

SIP Inflexibility & Poor Mutual Fund Support - Product Analyst Case Study (Upstox)

◆ Overview

This case study aims to explore and solve the real-world problem faced by mutual fund investors using the Upstox platform. Users reported issues around the inflexibility of Systematic Investment Plans (SIPs), limited support for advanced mutual fund features like STP (Systematic Transfer Plan) and SWP (Systematic Withdrawal Plan), and execution delays without timely communication.

As a Product Analyst, I have approached this problem using a dataset and laid out the steps for identifying, analyzing, and solving the issue through data-backed product enhancements.

Problem Statement

Upstox mutual fund users have raised the following concerns:

- Inability to **edit existing SIPs**, including simple changes such as investment amount or date.
- Lack of support for **STP** and **SWP**, which are critical for advanced investors managing large portfolios.
- Delays in SIP execution with **no real-time tracking** or notifications, leading to confusion and dissatisfaction.

This case study provides a data-driven approach to analyze the impact of these issues and propose product enhancements.

Dataset Description

Source:

["C:\Users\Radhika Patil\Downloads\synthetic_sip_dataset.csv"](C:\Users\Radhika Patil\Downloads\synthetic_sip_dataset.csv)

Key Columns:

- **User_ID**: Unique identifier for investors
- **Fund_ID, Fund_Name**: Mutual fund identifiers
- **SIP_Start_Date**: Date SIP began
- **SIP_Amount**: Monthly investment amount
- **Execution_Date**: Date SIP was executed
- **NAV_on_Date**: NAV on the SIP execution date
- **Units_Credited**: Units purchased
- **Category**: Fund category (Equity, Debt, Hybrid, etc.)
- **Expense_Ratio**: Cost to manage the fund
- **Feedback_Score**: User satisfaction rating (scale 1-5)
- **Modified_Flag**: 1 if user tried to modify SIP, else 0
- **Cancelled_Flag**: 1 if SIP was cancelled, else 0

Derived Metrics:

- **TAT_Days**: Turnaround time = $\text{Execution_Date} - \text{SIP_Start_Date}$

Root Cause Analysis

A thorough root cause analysis identifies the underlying reasons for the reported problems:

- **For Inability to Modify SIPs:**

- **Technical Debt/Legacy System Limitations:** The existing backend infrastructure or database schema might not have been designed to support dynamic modification of active SIPs, requiring a complete cancellation and re-initiation.
- **Lack of Prioritization:** In the past, the development of a SIP modification feature might have been deprioritized in favor of other functionalities, leading to this existing gap.
- **Complexity of Financial Transactions:** Modifying SIPs involves intricate financial logic, including pro-rata calculations, NAV adjustments, and backend system updates, which might be perceived as complex to implement.

- **For Missing Advanced Features (STP/SWP):**

- **Product Roadmap Gap:** STP and SWP might not have been part of the initial product roadmap or were slated for a later phase of development that hasn't been reached yet.
- **Resource Constraints:** Development teams might be stretched, focusing on core functionalities or addressing critical bugs, leaving less bandwidth for advanced features.
- **Underestimation of User Demand:** The demand for these advanced features from certain user segments (e.g., high-net-worth individuals, experienced investors) might have been underestimated.

- **For Execution Delays and Poor Communication:**

- **Inefficient Backend Processes:** Manual intervention in SIP execution, batch processing, or reliance on external intermediaries with slow processing times could contribute to delays.

- **Lack of Real-time Integration:** Insufficient integration with external financial institutions (e.g., AMCs, payment gateways) might lead to delays in receiving execution confirmations.
- **Absence of Robust Notification System:** A missing or inadequate automated notification system fails to keep users informed about the status of their SIPs.
- **Unclear Internal Communication Protocols:** Lack of defined internal processes for handling and communicating delays to users.

Implementation Solutions

The proposed solutions are categorized into short-term and long-term fixes, acknowledging the need for immediate improvements while building a robust future.

Short-Term Fixes (Immediate Impact, Faster Implementation)

1. Enhanced Communication for SIP Execution Delays:

- **Proactive Notifications:** Implement SMS/email notifications for SIP execution status changes (e.g., "SIP initiated," "Processing," "Executed," "Delayed").
- **In-App Status Tracker:** Introduce a simple "SIP Status" section within the app where users can see the real-time progress and estimated completion time for their SIPs.
- **Clearer TAT Indicator:** Display the average and expected turnaround time (TAT) prominently during SIP setup and on the SIP dashboard.

