



ATM Transaction Analysis

Data-Driven Insights Report

Introduction

This dashboard enables stakeholders to track and analyze ATM transactions by key dimensions such as ATM Type, State, and ATM ID. It covers both financial and non-financial transactions and includes critical metrics like Monthly Revenue, E-Bill, Penalty, VSAT AMC, CRA, and Avg. Uptime. Designed to deliver data-driven insights, the dashboard helps uncover performance trends, control operational costs, optimize ATM network planning, and drive better decision-making. The dashboard is tailored for key stakeholders, including:

- State level bank managers, ATM Network teams, Hardware and Technology Infrastructure teams, Finance and Maintenance teams

Objective

- Develop a unified dashboard that consolidates ATM data across states, and time periods to provide a single source of truth
- Enable stakeholders to monitor financial and non-financial transaction trends, identify high- and low-performing ATMs, and assess monthly and daily averages.
- Provide insights into revenue streams (e.g., CRA, MHA Revenue) and detailed cost components (e.g., AMC, spare parts, site maintenance) to understand net profitability.
- Calculate and visualize gross profit margins, margin ranges, and uptime to assess ATM effectiveness and return on investment. Deliver actionable insights that support strategic decisions related to ATM placement, maintenance planning, cost optimization, and revenue improvement initiatives.

Key Questions

- What is the average number of financial and non-financial transactions per ATM per month or per day?
- Which states or regions generate the highest and lowest revenues from ATMs?
- Which ATMs are underperforming in terms of transaction volume and profitability?
- What are the total and average expenditure costs for E-Bills, penalties and AMCs?

Metric Details

Metrics	Visual Type
Total Financial Transactions	Card
Total Non-Financial Transactions	Card
Total Cost	Card
Average Monthly Revenue	Card
Gross Profit Percentage	Card
Cost Analysis (ATM Cost and Maintenance)	Donut Chart
ATM, MHA and Monthly Revenue	Bar Chart
Monthly Financial and Non-Financial Transactions	Bar Chart
Monthly Transactions	Line Chart

ATM Transaction Analysis



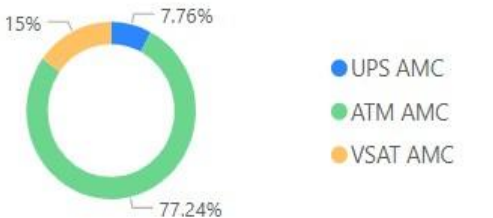
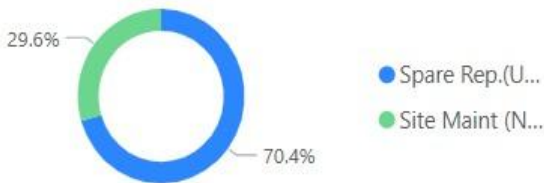
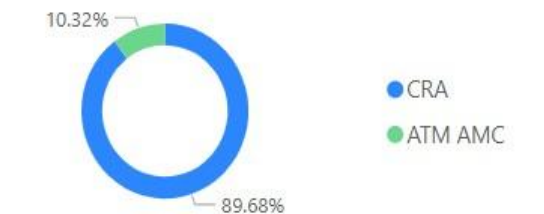
Overview

