

Bank Income and Profitability Analysis
Assurance Bank, Alberta - Canada

1.0 Executive Summary

Banks cannot exist without customer. In order to remain a competitive choice for customers to bank, a destination choice for employees to work, a safe option for investors to invest and a trusted partner to regulators, the bank needs to perform profitably at the minimum risk acceptable.

The branches, region and province form the bank. Each of these divisions need to do well to positively impact the bank-wide financial performance. An imaginary bank - **Assurance Bank** was used in this project.

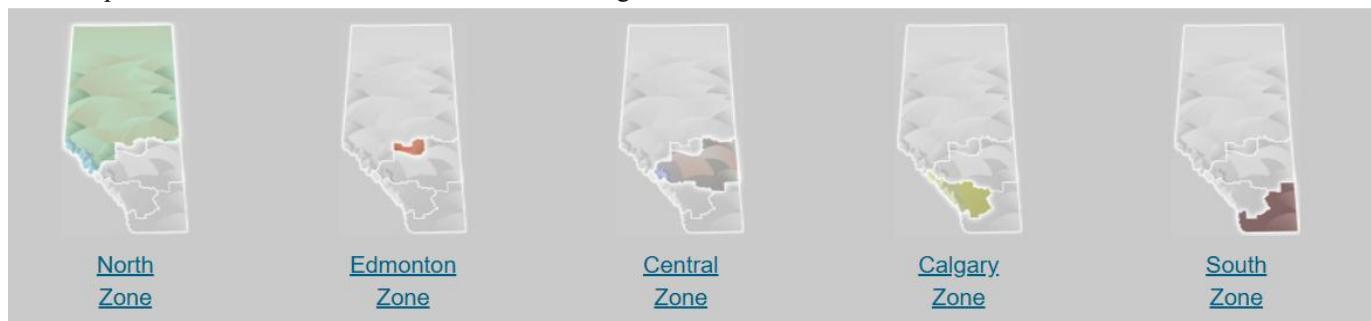
Project Objective:

The objective of this project analyzes the performance of the bank at the branch, regional and provincial levels in order to optimize cost and improve profitability through appropriate pricing and cost strategies. The key determinants of this objective are:

- **Provincial Level:** Determine the top and worst profitable branches within the province of Alberta.
- **Branch Level:** Determine the most and least profitable products for each branch to aid product scaling or retiring decisions
- **Segment Level:** Determine the top and worst income-generating and profitable segments in the province of Alberta
- **Regional Level:** Determine top and worst income-generating and profitable regions in the province of Alberta
- Establish reasons for the worst performing products, branches, segments and regions
- Recommend management strategies to deploy to aid weaker performing products, branches, segments and regions improve performance

Project Scope:

- The province of Alberta is the focus
- The province of Alberta is divided into 5 business regions as below:



Source: AHS 2026

- 29 branches operate within the province
- 4 customer segments exist
- 7 products are run across the province

Tools Deployed:

- SQL
- Microsoft Excel
- Pivot Tables
- Excel charts

2.0 Methodology

The following methods were deployed:

- Branch income and profitability database was created using SQL: **branch_rev_prof_database**
- 7 tables were created under the database: **branch_list, product_list, segment_list, income_statement_summary, segment_income, product_income, product_cost**

The screenshot shows the MySQL Workbench interface. On the left, the Navigator pane displays the schema structure of the **branch_rev_prof_database**, which contains tables like **branch_list, income_statement_s, product_cost, product_income, product_list, segment_income, segment_list**. The central area shows the **branch_list** table with 11 rows of data. The bottom pane shows the **Action Output** window with two recent queries.

branch_code	branch_name	branch_location	branch_manager_name	branch_region	province	open_date	branch_status
1	Bow Valley Branch	Bow Valley	Emery Elliott	Calgary	AB	2004-01-09	Open
2	Calgary Rural Branch	Calgary Rural	Stella Duncan	Calgary	AB	2005-01-03	Open
3	Calgary West Branch	Calgary West	Amar Correa	Calgary	AB	2005-06-13	Open
4	Calgary South Branch	Calgary South	Kimber Strong	Calgary	AB	2012-10-10	Open
5	Mosaic Branch	Mosaic	Fallon Edwards	Calgary	AB	2013-04-01	Open
6	Calgary Foothills Branch	Calgary Foothills	Jemma Rosario	Calgary	AB	2013-04-25	Open
7	Lloydminster Branch	Lloydminster	Zariyah Roach	Central	AB	2007-11-07	Open
8	Wetaskiwin Branch	Wetaskiwin	Liberty Jenkins	Central	AB	2012-04-24	Open
9	Camrose Branch	Camrose	Mya Lane	Central	AB	2013-05-03	Open
10	Drayton Valley Branch	Drayton Valley	Skyla Boyd	Central	AB	2014-12-31	Open

