Business Use Case

Brand

Nimbus Outfitters — a mid-market retailer selling apparel and accessories online and in-store.

Goals

- Unify customer identities from **Salesforce CRM** (Sales/Service data).
- Power **Copilot** with **policy** and **competitive pricing** documents stored in **SharePoint** for accurate, compliant responses.
- Create segments from CRM purchase and service history; activate campaigns; measure with Insights.
- Keep architecture **standard-first**: standard objects and DMOs wherever possible.

Systems & Sources

- **Salesforce CRM** (Sales/Service Cloud): `Account`, `Contact`, `Case`, `Product2`, `Pricebook2`, `PricebookEntry`, `Order`, `OrderItem`.
- **SharePoint** (documents only):
    - `policy_docs` (returns, warranty, shipping, privacy, price-match).
    - `competitive_pricing` (competitor price sheets, exceptions).

Data Cloud Architecture

- **Data Streams**: Salesforce CRM (structured), SharePoint libraries (unstructured docs).
- **DSO/DLO**: auto-created for CRM sources.
- **DMO (Standard)**: `Individual`, `UnifiedIndividual`, `ContactPointEmail`, `ContactPointPhone`, `Address`, `Account`, `Product`, `Order`, `OrderItem`, `Case`.
- **Custom DMOs**: *Not required*. (Optional: `CompetitivePrice__mdm` only if you want **structured** competitor price analytics derived from a CSV you might add later; not used in this version.)

Data Spaces

- **Retail** (Sales/Marketing scope).
- **Service** (Support/Case scope).

Outcomes

- **Unified Profiles** across CRM duplicates.
- **Insights**: LTV, order recency, open cases.
- **Segments**: High-value, recent purchasers, service-sensitive.
- **Copilot**: Answers using **Data Graph** + **SharePoint policies/pricing docs**, citing policy versions/dates.

Dummy Data

Use these CSVs to seed your CRM or to emulate CRM-origin DLOs in the Data Cloud stream (standard objects only).

1. CRM Core (Sales/Service Cloud)

Account.csv

```
Name,Type,BillingCountry
Nimbus Retail Store #01,Customer,US
Nimbus Online,Partner,US
Acme Corporate,Customer,US
```

Contact.csv

```
FirstName,LastName,Email,Phone,MobilePhone,HasOptedOutOfEmail,DoNotCall,MailingStr
eet,MailingCity,MailingState,MailingPostalCode,MailingCountry
Ava,Lee,ava.lee@example.com,+1-415-555-0101,+1-415-555-1101,false,false,10 Pine
St,San Francisco,CA,94102,US
Noah,Patel,noah.patel@example.com,+1-650-555-0102,+1-650-555-1102,true,false,25
Oak Ave,San Mateo,CA,94401,US
Lucas,Wong,lucas.wong@example.com,+1-408-555-0103,+1-408-555-1103,false,true,80
Elm Rd,San Jose,CA,95112,US
Mia,Gonzalez,mia.gonzalez@example.com,+1-510-555-0104,+1-510-555-
1104,false,false,55 Maple Ln,Oakland,CA,94607,US
```

Case.csv

```
ContactId,Subject,Status,Origin,Priority,CreatedDate
Return request for jacket,New,Web,Medium,2025-12-20T10:00:00Z
Size exchange inquiry,Working,Phone,Low,2025-12-19T09:00:00Z
Payment issue,New,Email,High,2025-12-22T14:30:00Z
```

Product2.csv

```
Name,ProductCode,IsActive,Family
Classic Denim Jacket,CDJ-001,true,Apparel
Trail Running Shoes,TRS-042,true,Footwear
Everyday Tee,EVT-011,true,Apparel
```

Order.csv

```
Id,AccountId,EffectiveDate,Status,TotalAmount,Description
801A000001,001A000001,2025-10-15,Activated,199.00,Store purchase
```

```
801A000002,001A000002,2025-11-05,Activated,79.00,Online order
801A000003,001A000003,2025-12-01,Activated,120.00,Shipped
```