Detail

Cost Analysis

ATM Cost And Maintenance

Mar Aug Nov Dec



49M

Total Fin Txn

11M

Total Non-Fin Txn

\$296.3M

Total Cost

\$52.1K

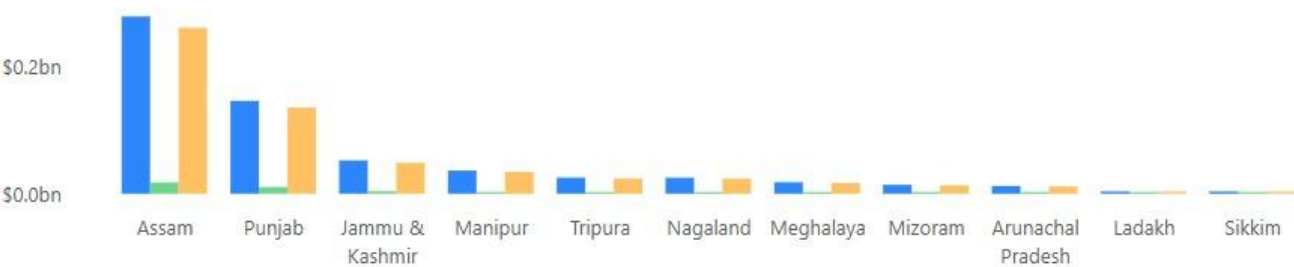
Avg Monthly Rev

59.6%

Gross Profit %

ATM, MHA and Monthly Revenue

ATM Revenue MHA Revenue Monthly Revenue



ATM Revenue

\$615.6M

MHA Revenue

\$40.9M

Monthly Revenue

\$574.7M

Monthly Financial and Non-Financial Txn

Financial Txn Non Financial Txn



Monthly Transactions



Key Metrics

49M	11M	\$296.3M	\$52.1K	59.6%
Total Fin Txn	Total Non-Fin Txn	Total Cost	Avg Monthly Rev	Gross Profit %

Insights

- The system has processed a significant number of financial transactions, totaling 49 million
- With 11 million non-financial transactions (like balance inquiries or mini statements), there is considerable user interaction beyond cash-related services.
- The total cost of \$296.3 million reflects the scale of infrastructure and maintenance efforts.
- Despite the high operational cost, the gross profit margin stands at 59.6%, indicating notable returns.

Cost Analysis (ATM Cost & Maintenance)

Insights

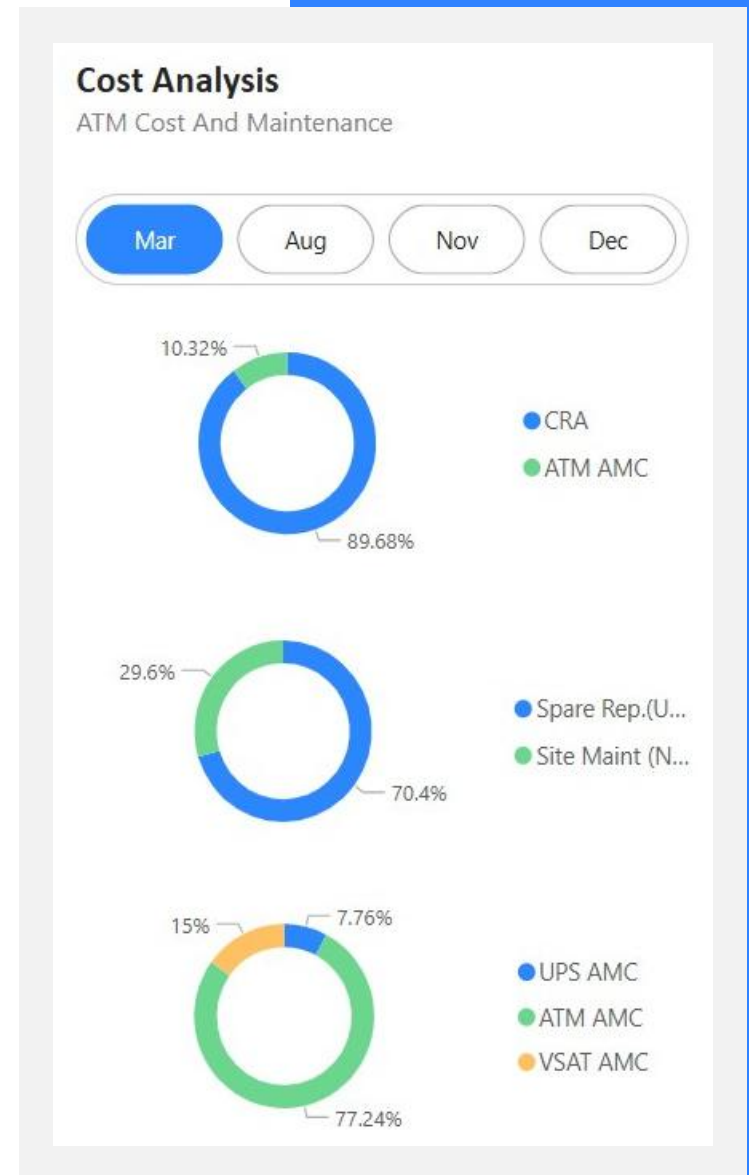
- CRA accounts for 89.68% of the cost in its category, highlighting it as the most significant contributor to operational expenses
- Site Maintenance represents 29.6%, indicating substantial costs in keeping ATM infrastructure functional and accessible
- In the third category, VSAT AMC makes up 15%, suggesting that satellite communication costs are a notable overhead
- ATM AMC appears in both the first and third donut charts, with 10.32% and 77.24%, indicating that maintenance contracts are a key recurring cost

