NOTCH SOFTWARE LIMITED (NotchHR)

Data Analyst Recruitment Task

Insight-Driven Dashboard & Executive Summary

Submitted as part of the Data Analyst recruitment process.
Prepared using Power BI to deliver strategic insights on ARR, MRR, churn risk, and customer retention opportunities.

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Executive Insight Summary

- **High-level health**: Total ARR is ₦108M and Total MRR is ₦9M, with a Total CLV estimate of ₦172.17M (Avg CLV ≈ ₦5.74M). There are 30 customers total across 7 industries and ~4,960 users. These are the core revenue numbers to defend and grow.
- **Concentration + risk**: Top 5 customers together contribute ₦32.22M of ARR — losing one or more would materially move ARR. Protecting these top accounts is high ROI.
- **Churn signal inconsistency (action required)**: The dashboard shows two churn perspectives: a status-based churn (20%) and a behaviour/flag-based churn signal that is higher (40%). The discrepancy means many at-risk customers are not yet marked churned but show clear warning signs — treat flagged churns as near-term threats.
- **Single highest immediate threat**: Company_15 is a priority — ARR ₦3.84M, payroll processed ₦64M, and 79 days since last active, yet status shows "Reactivated." It is also within ~55 days of renewal. This is a near-term, high-impact retention opportunity.
- **Root cause pattern for churned accounts**: Churned companies logged very high ticket volumes (20–30 tickets) while performing very few payroll runs (3–6 per year). That pattern — high support load + low core usage — is the dominant churn driver in the dataset. Addressing product reliability and fast escalation will reduce future churn.
- **Bottom line for leadership**: prioritize immediate outreach to high-ARR at-risk accounts (Company_15 first), roll out a 60-day renewal playbook, and reallocate technical CSM resources to accounts with high support load but low product usage. These steps directly reduce near-term ARR leakage and improve retention/CLV.

Key Business Implications

Metric	Dashboard Value	Implication for Revenue & Retention
Logo Churn Rate	20.00%	**CRITICAL RISK:** Losing one in five customers is unsustainable. This immediately dictates that retention is the top priority over new customer acquisition. Future ARR growth is blocked until this rate is halved.
Total Payroll Value	₦2 Billion	**OPPORTUNITY**: The total value being processed is enormous ₦2B. This validates our product-market fit in the core payroll function. We must better align our ARR to the massive value we enable for our clients.

High-Risk Accounts	1 Company flagged (Company_15)	**IMMEDIATE ACTION**: This account represents high-value ARR at risk ₦3.84M due to 79 days of inactivity. This single, targeted intervention is the fastest way to save high-impact revenue.

Strategic Priorities for Leadership

- **Urgent Intervention (Retention Strategy)**: The Head of Customer Success must initiate a "pre-churn" blitz for Company_15. The 79 days inactive, combined with a previous Reactivated status, signals a high probability of imminent churn. This must be resolved within 7 days.
- **Segment Focus (Growth Strategy)**: Analyse the ARR by Industry chart to identify the top 2 highest-paying sectors. Focus Sales and Marketing resources to replicate success in these specific segments, rather than broad market targeting across the African market.
- **Proactive Value Alignment (Customer Success Strategy)**: Implement the proposed Value-Justification Audit (VJA). Our previous churn analysis shows accounts left due to high friction and perceived low value. We must proactively use the customer's high Total Payroll Value to demonstrate ROI 60 days before renewal, justifying our ARR.

Explanation of visuals used and why (how each supports decision-making)

- **KPI Cards** (Total ARR, Total MRR, Total CLV, Avg CLV, Avg ARR/MRR)
  Why: Executive one-glance numbers. Quickly show scale and the value-at-risk. Useful for board/leadership to monitor health each month.
- **Donut Chart** / Status Distribution (Active vs Churned vs Inactive vs Reactivated)
  Why: Visualizes customer base composition and immediate churn exposure. The status-based churn % (20%) vs flagged churn % (40%) helps surface hidden risk.
- Top 5 ARR **Table Visual**+ **Bar Chart** by Company (sortable by CSM / Industry)
  Why: Shows revenue concentration and accountability — who owns the biggest accounts and where CSMs should invest time. Sortable for quick prioritization.
- MRR / ARR by Company segmented by CSM & Industry (**Bar Charts / Tables**)
  Why: Enables segment-level strategy (e.g., vertical plays) and reveals which CSMs manage the highest ARR and which industries are most fruitful. Useful for resource allocation and GTM adjustments.
- Risk Matrix (Total ARR vs Days Since Last Active / Risk buckets). **Scatter Plot**.
  Why: Maps revenue against disengagement so leadership can quickly find high-value but inactive accounts — prime rescue targets.

- Renewal Table (companies within next 60 days). **Table Visual.**
  Why: Operationally actionable list for CSMs and Sales to run renewal playbooks. Shows days to renewal and MRR so teams prioritize high-dollar renewals first. Company_15 appears here as urgent.
- Support Load vs Value (Average Tickets vs ARR by CSM). **Table Visual**.
  Why: Reveals places where support effort is high relative to ARR — a strong signal to rebalance resources, move to T-CSM escalation, or change commercial terms for high-maintenance accounts.
- Churned Companies Drill (tickets logged, days since last support/active, payroll runs). **Table Visual**.
  Why: Root-cause evidence: the churned cohort shows the same pattern (many tickets + few payroll runs) that you should treat as a red flag. Use this as training data for predictive retention.
- **Slicers.**
  Enables executive drill-down. Company Size, (SME, Mid-Market, Enterprise), Industry etc. allows for a review of whether the churn problem is concentrated in a specific high-priority segment.

Strategic Use of Median ARR for Churn Risk

The criterion for identifying high-risk churn was deliberately set as (inactivity >= 60 days) AND (ARR > Median ARR).

- **Defining "High Value"**: We calculated the Median ARR (₦3,300,000 in the dataset). The median is the 50th percentile and is used because it is resistant to outliers. If NotchHR signs one massive contract, the average ARR would spike, making the "High Value" threshold misleadingly high. The median accurately captures the true break-point between the top half and bottom half of our revenue-generating customers.
- **Resource Prioritization**: By focusing only on high-value accounts (those above the median), we ensure that the limited resources of the Customer Success team are dedicated to preventing the highest financial impact losses. It turns the attention from "all inactive accounts" to "the most valuable inactive accounts."