> **OrderItem.csv**

```
Id,OrderId,PricebookEntryId,Quantity,UnitPrice
802A000001,801A000001,01uA000002,1,120.00
802A000002,801A000001,01uA000003,3,25.00
802A000003,801A000002,01uA000001,1,79.00
```

2. SharePoint (Documents Only)

> **policy_docs/** (PDFs; examples)

```
returns_policy_v3.pdf
shipping_policy_2025.pdf
warranty_policy_apparel_footwear.pdf
privacy_notice_v2.pdf
price_match_policy_v1.pdf
```

Example snippets (for testing retrieval):

- `returns_policy_v3.pdf`: "Returns accepted within **30 days** of delivery. Items must be unworn with tags. Receipt or order number required."
- `price_match_policy_v1.pdf`: "We match qualifying competitor prices at purchase or within **7 days**. Excludes flash sales, clearance, bundles."

> **competitive_pricing/** (PDFs or internal spreadsheets exported to PDF)

```
competitor_prices_Q4_2025.pdf
price_match_exceptions_2025.pdf
```

(No structured CSV ingestion from SharePoint in this version.)

Hands-On Labs (Concise)

> Steps are purposefully brief. Use **standard DMOs** wherever possible.

Module 1

1. **Data Cloud Setup**

- Enable Data Cloud.

- Create **Data Spaces**: `Retail`, `Service`.
- Register **Data Sources**: Salesforce CRM; SharePoint (libraries: `policy_docs`, `competitive_pricing`).

2. **Licenses and Permission Sets**

- Assign **Data Cloud Admin/User**.
- Grant **Data Space** access.

3. **Data Streams**

- **Create CRM Data Stream** (Retail): `Account`, `Contact`, `Case`, `Product2`, `Order`, `OrderItem`.
- **Register SharePoint Libraries** (Retail): `policy_docs`, `competitive_pricing`.

4. **DSO, DLO, DMO [Standard and Custom]**

- Verify CRM **DSO/DLO** auto-created.
- Use **Standard DMOs**: `Individual`, `ContactPointEmail`, `ContactPointPhone`, `Address`, `Account`, `Product`, `Order`, `OrderItem`, `Case`.
- *(No custom DMOs required for policies/pricing docs; they are unstructured and used for retrieval.)*

5. **Data Spaces**

- Scope CRM streams to `Retail` (and `Service` for Cases if needed).
- Validate isolation and role-based access.

6. **Data Explorer and Query Editor**

- Inspect counts for Contacts, Orders, Cases.
- Query: "Top 5 products by revenue," "Open cases by priority," "Orders in last 30 days."

7. **Data Ingestion: SharePoint**

- Connect SharePoint site/tenant; grant library permissions.
- Ingest & index **`policy_docs`** and **`competitive_pricing`** libraries for Module 3 (RAG).

8. **Data Mapping**

- **Map DLO → DMO**:
    - `Contact` → `Individual`, `ContactPointEmail`, `ContactPointPhone`, `Address`.
    - `Account` → `Account`.
    - `Product2` → `Product`.
    - `Order` / `OrderItem` → `Order` / `OrderItem`.
    - `Case` → `Case`.
- *(No DMO mapping for SharePoint documents; they are indexed, not modeled.)*

Module 2

1. **Identity Resolutions**

- Enable Identity Resolution for `Individual`.

2. **Matching Rules**

- Create: **Email exact**.
- Create: **Phone exact + Postal exact**.
- Create: **Name + Address fuzzy**.

3. **Unified Individual & Links**

- Run Identity Resolution.
- Review `UnifiedIndividual` profiles & contributing source links.

4. **Identity Resolution Rule Set**

- Combine rules; set priority; schedule incremental runs.

5. **Consolidation Rate**

- Set threshold (e.g., 0.85 → 0.90); compare merges; document over/under-merge tradeoffs.