Action Output:

#	Time	Action	Message	Duration / Fetch
118	23:12:06	select segment_income.segment_id, segment_income.segment_name, segment_income.segment_income, seg...	116 row(s) returned	0.047 sec / 0.000 sec
119	23:17:28	select * from branch_rev_prof_database.branch_list LIMIT 0, 1000	29 row(s) returned	0.062 sec / 0.000 sec

- The various key indicators defined in the object statement were manipulated with SQL and analyzed using Excel
- Dashboards summary was created using Excel charts with descriptive interpretations.
- Recommendations, management impact and risks to be considered were suggested to aid resolve weaknesses discovered after the data analysis.

Data Limitations

- **Aggregate Data Constraints:** Branch-level aggregation of the data mask out customer-level profitability differences.
- **Cost Allocation Assumptions:** Certain costs may be allocated using estimates rather than direct attribution, affecting precision.
- **Limited Time Horizon:** Analysis based on a single period (FY2025) may not capture seasonality or long-term trends over a range of years
- **Exclusion of External Factors:** Market conditions, competitors' pricing and macroeconomics impacts were not fully incorporated.

2.0 Project Outcomes

Based on the project objective, the following key performance areas was discovered:

Strengths

- Red Deer branch is the top income making branch in Alberta: \$5,372,857.33
- Red Deer branch is the most profitable branch in Alberta: \$4,614,393.34
- SME is the top income making segment in Alberta: \$32,998,423.35
- Central is the most profitable region within the province: \$7,172,463.69
- Mortgage is the most profitable product in Alberta. Red Deer, St. Albert and Sheerwood Park branches the made top 3 profit with mortgage as a product

Weaknesses

- **3 branches made losses for the reporting year**

Significant variation exists in net profit of the branches indicating inefficiencies in cost management and optimal product mix and income generation but Leduc, Bonnyville, and Borealis branches were most hit with larger losses.

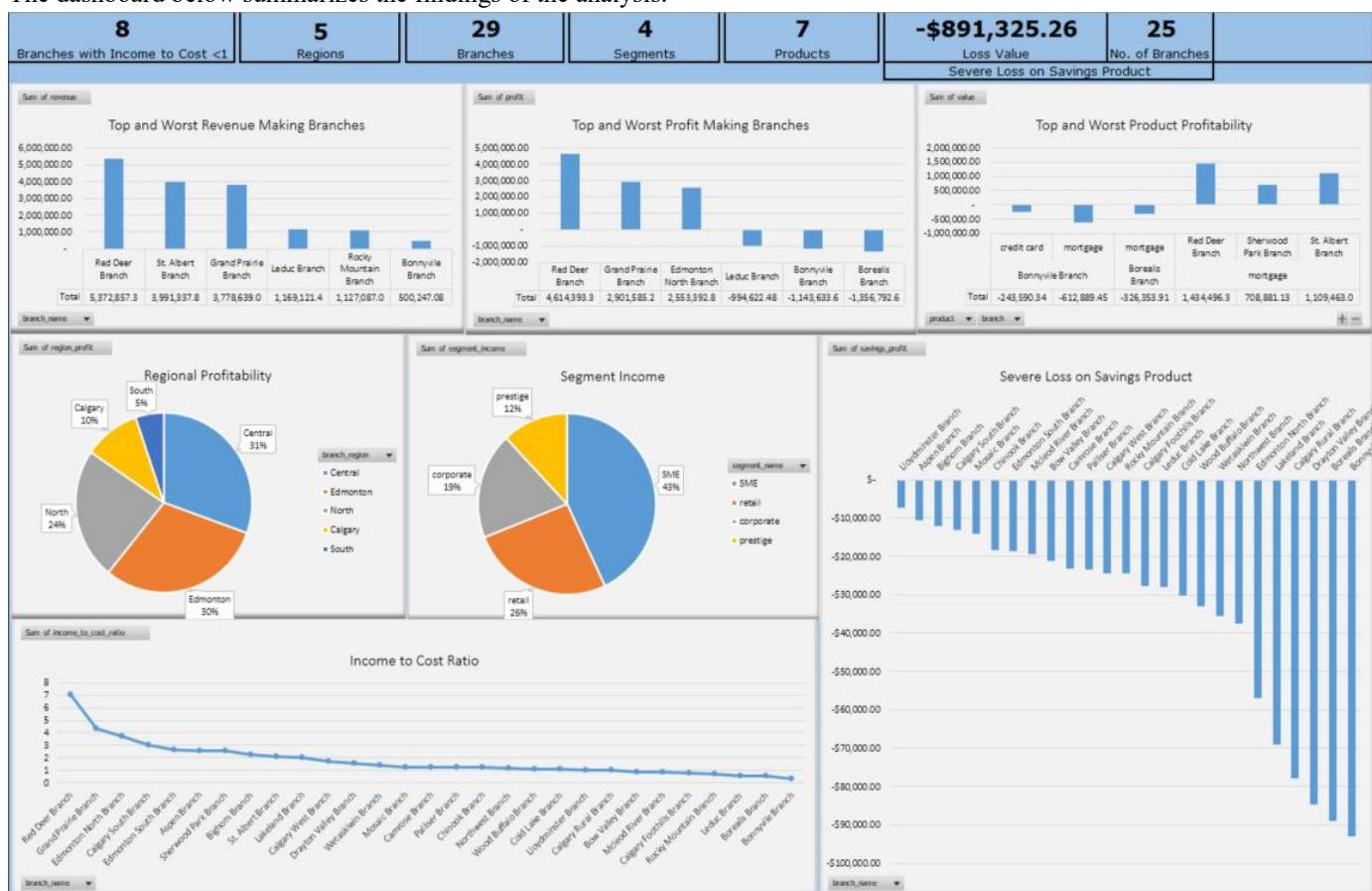
- **25 branches made losses over the savings product totaling**

