CPFR Platform & Portal: Problem Definition & User Stories

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Document Purpose

This document captures problem statements and user needs for the CPFR Platform & Portal initiative **before solutioning**. The focus is on understanding problems, user needs, and requirements that any solution must address.

Note: This document emphasizes problem definition and user stories. Technical solution details are documented separately in the Requirements & Solutioning document.

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Executive Summary

Initiative Overview

Chewy's CPFR (Collaborative Planning, Forecasting & Replenishment) program needs to scale to serve 3,000+ vendors while eliminating data inconsistencies, reducing manual coordination overhead, and enabling vendor self-service. The initiative addresses these needs through two complementary workstreams: a governed data platform and a vendor-facing portal.

Core Problems

1. **Scale Constraint:** Current infrastructure cannot support business growth to 3,000+ vendors
2. **Data Inconsistency & Fragmentation:** Conflicting data and fragmented access patterns undermine collaboration
3. **Manual Overhead:** Excessive time spent on data extraction, validation, and delivery
4. **Limited Self-Service:** Vendors require Chewy intervention for most data requests

Problem Statements

Problem 1: Scale Constraint Limiting Business Growth

Current State:
- CPFR program currently serves ~65 vendors at full analytical depth through VDS (Vendor Data Services) infrastructure
- Business objectives require serving 3,000-5,000 vendors (including future runway)
- Gap of 2,900+ vendors with obstacles to accessing consistent, broad collaborative data

Impact:
- Direct constraint on CPFR program growth and vendor partnership expansion
- Inability to scale vendor relationships without proportional infrastructure overhead
- Limited ability to serve broader vendor base with data-driven collaboration

Root Cause:
- Architectural limitations in how data is exposed and accessed at scale
- Current API partition model creates exponential scaling challenges for one-to-many vendor relationships
- Session-based design optimized for low-concurrency, premium vendor use cases

Business Need: Enable 3,000+ vendors to access CPFR data concurrently without proportional infrastructure cost increases.

Problem 2: Data Inconsistency & Fragmented Access Undermining Collaboration

Current State:
- Vendor conversations frequently involve data variances between Chewy and vendor participants
- Multiple internal teams have developed independent tools accessing data directly, creating inconsistent interpretations
- Fragmented data access patterns (emailed reports, VDS dashboards, direct Snowflake queries)
- No standardized approach to CPFR data access, calculation, and presentation
- Limited ability to provide definitive data lineage when discrepancies arise

Impact:
- Time wasted resolving data discrepancies instead of addressing supply chain issues
- Erosion of trust in vendor relationships
- Inability to hold productive collaborative planning discussions
- Inconsistent data interpretations across teams
- Duplication of effort in tool development
- Governance challenges

Root Cause:
- No single source of truth for CPFR data
- Time-of-day data drift (data changes throughout the day, creating version conflicts)
- Lack of standardized definitions and data governance
- Lack of centralized, governed data access layer
- Teams solving local problems without enterprise coordination

Business Need: Establish a single, consistent source of CPFR data that all stakeholders (internal and external) can reference with confidence, eliminating conflicting interpretations and shadow tools.

Problem 3: Manual Coordination Overhead Consuming Strategic Capacity

Current State:
- CPFR distributes weekly inventory and forecast reports to 2,300+ vendors via email
- Each cycle requires manual coordination of data extraction, validation, and delivery
- CPFR and BI spend significant time on routine data preparation
- ISMs spend too much time verifying data instead of strategic work
- Vendors require Chewy team intervention for most data requests

Impact:
- Capacity redirected from proactive vendor support and forecast work to routine reporting
- Inability to scale vendor relationships without proportional increases in Chewy TM workloads
- Delayed vendor response to supply chain issues
- Increased support burden on ISMs for routine data requests
- Opportunity cost of strategic work not being performed

Root Cause:
- Fragmented query processes requiring manual assembly
- Lack of automated, governed data distribution workflows
- No self-service capabilities for vendors or internal teams
- Email-based distribution creates delays and version control issues

Business Need: Eliminate manual coordination for routine data distribution, enabling vendor self-service and freeing ISM and analyst capacity for higher-value strategic work (vendor collaboration, root-cause analysis, forecast improvement).