Challenges

- The high CRA expenditure (almost 90%) may indicate inefficiencies.
- The presence of ATM AMC in multiple categories raises concerns of overlapping maintenance contracts..
- The 15% cost associated with VSAT suggests potential over-reliance on satellite communication

Recommendations

- Review vendor contracts, or explore in-house cash management to reduce CRA overhead.
- Conduct a contract audit to ensure that AMC services are not duplicated across categories and renegotiate overlapping service scopes
- Explore more cost-effective connectivity options (e.g., fiber, 4G/5G) to replace or supplement VSAT where feasible, reducing long-term maintenance expenses.



ATM, MHA and Monthly Revenue

Insights

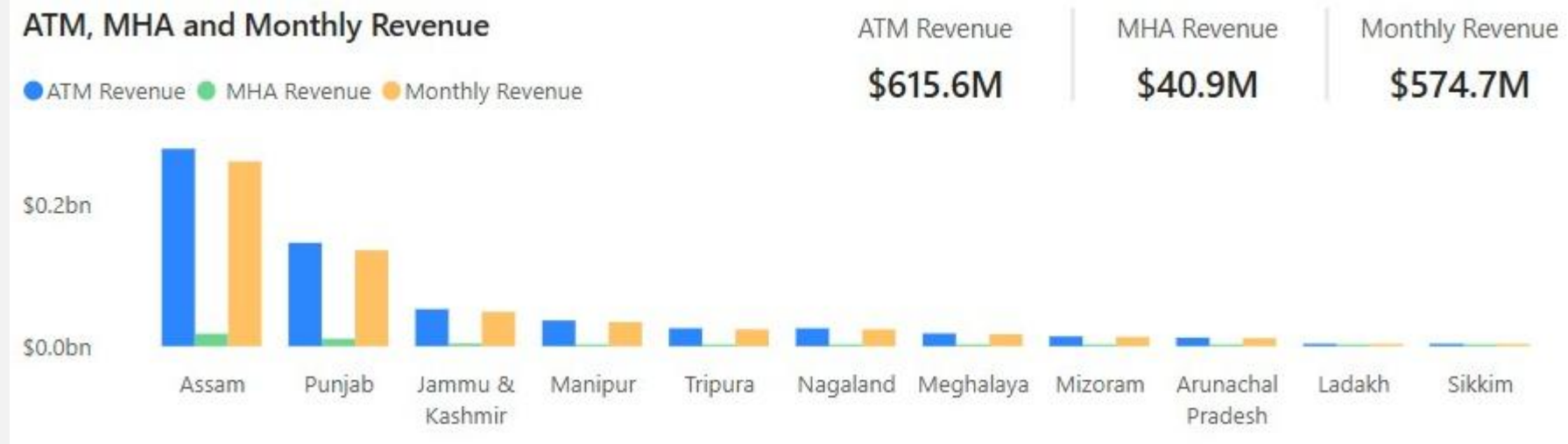
- Assam and Punjab states are the Top performers in ATM and Monthly Revenue categories
- The MHA revenue is mostly low in Comparison to the other two Revenues indicating struggle.
- Sikkim and Ladakh earned the Lowest revenues amongst all the States.

Challenges

- Low revenues in certain states, indicating lack of efforts and strategy
- MHA revenues facing significant decline compared to other revenues

Recommendations

- Study the successful patterns and strategies in the top performing states and apply them to the low performing states.
- Develop creative trial strategies to reduce MHA overhead and increase MHA revenues.



Monthly Financial & Non-Financial Transactions

Insights

- Financial transactions remained the major type of transactions happening overall.
- Non-Financial transactions were always lower than financial transactions
- Both transaction types remained around the same level over the period of 10 months.

Challenges

- Month over month transactions have remained at near equal levels, indicating a stagnation.

Recommendations

- Promote weekend theme related content on Fridays to boost engagement.

Monthly Financial and Non-Financial Txn



Monthly Transaction

Insights

- March-24 reported the highest monthly transactions.
- November-24 was the lowest amongst all months in total transactions.
- August-24 and December-24 had near equal transactions.