Revenue in some branches is heavily concentrated in a small number of products, increasing exposure to income volatility and limiting growth opportunities from diversified offerings while the savings products generated lesser income relative to cost resulting in losses for 25 branches. A total of **-\$891,325.26** loss was accrued for the savings products to the 25 branches

- **8 branches have income to cost ratio below 1**

8 branches exhibited operating expenses growing faster than income, resulting in elevated cost-to-income ratios less than 1. This suggests opportunities for cost optimization and improved operational efficiency.

The dashboard below summarizes the findings of the analysis.



3.0 Details of Key Performance Areas Identified

Branch income performance by branch

The 3 best performing and the 3 worst performing branches by income are relatively close in terms of performance, painting a fair income performance across the branches.

3 Best Performing Branches by Income

Row Labels	Sum of income
Red Deer Branch	\$ 5,372,857.33
St. Albert Branch	\$ 3,991,337.80
Grand Prairie Branch	\$ 3,778,639.08

Worst Performing Branches by Income

Leduc Branch	\$ 1,169,121.47
Rocky Mountain Branch	\$ 1,127,087.08
Bonnyville Branch	\$ 500,247.08

Branch profit performance by branch

The 3 most profitable branches have closely performed in match to each other. The 3 loss making branches give a need for market assessment and customer service evaluation.

3 Best Performing Branches by Profit

Row Labels	Profit
Red Deer Branch	\$ 4,614,393.34
Grand Prairie Branch	\$ 2,901,585.29
Edmonton North Branch	\$ 2,553,392.87

3 Worst Performing Branches by Profit

Leduc Branch	- \$ 994,622.48
Bonnyville Branch	- \$ 1,143,633.64
Borealis Branch	- \$ 1,356,792.63

Product Performance by Profitability

While mortgage expresses to be the most profitable product, the same product is loss making for Borealis and Bonnyville. An assessment needs to be done to seek opportunities to boost the mortgage profit numbers in Borealis and Bonnyville.

3 Best Performing Product by Profit

Product Name	Branch Name	Sum of value
Mortgage	Red Deer	\$1,434,496.31
Mortgage	St. Albert	\$1,109,463.08
Mortgage	Sherwood Park	\$708,881.13

3 Worst Performing Product by Profit

Credit Card	Bonnyville	-\$ 243,590.34
Mortgage	Borealis	-\$ 326,353.91
Mortgage	Bonnyville	-\$ 612,889.45

Income by Segments

SME is the top profit making segment possibly due to larger number of SME in various parts of the province seeking banking services continuously. The other 3 segments fairly performed in match against the SME segment.

