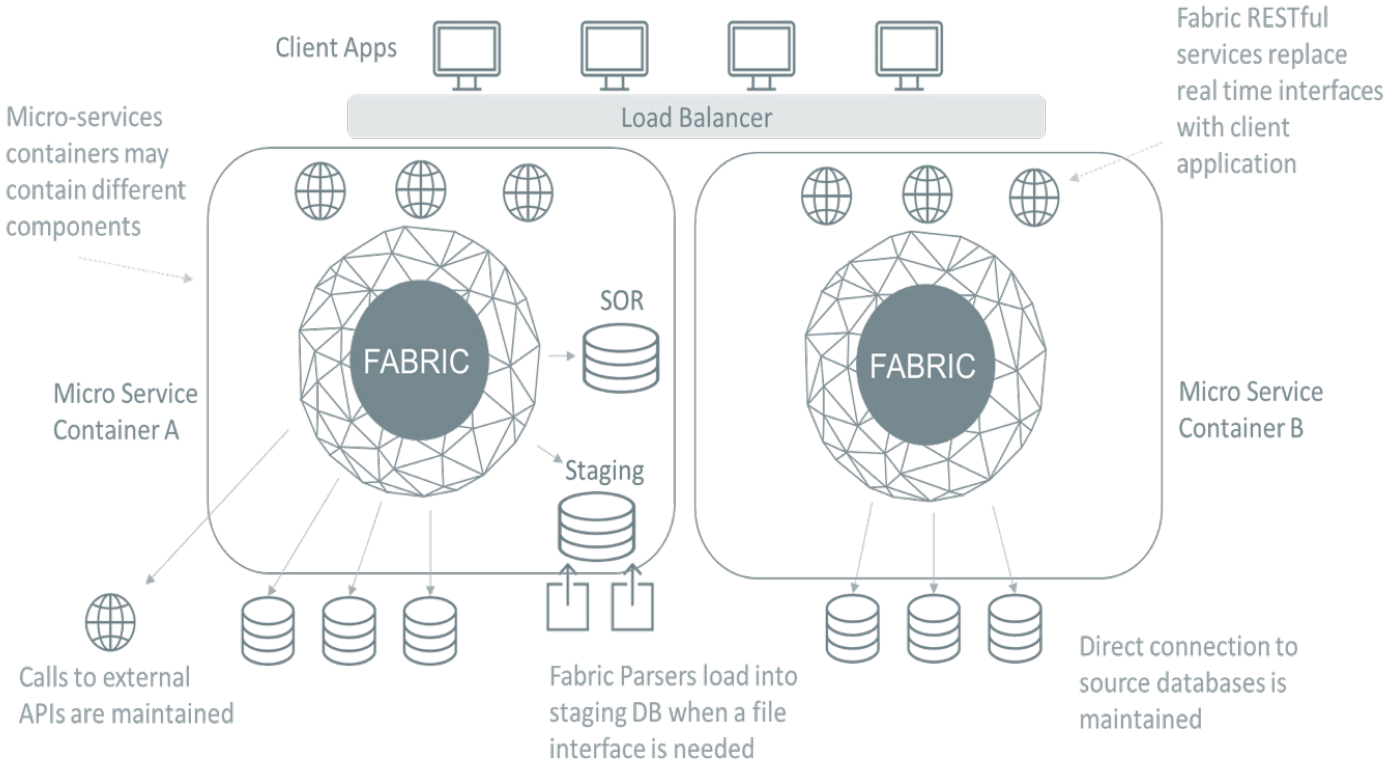
*K2View Fabric delivers big cost savings and improved speed to market, performance & security for Major U.S. Telco*

## FABRIC CONFIGURATION

- Fabric as real-time data overlay to legacy systems
- Separate micro-services containers may hold different components
- Fabric RESTful services replace real-time interfaces with client applications

## RESULTS

- Savings – >$15M every 3-5 years; runs on 80% fewer cores
- Improved performance
- Improved security due to individually-encrypted micro-database structure
- Improved speed to market



CASE STUDY OVERVIEW #DTCM106

# K2View Fabric wipes out archiving & purging woes

SOLUTION → Digital Transformation

INDUSTRY → Communications

*Major Telco decreases TCO while drastically improving performance*

**CHALLENGE**

**Major Telco needed to more cost effective, better performing archiving & purging solution.**

**SOLUTION**

**K2View Fabric rules-based decisioning, purging and Fabric layer archiving solution.**

**RESULTS**

**TCO slashed by 75% while drastically improving production performance.**

- Major Telco needed to purge & archive data from production systems to improve performance, decrease cost & usability of production.
- Archiving needed be consistent & performed at the customer level

- K2View created a rules-based purging process to simplifying complex decision-making.
- The solution archived data in Fabric, for easy re-usability

- Cost of ownership decreased by over 75%
- Production performance improved
- Running upward of 48,000 rules per second on each instance

CASE STUDY OVERVIEW DTFS201

# K2View Fabric delivers data from silo-ed systems to fuel self-service portal for >2M payment processing merchants

SOLUTION → Digital Transformation

INDUSTRY → Financial Services

*Improves customer experience while reducing call center costs & metrics*

**CHALLENGE**

Create a real-time self-service portal to improve customer experience and provide unified view of the customer funds/portfolio.

**SOLUTION**

K2View Fabric as integrated, real-time data layer across 8 systems to power self-service portal solution.

**RESULTS**

Real-time 360-degree customer view for self-service portal in just 3 months.

- Merchants required to call into service desk, creating poor experience an high operational cost
- New customer insurance & saving information data requirements driving self-service needs
- Legacy systems not integrated; lengthy, capital-intense modernization required

- Fabric as the integrated data layer across 8 systems
- Real-time on-retrieval updated funds information
- Front-end using Fabric's API layer as middleware
- Login Verification & data analyzation with BI tools
- Self Service Portal build on top of Fabric for > 2M merchants

Results

- ROI of over $10M over 3 years
  - Lower Development and Implementation costs
  - Reduced calls and Average handle time for reps
  - Less Merchant Churn