2. Simplified SIP Cancellation & Re-creation Process:

- **Streamlined Workflow:** Optimize the existing cancellation and re-creation flow to reduce the number of steps and clicks required.
- **Pre-filled Forms for Re-creation:** When a user cancels a SIP to modify it, pre-fill the new SIP creation form with previous details (Fund, Category) to reduce data entry.
- **In-App Guidance/FAQs:** Provide clear instructions and FAQs on how to "modify" a SIP via cancellation and re-creation, setting realistic expectations.

Long-Term Fixes (Strategic, Requires More Development)

1. **Implement Comprehensive SIP Modification Feature:**
 - **In-App Edit Option:** Develop a direct "Edit SIP" functionality allowing users to change SIP amount, due date, and potentially bank account details without cancellation.
 - **Backend System Overhaul:** Refactor the backend SIP processing logic to support dynamic modifications and ensure data integrity.
 - **Version Control for SIPs:** Implement a system to track changes made to a SIP, providing a history for users.
2. **Introduce STP (Systematic Transfer Plan):**
 - **Feature Development:** Build the functionality for users to set up systematic transfers from one mutual fund scheme to another within the Upstox platform.
 - **UI/UX Design:** Design an intuitive interface for setting up and managing STP mandates, including frequency, amount, and source/destination funds.
3. **Introduce SWP (Systematic Withdrawal Plan):**
 - **Feature Development:** Develop the functionality for users to set up systematic withdrawals from their mutual fund investments to their linked bank accounts.
 - **UI/UX Design:** Create a user-friendly interface for configuring SWP details, including withdrawal frequency, amount, and bank details.
4. **Automated Delay Resolution & Communication:**
 - **Integration with External Systems:** Improve real-time data exchange and API integrations with Asset Management Companies (AMCs) and payment gateways to reduce manual intervention and speed up execution.
 - **Automated Escalation Matrix:** Implement a system for automatic escalation of delayed SIPs to internal support teams, along with automated communication triggers to affected users.

KPIs to Track

To measure the effectiveness of the implemented solutions, the following Key Performance Indicators (KPIs) will be crucial:

- **SIP Edit Adoption Rate:**
 - **Definition:** Percentage of users who utilize the new 'Edit SIP' feature compared to those who cancel and re-create for modifications.

- **Goal:** Increase adoption rate from 0% to >70% within 6 months post-launch.
- **TAT < 2 Days Rate:**
 - **Definition:** Percentage of SIPs successfully executed within 2 days from the SIP_Start_Date.
 - **Goal:** Increase from current average (approximately 40-50% based on our data for <= 2 days) to >85% within 3 months of communication improvements.
- **SIP Cancellation Rate (Overall & Post-Modification Attempt):**
 - **Definition:** Percentage of active SIPs that are cancelled within a defined period (e.g., 3 months).
 - **Goal:** Reduce overall SIP cancellation rate by 10% and cancellation rate post-modification attempt by >50% (from 52.24% to <25%).
- **STP/SWP Feature Usage (for target cohorts):**
 - **Definition:** Number of active STP/SWP mandates created by users, particularly those with higher AUM or SIP amounts.
 - **Goal:** Achieve a target number of STP/SWP mandates (e.g., 5,000 active mandates within 6 months post-launch).
- **Average Feedback Score:**
 - **Definition:** The average feedback score provided by users (1-10 scale).
 - **Goal:** Increase the overall average feedback score by 1 point (e.g., from 5.53 to 6.53) within 3 months of phased rollouts.
- **User Churn Rate (related to SIPs):**
 - **Definition:** Percentage of users who stop all their SIPs and become inactive.
 - **Goal:** Reduce SIP-related user churn by 5-10%.

Solution Prioritization and Trade-off Points

Prioritization will leverage a combination of impact and effort frameworks, focusing on delivering maximum value with available resources.

Prioritization Framework: RICE Scoring

RICE (Reach, Impact, Confidence, Effort) is a suitable framework for this scenario.

- **Reach:** How many users will this solution affect?
- **Impact:** How much will this solution improve user experience, reduce churn, or increase engagement? (Scale: Minimal, Low, Medium, High, Massive)
- **Confidence:** How confident are we in our estimates for Reach, Impact, and Effort? (Scale: Low, Medium, High)
- **Effort:** How much time and resources will this solution require? (Scale: Months for development)

Short-Term Fixes

Solution Short-Term Fixes	Reach (Users affected)	Impact	Confidence	Effort (Person-Months)	RICE Score (R/C/E)	Priority
Proactive Notifications (TAT)	High	High	High	1	High	1 (High)
In-App Status Tracker	High	Medium	High	2	Medium	2 (Med)
Simplified Cancel/Re-create (Pre-fill)	Medium	Medium	High	1	Medium	3 (Med)
Long-Term Fixes						

Comprehensive SIP Modification	High	Massive	High	6	High	1 (High)
STP Feature Development	Medium	High	High	4	Medium	2 (Med)
SWP Feature Development	Medium	High	High	4	Medium	3 (Med)
Automated Delay Resolution	High	High	High	5	Medium	4 (Med)

Prioritization Logic:

- **High Priority:** Solutions with high RICE scores, typically offering high reach and impact with reasonable effort. Proactive notifications and the comprehensive SIP modification feature fall here.
- **Medium Priority:** Solutions with moderate RICE scores, which are important but might require more effort or affect a slightly smaller segment initially. In-app status tracker, simplified cancel/re-create, STP/SWP, and automated delay resolution.

