Connection 5G – Scenario

Connection 5G: Business Primer

Key Strategic Initiatives

- **Unlock New Opportunities:** Continue to drive new customer acquisition and retention but win back lost customers and cross-sell, suppress to save money

- **Hyper-Personalization:** Deliver engaging content through relevant, tailored personalized experiences.

- **Increase ROI on Customer Data:** Move towards a unified view of customer by consolidating disparate views of customer accounts, standardize data usage and privacy workflows.

- **Cost Optimization:** Reduce operational costs via increased speed, scale and flexibility

Customer Use Cases

JOURNEY OPTIMIZER

Orchestrate the curb-side / in-store pickup communication process starting from when an order is placed to when an order has been picked up

REAL-TIME CDP (ACQUISITION)

Activate all profiles who have visited an iPhone 13/Pixel 6 product page and no order exists for that device or that device is not currently an active line on the customer's account

REAL-TIME CDP (UPSELL)

Find all profiles who have a total billing data usage in the last 6 months > 140 GB, have a rolling 6-month average monthly data usage >= 20 GB and are not on the ultimate phone plan

Customer Use Cases – Phase 1 Focus

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Connection 5G: System Description

- **Centralized data warehouse in Teradata used to unify all customer data** but currently lacks many of the marketing application feedback loops

- **Commerce system fully integrated with CI/CD pipeline** but requires IT effort to exposes new events to the business requests

- **Google Analytics deployment exists** but primarily used to understand basic page traffic. Significant interest with gaining access to the data set and feed it back to their warehouse for data science and analysis.

- **Billing system is a batch based daily job that pushes to warehouse** but there are plans to integrate it into the CI/CID pipeline over the long term

- **IVR system currently works off a projection of data from the warehouse** but there is need to make data more accessible to the call center to deliver more contextualized conversations / offers

- **Salesforce** being leveraged by marketing to send email, SMS and mobile communications to customers. Significant investment by marketing into this application but currently heavily batch-based feeds with data coming from the warehouse

Customer Architecture: System View
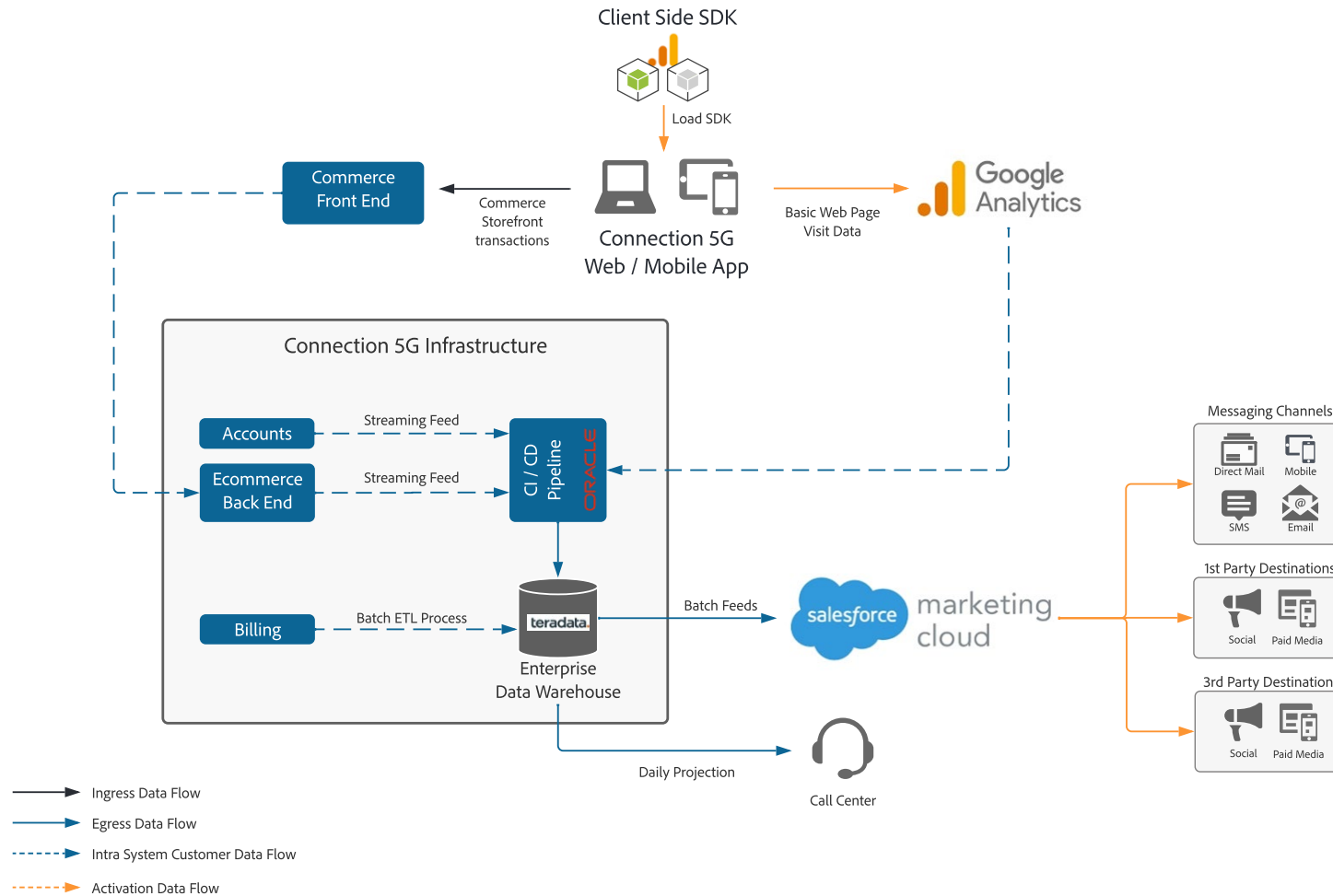
- **Lack of onsite personalization** given no existing architecture is available to expose the warehouse data in a consistent fashion for marketing to leverage

