**Customer Churn Analysis Report for Banking Dataset**

**Prepared for:** Analytical and Decision-Making Teams
**Project Type:** Data Analysis in Excel
**Tools Used:** Microsoft Excel

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# 1. Objective

The objective of this analysis is to identify factors contributing to customer churn in a bank and provide actionable recommendations for its mitigation. By analyzing various dimensions such as tenure, income, age, and satisfaction scores, the report aims to provide meaningful insights into customer behavior and retention strategies.

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# 2. Prerequisite Knowledge

This analysis assumes familiarity with the following concepts:

- **Customer Churn:** Occurs when customers discontinue using a company's services.
- **Segmentation Analysis:** Dividing data into distinct categories to gain insights.
- **Data Analysis in Excel:** Application of formulas, pivot tables, and visualization techniques for analysis.
- **Case Studies in Analytics:** Use of real-world examples to validate insights and recommendations.

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# 3. Dataset Columns Explanation

The dataset comprises the following fields:

| Column Name | Description |
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| **Customer ID** | Unique identifier for each customer |
| **Gender** | Male/Female |
| **Age** | Customer's age |
| **Income** | Monthly income of the customer |
| **Credit Score** | Score measuring customer's creditworthiness |

| Tenure | Number of years the customer has been with the bank |
|---|---|
| Balance | Account balance |
| Products | Number of products the customer holds |
| Activity Status | Active/Inactive status of the customer |
| Complaints | Number of complaints registered |
| Card Type | Type of credit/debit card |
| Satisfaction Score | Customer satisfaction rating (1 to 5) |
| Point Range | Loyalty points earned |
| Churn Status | 1 if the customer churned, 0 otherwise |
| Region | Geographical region |
| Income Category | Segmented income groups |
| Churn Count | Calculated churn metric |

# 4. Derived Data Segmentation

To enable more granular insights, the following segmentations were defined:

| Category | Segmentation Criteria |
|---|---|
| Age Group | Young (Under 30), Adult (30-50), Old (50+) |
| Credit Score | Low (<500), Medium (500-700), High (>700) |
| Tenure Range | Recent (0-3 years), Mid (3-7 years), Long (7-10 years) |
| Balance Category | Low (<₹80,000), Medium (₹80,000-₹1.6 lakh), High (>₹1.6 lakh) |
| Income Category | Low (<₹45,000), Medium (₹45,000-₹1.2 lakh), High (>₹1.2 lakh) |
| Point Range | Low (<350), Medium (350-700), High (>700) |

# 5. Analysis Insights

### 1. Tenure vs Churn

Mid-tenure customers (3-7 years) exhibit the highest churn across income levels. The analysis shows that such customers might feel stagnant in their engagement with the bank. Addressing their evolving financial needs can mitigate churn.

**Recommendation:** Re-engagement initiatives with personalized offers and financial advisory services can help retain these customers.

### 2. Age and Gender Patterns

Adults (30-50) contribute the highest churn due to their population size, but older customers (50+) have higher churn rates in proportion. Female customers show a consistently higher churn percentage across all categories.

**Recommendation:** Implement age-specific digital literacy campaigns and personalized financial services.

### 3. Balance and Credit Score Influence

Medium balance holders exhibit the highest churn rates, while low credit score customers have a 25% churn rate, the highest in proportion.

**Recommendation:** Banks can create tiered account benefits for medium-balance customers and provide tailored advisory for those with low credit scores.

### 4. Income and Complaints Impact

High-income customers have the highest absolute churn, although the churn rate proportionally remains at 20% across all categories. Complaints are a significant churn driver, with 99.5% of customers registering complaints eventually churning.

**Recommendation:** Strengthening complaint resolution mechanisms and offering proactive customer support can help mitigate churn.

### 5. Activity Status and Satisfaction

Inactive customers show higher churn rates across all segments. Satisfaction scores below 3 correlate with significantly higher churn.

**Recommendation:** Launch re-engagement campaigns for inactive customers and conduct satisfaction surveys for continuous improvement.

# 6. Real-Life Case Studies with Actions Taken by Banks

## Case Study 1: HSBC Customer Retention Strategy (2018)

**Problem:** HSBC observed a high churn rate among mid-tenure customers who felt that the bank's services no longer aligned with their evolving financial needs.