Challenges

- Decline in use of the bank ATMs, revealed by the low number of transactions for two consecutive months

Recommendations

- Study the locations of the current ATMs and make a decision to place the ATMs strategically to have a wider audience and increased transactions.
- Prevent frequent downtimes and cash inavailability to reduce poor ATM experience for customers

Monthly Transactions



ATM Transaction Analysis



Overview

Detail

Range Analysis

of selected and previous Month by ATM Id

Aug

Dec

Mar

Nov

Margin Range (Selected Month) Count of ATM id

Above 30%	2137
Below 0%	332
25% - 30%	75
20% - 25%	66
15% - 20%	49
5% - 10%	41
10% - 15%	40
0% - 5%	29

Txn Range (Previous Month) Count of ATM id

50 - 75	128
75 - 100	157
Below 50	166
100 - 125	216
125 - 150	271
150 - 175	306
175 - 200	318
Above 200	1207

\$1.9K

Avg E-Bill

\$1.3K

Avg Penalty

\$285.2

Avg VSAT AMC

\$10.8K

Avg CRA

91.8%

Avg Up Time

Detailed Analysis

by State and Revenue Performance

Select all

Captive

DBT Site

Regular

Tea Estate

Revenue Performance	Monthly Rev	EBILL	Penalty	VSAT AMC	CRA	Avg Up Time
<div>Below 10K</div>						
<div>Arunachal Pradesh</div>						
TSFTSK000145192	\$13.0	\$3,294.0	\$1.0	\$382.0		0.0%
TSFTSK003232012		\$2,500.0		\$1,035.0		0.0%
TSFTSK003232021	\$26,532.0	\$8,489.0	\$1,371.0	\$929.0	\$36,200.0	94.8%
TSFTSK005844009	\$7,580.0	\$4,000.0	\$379.0	\$452.0	\$18,000.0	6.0%
TSFTSK006091039	\$6,598.0	\$0.0	\$330.0	\$226.0	\$6,500.0	33.0%
<div>Assam</div>						
TSFNK000145150	\$9,115.0	\$0.0	\$486.0	\$251.0	\$9,200.0	99.0%

ATM Transaction Detail Analysis

This dashboard provides a detailed view of ATM transaction patterns and performance across multiple states and ATM IDs, with an emphasis on cost and uptime metrics. It helps stakeholders identify revenue trends, control operational inefficiencies, and make informed decisions for ATM network optimization.

Insights

- States show variation in ATM revenue , uptime and High penalties and CRA values are clustered in certain regions
- Some ATMs report 0% uptime, indicating critical service gaps
- ATMs with high e-bill but low revenue need performance review
- Majority of ATMs (2,137) are in Above 30% margin and Over 1,200 ATMs had 200+ transactions, indicating high usage

Challenges

- Low Uptime: Certain ATMs have extremely low uptime, directly affecting customer service.
- Penalty Costs: Some locations face high penalties due to SLA breaches or service delays.
- Disproportionate CRA Costs: CRA appears to dominate operational cost in several ATMs.
- Underperforming Locations: ATMs with revenue and low usage indicate underutilization.

Recommendation

- Investigate ATMs with low uptime and initiate urgent maintenance or replacement.
- Optimize CRA Contracts: Focus on renegotiating or centralizing cash handling services.
- Phase Out Underperformers: Review low-revenue ATMs for relocation or closure.
- Boost High-Margin ATM Support: Invest in ATMs showing >30% margins for better ROI.

Outcome

By implementing these insights and recommendations, stakeholders and ATM operations managers can expect:

- Increased transactions- A measurable rise in both financial and non-financial transactions across different ATM types and locations
- Improved performance of underutilized ATMs - Gradually increase the usage of underperforming ATMs by identifying issues (like downtime or poor accessibility) and applying targeted improvements
- Customer Acquisition and Retention - decisions based on this data can lead to enhanced customer satisfaction, encouraging both retention of existing users and acquisition of new ones, especially in underserved areas.

As a result, the overall ATM service and banking experience can be significantly enhanced. This will not only increase transaction volumes but also drive greater profitability. With the ongoing push toward digital banking, there lies a strong opportunity to expand market reach and customer touchpoints through strategic ATM network optimization.



Thank You!