Row Labels	Income
SME	\$ 32,998,423.35
retail	\$ 19,952,535.04
corporate	\$ 14,580,698.69
prestige	\$ 9,208,862.33
Grand Total	\$76,740,519.41

Regional Performance by Profitability

The uneven spread of regional profitability is of a great concern, particularly with Calgary which is expected to make higher profit due to its cosmopolitan structure and huge banking opportunities as a major city in Alberta.

Region	Profit
Central	\$ 7,172,463.69
Edmonton	\$ 7,140,142.83
North	\$ 5,563,110.96
Calgary	\$ 2,425,064.28
South	\$ 1,219,318.24
Grand Total	\$ 23,520,100.00

List of Severe Loss Making Branches

25 branches out of 29 made losses with the savings products. The loss making characteristics of this product across a larger branch network give reasons for product assessment and quick managerial management decision making.

Branch Name	Loss on Savings Product
Lloydminster Branch	-\$ 7,191.36
Aspen Branch	-\$ 10,454.61
Bighorn Branch	-\$ 12,065.32
Calgary South Branch	-\$ 13,020.05
Mosaic Branch	-\$ 14,112.87
Chinook Branch	-\$ 18,451.56

Edmonton South Branch	-\$ 18,508.29
Mcleod River Branch	-\$ 19,385.00
Bow Valley Branch	-\$ 21,213.06
Camrose Branch	-\$ 23,047.64
Palliser Branch	-\$ 23,458.05
Calgary West Branch	-\$ 24,316.51
Rocky Mountain Branch	-\$ 24,346.67
Calgary Foothills Branch	-\$ 27,606.54
Leduc Branch	-\$ 27,880.64
Cold Lake Branch	-\$ 30,158.81
Wood Buffalo Branch	-\$ 33,102.84
Wetaskiwin Branch	-\$ 35,397.71
Northwest Branch	-\$ 37,443.45
Edmonton North Branch	-\$ 56,929.91
Lakeland Branch	-\$ 68,941.67
Calgary Rural Branch	-\$ 77,803.92
Drayton Valley Branch	-\$ 84,676.19
Borealis Branch	-\$ 88,943.38
Bonnyvile Branch	-\$ 92,869.21
Grand Total	-\$ 891,325.26

3.0 Strategy Recommendations

The following strategies have been recommended to aid resolve the identified weaknesses with the performance analysis of Assurance Bank in Alberta.

Identified Weaknesses	Recommendation	Management Impact	Risk to be Considered
<ul style="list-style-type: none"> 3 branches made losses for the reporting year: Leduc, Bonnyville, and Borealis 	<ul style="list-style-type: none"> Deep-dive analysis of fixed versus variable cost of the branches for capturing under the right account types Review of staff levels and branch operating hours to reducing operational cost Evaluation of local market dynamics to match branch capabilities Introduces real time performance monitoring and reporting systems 	<ul style="list-style-type: none"> Introduces corrective actions such as cost restructuring, staff optimization, targeted income to improve profitability of loss making branches Establish decisions to reprice, redesign, terminate the savings products Redirect capital, budget and staff effort toward more profitable branches and more profitable products 	A. Financial Risks <ul style="list-style-type: none"> Customer Attrition: changes to savings product pricing may result in customer dissatisfaction or deposit outflows if not managed carefully Revenue Concentration Risk: Over reliance on only high profitable products may increase over reliance on fewer income streams Short-term profit volatility: Turn around initiatives may increase cost of operation before benefits are realized
<ul style="list-style-type: none"> 25 branches made losses over the savings product totaling \$891,325.26 	<ul style="list-style-type: none"> Review interest rate paid on savings accounts compared to market offering Introducing tiered interest rates to account balance Reducing operational cost through digital self-service channels Introduces real time performance monitoring and reporting systems 	<ul style="list-style-type: none"> Refines branch revenue and cost strategy to improve income to earning ratios of branches rating below 1 Launch digitization and appropriate technology to service delivery to customers 	B. Operational Risks <ul style="list-style-type: none"> Execution Risk: Inconsistent implementation of cost or product strategies across branches may reduce effectiveness Staff Resistance to Change: Changes to performance metrics or incentive structure may face resistance from branch staff Service Quality Risk: Aggressive cost reduction could negatively impact customer experience if not balanced properly
<ul style="list-style-type: none"> 8 branches have income to cost ratio below 1 	<ul style="list-style-type: none"> Cross-selling credit cards, personal loans, and GICs to existing savings account customers to rake in leaking incomes Setting branch specific targets based on local demographics Introducing incentives to staff based on net income and not gross income Introduces real time performance monitoring and reporting systems 		