Vendor User Stories

Story V-1: Access Data On-Demand via Preferred Method
- **As a** vendor partner
- **I need** to access CPFR data (forecast, inventory, etc.) on-demand, 24/7, via my preferred method (portal, email, or both)
- **So that** I can proactively identify and address supply chain issues without waiting for scheduled reports or requesting data from my ISM, and integrate data into my existing workflows

Story V-2: View Consistent Data with ISM
- **As a** vendor partner
- **I need** to see the same data that my ISM sees when we discuss performance
- **So that** we can have productive conversations without spending time reconciling conflicting numbers

Story V-3: Access Appropriate Analytical Depth
- **As a** vendor partner
- **I need** to access data at the analytical depth that matches the planning and monitoring needs of my business
- **So that** I can make informed decisions at the right level of detail for my planning processes

Story V-4: Manage Data Access and Preferences
- **As a** vendor partner
- **I need** to manage my contact information, notification preferences, data recipients, and know that my data is secure and accessible only to my own staff
- **So that** I can ensure the right people receive relevant information and maintain data security without requiring ISM intervention for administrative changes

Story V-5: Access Historical Data for Analysis
- **As a** vendor partner
- **I need** to access historical CPFR data (up to 2 years) with daily granularity
- **So that** I can identify trends, validate forecast accuracy over time, and make data-driven planning decisions

In-Stock Manager (ISM) User Stories

Story I-1: Collaborate Using Shared Data
- **As an** In-Stock Manager
- **I need** to reference the same data that my vendors see when we collaborate, through a consistent interface that provides the same data regardless of which tool I use
- **So that** we can have productive conversations focused on solutions rather than data reconciliation, and I can rely on data accuracy without confusion from conflicting sources

Story I-2: Access Cross-Vendor Analytics with Flexible Scope
- **As an** In-Stock Manager
- **I need** to access CPFR data across my assigned vendors (and outside my default scope as needed) for strategic analysis
- **So that** I can identify patterns, optimize category performance, provide comprehensive support, and make informed decisions without access constraints

Story I-3: Reduce Time on Routine Data Work
- **As an** In-Stock Manager
- **I need** to spend less time on routine data extraction, validation, report prep, and responding to vendor data requests
- **So that** I can focus on proactive vendor collaboration, root-cause analysis, and strategic planning

Story I-4: Customize Vendor Data Views
- **As an** In-Stock Manager
- **I need** to customize the metrics and data views that my vendors see (especially for high-touch relationships)
- **So that** I can tailor data presentation to each vendor's specific relationship needs and analytical capabilities

CPFR Team User Stories

Story P-1: Establish Single Source of Truth with Governance
- **As a** member of the CPFR team
- **I need** to establish and maintain a single, governed source of CPFR data with daily immutable snapshots that all stakeholders reference
- **So that** we can eliminate data inconsistencies, reduce support burden from conflicting interpretations, eliminate time-of-day drift, and ensure all stakeholders reference the same data version for collaborative planning

Story P-2: Provide Definitive Audit Trails
- **As a** member of the CPFR team
- **I need** to provide definitive data lineage and access logs for CPFR data
- **So that** we can resolve discrepancies, support audits, and maintain accountability

Story P-3: Support Advanced Analytics and Cross-Team Sharing
- **As a** member of the CPFR team
- **I need** to structure CPFR data to support machine learning model training, advanced analytics, and shared data definitions across teams
- **So that** we can enable future AI/ML-driven insights, automation, and effective collaboration that eliminates planning risks from conflicting extracts

Business Intelligence Engineer (BIE) User Stories

Story B-1: Scale Data Access Without Proportional Overhead
- **As a** Business Intelligence Engineer
- **I need** to enable data access for thousands of vendors without requiring proportional infrastructure or support overhead
- **So that** the CPFR program can scale efficiently as business grows

Story B-2: Provide Unified Data Access Layer
- **As a** Business Intelligence Engineer
- **I need** to provide a unified data access layer that internal teams can leverage
- **So that** we can eliminate duplicate tool development, shadow tools, and ensure consistent data governance

Cross-Team User Stories

Story C-1: Extend Platform to Other Data Types
- **As a** member of Vendor Compliance or other teams
- **I need** to leverage the CPFR platform architecture for other vendor-related data
- **So that** we can create a unified vendor data environment without duplicating infrastructure

Document Maintenance

This document should be updated as:
- Problem statements are refined through stakeholder feedback
- User stories are validated or modified
- New problems or user needs are identified

Maintenance Principles:
- Preserve problem statements and user needs even as solutions evolve
- Update "Last Updated" date with each significant change
- Maintain clear separation between problems/needs and solutions