- **Scalability & reliability** are a concern as IT teams are constantly being asked to expose the data within the warehouse to the various marketing applications within the marketing stack. Long term to plans to re-architect the warehouse and move to Redshift or Snowflake

- **Data Governance & privacy** are key priorities with all systems moving forward. Need to centralize all governance and privacy for internal teams and marketing teams when working with the customer data

Customer Data Architecture: Warehouse View
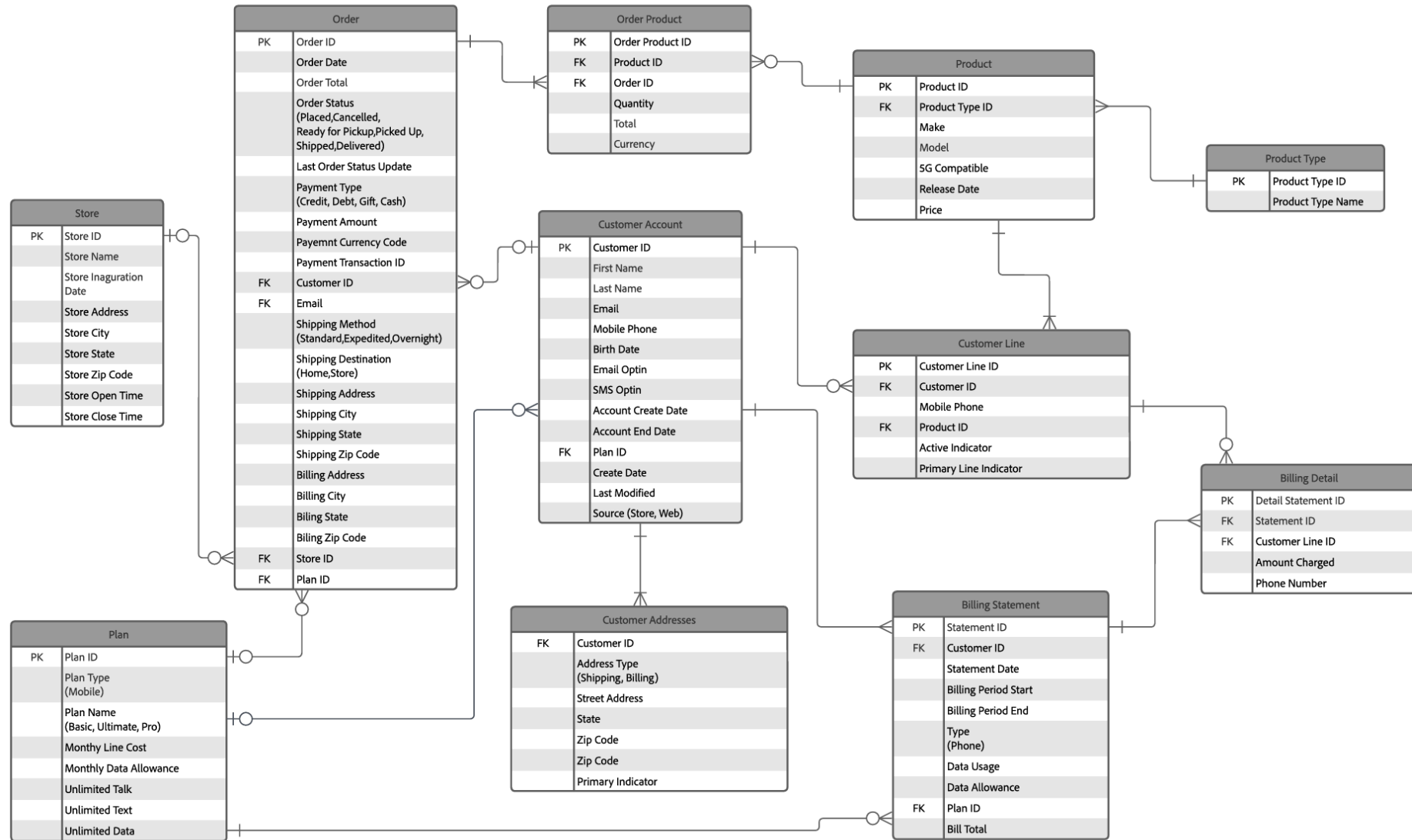
Customer Data Architecture: Streaming Payloads