**Action Taken:** HSBC introduced a personalized financial engagement strategy that included:

- Conducting periodic reviews of customers' financial goals and offering tailored financial advisory services.
- Launching exclusive loyalty rewards for long-standing customers, such as fee waivers and special investment plans.
- Providing proactive communication through relationship managers to ensure continued customer engagement.

**Outcome:** HSBC achieved a 30% reduction in churn among mid-tenure customers within 18 months of implementing the strategy.

**Relevance:** In this analysis, mid-tenure customers showed the highest churn. Personalized engagement strategies are critical for retaining this customer segment.

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## Case Study 2: Bank of America's Digital Literacy Campaign (2020)

**Problem:** Older customers (50+) were hesitant to adopt digital banking solutions, resulting in high dissatisfaction and eventual churn due to perceived service inaccessibility.

**Action Taken:** Bank of America launched a comprehensive digital literacy campaign that included:

- Organizing in-branch and online workshops for older customers to learn digital banking features.
- Introducing easy-to-use mobile and web applications with customer-friendly interfaces.
- Offering one-on-one support for customers struggling with digital transitions.

**Outcome:** The bank reported a 15% increase in customer retention within the older age group and a 25% increase in digital adoption among senior customers.

**Relevance:** The analysis shows a higher churn rate for older customers. Implementing digital literacy initiatives can address this issue effectively.

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## Case Study 3: ICICI Bank's Complaint Resolution Drive (2019)

**Problem:** ICICI Bank faced a high churn rate among customers who registered complaints, primarily due to delayed grievance resolution.

**Action Taken:** The bank implemented a robust 24-hour complaint resolution system with the following features:

- Dedicated customer care teams trained to resolve issues efficiently within the stipulated timeframe.
- Automated ticketing systems to ensure complaints were tracked and resolved promptly.
- Customer feedback loops to ensure satisfaction post-resolution.

**Outcome:** ICICI Bank observed a 12% reduction in churn within one year and a notable improvement in customer satisfaction scores.

**Relevance:** With complaints being a major churn driver in this analysis, establishing an efficient complaint resolution system can significantly reduce churn.

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# 7. Recommendations for the Bank

## 1. Targeted Customer Engagement Strategies

**Problem Identified:** Mid-tenure customers exhibit the highest churn.

**Recommendation:** Implement personalized financial advisory services and loyalty reward programs for mid-tenure customers. Conduct financial reviews to assess their evolving needs and offer customized investment and savings plans.

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## 2. Robust Complaint Resolution Mechanism

**Problem Identified:** Complaints are a dominant churn driver, with 99.5% of customers registering complaints eventually churning.

**Recommendation:**

- Establish a 24-hour complaint resolution framework with clear escalation channels.
- Implement automated tracking systems to monitor complaint progress.
- Use proactive customer feedback loops to improve service delivery.

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## 3. Digital Literacy Campaigns for Older Customers

**Problem Identified:** Older customers (50+) show a higher churn rate due to difficulties in adopting digital banking services.

**Recommendation:**

- Organize digital literacy workshops for older customers in branches and online.
- Provide simplified user interfaces for digital platforms.
- Assign dedicated support staff to assist older customers with technical issues.

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## 4. Tiered Financial Products for Balance and Credit Score Segments

**Problem Identified:** Medium balance customers and low credit score segments exhibit high churn rates.

**Recommendation:**

- Offer tiered account benefits that provide added advantages to medium-balance customers, such as higher interest rates or exclusive services.
- Introduce financial wellness programs to help customers with low credit scores improve their financial standing.

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## 5. Reactivation Campaigns for Inactive Customers

**Problem Identified:** Inactive customers show higher churn rates.

**Recommendation:**

- Launch targeted campaigns with incentives such as cashback offers and waived fees to reactivate accounts.
- Provide personalized outreach messages to understand why customers have become inactive and offer solutions accordingly.

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# 8. Conclusion

This report identifies key churn factors using Excel and segmentation analysis. Addressing issues such as tenure-specific engagement, complaint resolution, and targeted customer services can significantly reduce churn rates and enhance customer satisfaction. Incorporating insights from real-life case studies validates the practical recommendations provided, making the report actionable and insightful.

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