Trade-off Points

User Segments Affected:

- **SIP Modification Difficulty:** All SIP users are affected by the lack of direct modification options. However, users experiencing significant life events (e.g., salary changes, new financial goals) or those seeking more active portfolio management are most impacted.

- **Missing STP/SWP:** The data suggests that "high-income fund segments" (users with higher SIP amounts) are most affected by the absence of STP/SWP. These users likely have more complex financial planning needs and larger AUM to manage.
- **Execution Delays & Communication:** All users are affected by delays, but users who are actively monitoring their investments or relying on timely execution for specific financial planning purposes will be more frustrated.

Overall Performance Summary

- **SIP Cancellation Rate (Overall)**
- **Avg. Feedback Score**
- **TAT < 2 Days Rate**
- **SIP Edit Adoption Rate**
- **STP/SWP Active Mandates**

SIP Funnel Analysis (Time Series Bar/Line Chart)

- **X-axis:** Time (Weeks/Months)
- **Y-axis:** Number of Events
- **Stacked Bars/Lines for:** SIP Started, Modification Attempted, SIP Modified (new!), SIP Cancelled, SIP Re-created (if tracking is improved).
- **Filter:** By Fund Category, User Cohort (e.g., High-Value).

Turnaround Time (TAT) Distribution

- **Box Plot/Histogram:** Distribution of TAT_Days
- **Line Chart:** Average TAT_Days over time
- **Breakdowns:** By Fund Category, By User Tier (e.g., based on AUM or SIP Amount).
- **Indicator:** Target TAT (< 2 days) line.

Feature Adoption & Usage (Line Charts)

- **Edit SIP Adoption Rate over Time**
- **STP Feature Usage (Number of mandates created) over Time**
- **SWP Feature Usage (Number of mandates created) over Time**
- **Filter:** By User Cohort (e.g., users with >₹5L AUM for STP/SWP).

User Sentiment & Feedback

- **Boxplot: Feedback Score by Cancellation Status (Pre/Post Launch)**
- **Trend Line: Average Feedback Score over Time**
- **Word Cloud/Frequency of Keywords (if NLP integrated):** Top positive/negative keywords (e.g., "easy edit," "quick execution" vs. "frustrated," "slow").

Cohort Analysis

- **Churn Rate by User Tier (e.g., SIP Amount bands):** Bar chart comparing churn across different user value segments.
- **Average Feedback Score by User Tier:** Bar chart.

Final Business Impact with Insights

Implementing these solutions is expected to deliver significant business impact for Upstox:

1. **Reduced Churn & Enhanced Retention:** By addressing the inflexibility of SIPs and improving execution transparency, Upstox will drastically reduce SIP cancellations and overall user churn. Users will feel more in control of their investments, leading to higher satisfaction and loyalty. The projected reduction of the overall SIP cancellation rate by 10% and post-modification attempt cancellation rate by >50% directly translates to retained AUM and customer lifetime value.
2. **Increased User Satisfaction & Positive Brand Perception:** The average feedback score is a direct measure of user sentiment. An increase of 1 point indicates a significant improvement in user experience, leading to positive word-of-mouth and a stronger brand image in the competitive fintech landscape.
3. **Attraction of High-Value Users:** The introduction of advanced features like STP and SWP directly caters to the needs of sophisticated investors and high-AUM users. This will not only retain existing high-value clients but also attract new ones seeking comprehensive investment management tools, leading to higher AUM on the platform.

4. **Operational Efficiency & Reduced Support Load:** Automating notifications, streamlining modification processes, and eventually improving backend execution efficiency will reduce the volume of customer support queries related to SIP status and modifications. This frees up support resources to focus on more complex user issues.
5. **Competitive Advantage:** Offering robust SIP modification features and advanced plans like STP/SWP differentiates Upstox from competitors who might have similar limitations. This strengthens Upstox's position as a preferred platform for systematic investing.

Overall Insight: The data clearly indicates that the current SIP limitations are not merely minor inconveniences but significant friction points leading to user dissatisfaction and direct financial losses (through churn). Addressing these issues is not just about feature parity but about fundamentally improving the core investment experience, which is paramount for sustainable growth and customer trust in the long run.