Orders

```
{
  "orderID": "12345",
  "orderDate": "2017-09-26T15:52:25+00:00",
  "orderTotal": 1045.00,
  "orderstatus": "placed",
  "lastOrderStatusUpdate": "2017-09-26T15:52:25+00:00",
  "payments": {
      "paymentType": "credit|debit|cash",
      "paymentAmount": 1045.00,
      "paymentCurrencyCode": "USD",
      "paymentTransactionID": "PYMNT100"
  },
  "customerID": "C100",
  "shippingDestination": "store|home",
  "storeID": "STR100",
  "shippingstreet": "345 Park Ave",
  "shippingcity": "San Jose",
  "shippingstate": "CA",
  "shippingpostalCode": "95111",
  "shippingMethod": "standard|expedited|overnight",
  "shippingAmount": 0.00,
  "plan": {
      "ID": "PLN100",
      "name": "Ultimate",
      "type": "Phone",
      "monthlycost": 45.00
  },
  "source": "web",
  "productOrders": [
    {
      "productID": "P100",
      "make": "Apple",
      "model": "Iphone 13",
      "quantity": 1.0,
      "price": 1000.00,
      "currencyCode": "USD"
    }
  ]
}
```

Note:

Data is computed and streamed from the back office commerce order system as status changes. Applies to all in-store and online orders

Product Page View

```
{
  "commerce": {
    "productViews": {
      "value": 1
    }
  },
  "web": {
    "webPageDetails": {
      "name": "Google Pixel 6 Pro"
    }
  },
  "productListItems": {
    "SKU": "P100",
    "name": "New Product",
    "priceTotal": 45.00,
    "currencyCode": "USD"
  },
  "xdm:identityMap": {
    "ECID": [
      {
        "id": "2222222222222222222222222222222222222222",
        "authenticatedState": "ambiguous",
        "primary": true
      }
    ],
    "CustomerID": [
      {
        "id": "C100"
      }
    ]
  }
}
```

Note:

