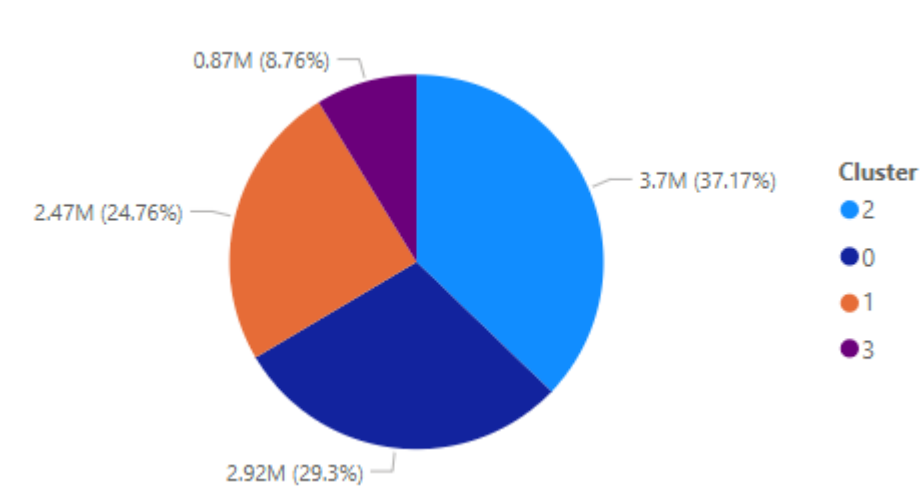


AI-Driven Collections Strategy: Behavioral Clustering to Execution

Cluster Overview – Customer Behavior Segmentation

- Overall Average Predicted Late Rate: 21%
- Clusters Identified: 0, 1, 2, 3



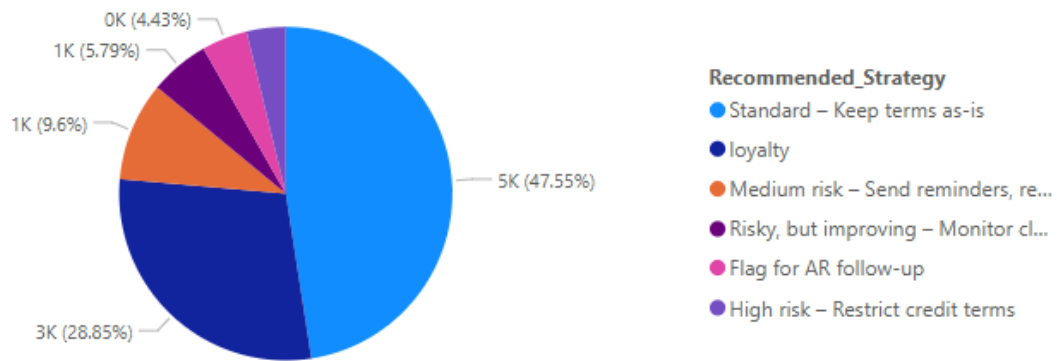
Segment-Level Insights

Cluster	Invoice Volume	Avg Late Probability	Total Amount Contribution	Risk Level
3	Low (~1K)	High (~0.40)	Low (8.76%)	High Risk
2	High (~3K)	Moderate (~0.15)	Highest (37.17%)	Moderate Risk
1	Medium (~2K)	Low (~0.10)	Medium (24.76%)	Low Risk
0	Medium (~2.5K)	Moderate (~0.25)	Medium (29.3%)	Needs Monitoring

Key Observations:

- **Cluster 3** shows the highest payment delays but minimal financial exposure — likely smaller, risk-prone customers.
- **Cluster 2** carries the lion’s share of revenue with moderate risk — critical for sustained cash flow.
- **Cluster 1** appears low-risk and stable — potentially high-value loyal customers.
- **Cluster 0** is a blend of behaviors — warrants closer monitoring for policy tuning.

🧠 Strategy-Level Insights



Strategy	Invoice Count	Total Value Share	Avg Late Probability	Action Plan
Standard – No change	5K (47.55%)	Highest	0.00	Maintain status; this group pays on time.
Loyalty	2.8K (28.5%)	High	0.00	Enhance loyalty with better terms.
Medium Risk – Send reminders	950	Moderate	1.00	Use automated reminder workflows.
AR Follow-up	439	Low	1.00	Prioritize for manual AR team engagement.
High Risk – Credit Restriction	375	Low	1.00	Apply strict terms or prepayment policies.

Strategic Themes:

- Nearly **70%+ of invoices** fall into low-risk/loyalty groups — a solid base for revenue stability.
- Just **8–10%** of the portfolio requires **focused collections efforts** to reduce Days Sales Outstanding (DSO).
- Implement **tiered AR workflows** to balance efficiency and risk management.

Proposal To The Business:

1. **Safeguard Cluster 2:** Moderate risk, high value — ensure timely collections without straining relationships.
2. **Automate for Cluster 3:** Smaller customers with high default risk — use follow-up automation and restrict exposure.
3. **Reward Cluster 1:** Offer loyalty benefits to reinforce positive payment behavior.
4. **Monitor Cluster 0:** Develop and iterate on rule-based logic to handle nuanced patterns effectively.