6. **Reconciliation Rules**

- Survivorship: Prefer CRM for Name; most recent verified for Email/Phone; highest confidence for Address.

7. **Data Transformation**

- Normalize emails (lowercase/trim).
- Standardize phone formats (E.164).
- Derive: `days_since_last_order`, `total_orders`, `avg_order_value`.

8. **Calculation Insights & Streaming Insights**

- **Calculation Insight**:
    - `lifetime_value` = sum(`Order.TotalAmount`) by Individual.
    - `30_day_order_count`.
- **Streaming Insight** (CRM event-driven):
    - `recent_case_opened` if `Case.CreatedDate` within last 24h.
    - `recent_order_placed` if `Order.EffectiveDate` within last 7d.

9. **Segments**

- **High-Value Loyal**: `lifetime_value > 250` AND `30_day_order_count >= 1`.
- **Service Sensitive**: `recent_case_opened = true` OR `Priority = High`.
- **Win-Back**: `days_since_last_order > 60` AND `total_orders >= 1`.

10. **Data Action [Data Action Targets, Activation Targets]**

- Create **Activation Target**: Marketing Cloud (Email/SMS audience).
- Create **Data Action Target**: Salesforce (create Task/Case) or webhook.
- **Activate Segments** with identifiers (email/phone) + attributes (LTV, last order date).

11. **Data Kit: Data Cloud Deployment**

- Create **Data Kit** including Streams, Mappings, Identity Rules, Transformations, Insights, Segments.
- Deploy to higher environments and validate.

Module 3

1. **Chunking**

- Register **SharePoint** libraries: `policy_docs`, `competitive_pricing`.
- Define chunking: semantic chunks (~800 tokens, 10–15% overlap), strip headers/footers, preserve tables.
- Build embeddings and index.

2. **Retrievers**

- **Documents Retriever**: over `policy_docs` + `competitive_pricing`.
- **Data Graph Retriever**: `UnifiedIndividual` → `Orders` → `OrderItems` → `Product` (+ `Case`). Expose: last order date, items, LTV, open cases, contact points.

3. **Hybrid Queries**

- Enable hybrid (BM25 + vector).
- Route policy/price questions → document retriever; order/account questions → data graph retriever; combine when needed (e.g., "Is this customer eligible for price match on TRS-042?").

4. **Ranking Models**

- Apply semantic reranker (top-k 20 → rerank top-5).
- A/B test: keyword-only vs hybrid+rerank on policy edge cases (exclusions, time windows).

5. **Intelligent Context**

- Copilot Skill: **"Policy & Price Assist"**
  - **Context (Data Cloud)**: `segment_membership`, `lifetime_value`, `last_order`, `open_case_count`, `contact emails/phones`.
  - **Grounding**: Policies & pricing from SharePoint docs; customer state from Data Graph.
  - **Guardrails**: Respect `HasOptedOutOfEmail` / `DoNotCall` for suggested outreach; cite policy doc name/version/date in all answers.

Mapping Cheatsheet (Final)

Source DLO	Target DMO	Key Field Mappings
Contact (CRM)	Individual	Email → PrimaryEmail, Phone/Mobile → PrimaryPhone, Mailing* → Address
Contact (CRM)	ContactPointEmail	Contact.Email → Address, IsPrimary = true
Contact (CRM)	ContactPointPhone	Contact.MobilePhone (pref.) or Phone → Number
Account (CRM)	Account	Name, Type, Country
Product2 (CRM)	Product	Name, ProductCode, Family

Source DLO	Target DMO	Key Field Mappings
Order/OrderItem	Order/OrderItem	Header totals/dates; items: ProductCode, Quantity, UnitPrice
Case (CRM)	Case	Subject, Status, Origin, Priority, CreatedDate
policy_docs	*Doc Retriever*	*Indexed for retrieval; not mapped to DMOs*
competitive_pricing	*Doc Retriever*	*Indexed for retrieval; not mapped to DMOs*