Real-time data feed from the Adobe Web SDK capturing page view traffic
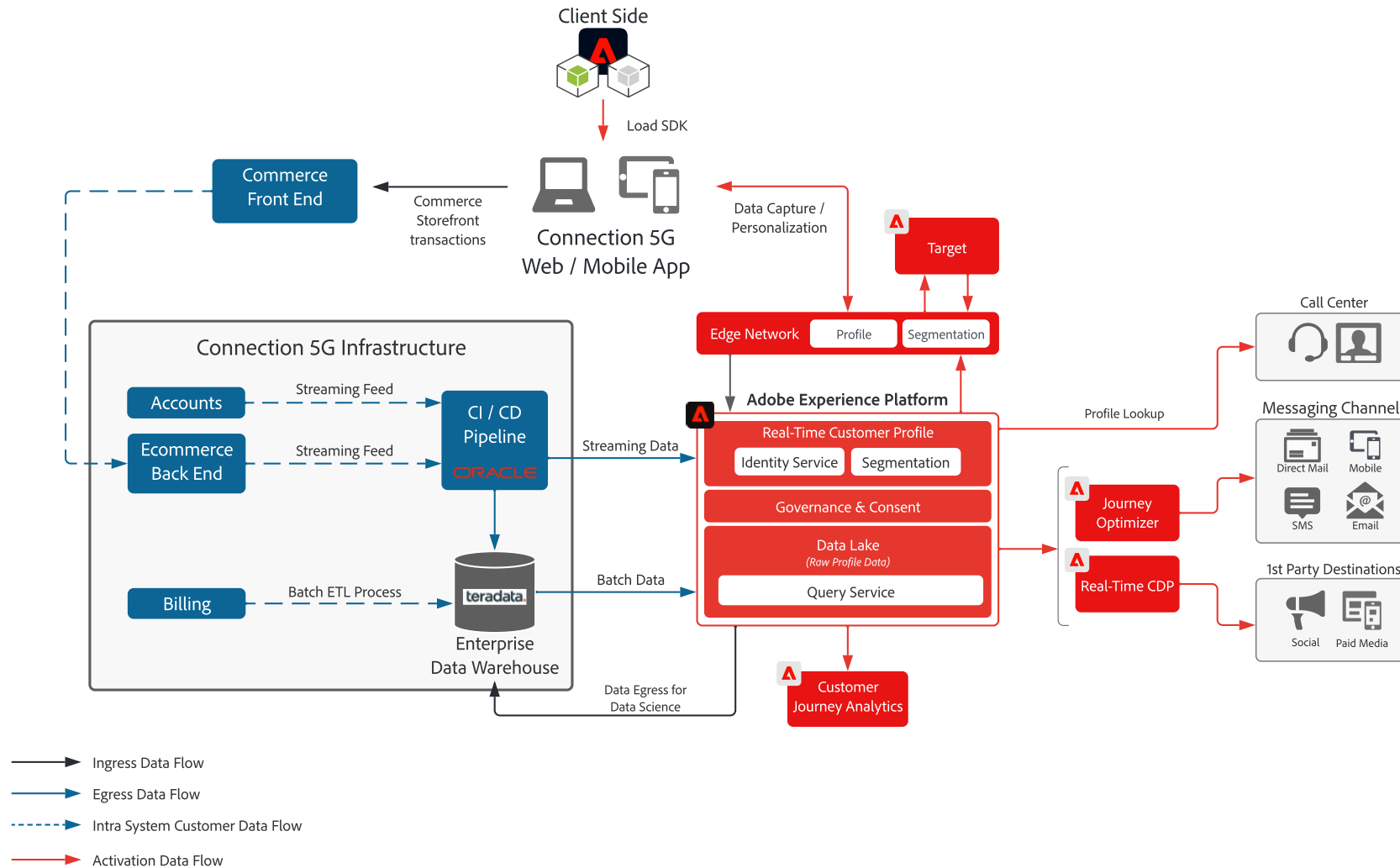
Ecommerce Checkout

```
{
  "checkoutDate": "2017-09-26T14:52:25+00:00",
  "customerID": "C100",
  "email": "john.doe@abc.com",
  "purchaseID": "12345",
  "orderStatus": "placed",
  "shipping": {
    "shippingDestination": "store|home",
    "shippingMethod": "standard|expedited|overnight",
    "shippingAmount": 0,
    "shippingstreet": "345 Park Ave",
    "shippingcity": "San Jose",
    "shippingstate": "CA",
    "shippingpostalCode": "95111"
  },
  "productListItems": {
    "productID": "P100",
    "model": "Iphone 13",
    "priceTotal": 1000,
    "quantity": 1,
    "currencyCode": "USD"
  }
}
```

Note:

Real-time data feed directly from the commerce system storefront. These are only web orders shipped to home

Proposed North Star Architecture

Client Side

Load SDK

Commerce Front End

Commerce Storefront transactions

Connection 5G
Web / Mobile App

Data Capture / Personalization

Target

Edge Network | Profile | Segmentation

Connection 5G Infrastructure

Accounts — Streaming Feed → CI / CD Pipeline (ORACLE)

Ecommerce Back End — Streaming Feed →

Streaming Data →

Adobe Experience Platform

Real-Time Customer Profile
| Identity Service | Segmentation |

Profile Lookup

Governance & Consent

Billing — Batch ETL Process → teradata (Enterprise Data Warehouse)

Batch Data →

Data Lake
(Raw Profile Data)

Query Service

Journey Optimizer

Real-Time CDP

Data Egress for Data Science

Customer Journey Analytics

Call Center

Messaging Channels
Direct Mail | Mobile
SMS | Email

1st Party Destinations
Social | Paid Media

→ Ingress Data Flow

→ Egress Data Flow

⇢ Intra System Customer Data Flow

→ Activation Data Flow

Proposed Phase 1 Architecture