

### Case Study – Alpha Banking Australia (ABA)

Alpha Banking Groups is one of the largest banking conglomerates in the world with operations in Europe, China, Singapore and Australia. Alpha Banking Australia (ABA) is a wholly owned but separately capitalised subsidiary of Alpha Banking Groups. ABA has established a significant presence in Australia predominantly through acquisition. Establishing and organically growing the Australian operational arm to compete with the Big Four banks such as Westpac, Commonwealth, ANZ and NAB would have required a great deal of time and significant investment. The bank has chosen to pursue a price/ product led strategy rather than using quality of service as a differentiator and competitive advantage. To date, ABA is a renowned provider of retail and commercial banking, as well as related financial solutions to individual, corporate, and small and medium-sized enterprises (SME) clients.

ABA, similar to other banks, primarily generates revenue through interest income on consumers and commercial loans while incurring liabilities through accepting deposits. In addition, it also generates revenue from investments, advances, fees and commissions. As of September 30, 2020, ABA has reported assets of AUD911.9 billion, net loans of AUD693.1 billion and deposits of AUD596.1 billion. As depicted in Figure 1, home loans have carried the largest segmentation of the products and services of ABA.

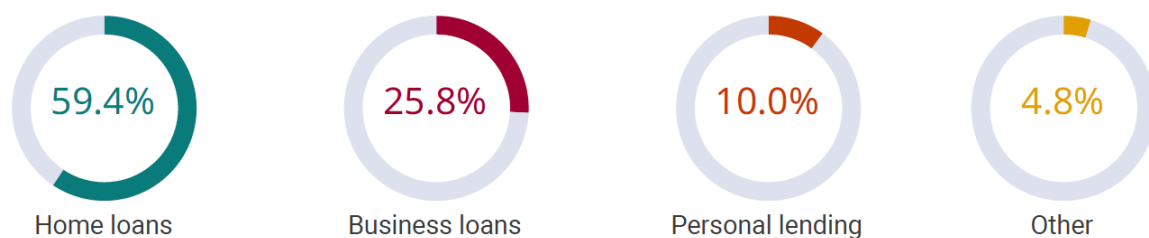


Figure 1 Alpha Banking Australia (ABA) Products and Services Segmentation

The global COVID-19 pandemic has had a significant impact on the banking sector, and the ABA is no exception. The National and Regional Commercial Banks business is projected to decline by a further 7.1% in the current year, following a 15.4% drop in the previous year due to the commencement of the COVID-19 pandemic. The decline has been primarily driven by six cash rate cuts by the Reserve Bank of Australia (RBA) since June 2019, as well as strong competition from other lenders. Despite an increase in loan volumes over the last year, this remains the case.

The home loans segment and the households market have grown significantly over the last year with government incentives to support first home buyers and boosting construction activity demand for residential property during the COVID-19 pandemic. This has resulted in increased demand for mortgages and rise in mortgage volume for lenders over the last year. Despite the rise in mortgage volume, there is a new measure introduced during the pandemic given that some previously considered employment (i.e., airlines or hospitality industry) is potentially at risk. Therefore, as part of the preparation for future financial turmoil, it is critical for ABA to identify and assess the risks of its customers in terms of their capacity to repay their loans.

BA has engaged the services of consulting company, Novo Group, to perform analytics and advisory work. As a Novo Group analytics consultant, you have been tasked to provide data visualisations and analysis to ABA that will assist the bank to better understand the profiles and characteristics of its customers, with specific emphasis on identifying the customer tenure and their home loan payment. By examining the profile and characteristics of the customers, you need to recommend what options ABA could consider in rewarding its customers with targeted approaches. And, also, by identifying high-risk customer profiles you need to recommend what options ABA could consider in supporting high-risk customers. Your recommendations should bridge the gap between visualisations and actionable business decisions.

**Dataset Description:**

You are provided with the sample dataset (given in Microsoft Excel file) that contains three spreadsheets. Each spreadsheet corresponds to a bank service centre located at different city in Australia. The dataset includes the following variable(s) or attribute(s):

- CustomerId: A unique customer identification.
- Gender: The gender of the customer. Male or Female
- State: Australian state where the customer is located
- Age: Age of the customer.
- Marital Status: Married, separated, single, widow
- Ethnicity: Aboriginal and Torres Strait Islander, European (incl. Australian/Anglo), East & Southeast Asian e.g., China, Vietnam, Philippines; reflects strong migration presence, South & Central Asian — e.g., India, Sri Lanka, Nepal; another large and growing component, and Middle Eastern, African & Pacific.
- Education Level – Level of education received
- Industry – Industry where the person is currently employed
- Dependants – How many dependants have the customer reported, including, kids, partner, parents, siblings etc.
- Tenure: Number of years since the customer opened the account with the bank
- CreditScore: Credit score of the customer with a range between 300 and 1100.
- HasHome Loan: Whether the customer has a Home Loan
- Home Loan Balance: Balance remaining on Home Loan repayment
- NumOfProducts: Number of overall banking related products that the customer currently has with the bank.
- HasCrCard: Whether the customer has a Credit Card
- Credit Balance Amt: Balance remaining on Credit Card repayment
- Credit Limit: Maximum spend limit on the credit card
- HasCarLoan: Whether the customer has a car loan
- CarLoan Balance: Balance remaining on Car Loan repayment
- Interest Income: Monthly interest income generated by the bank from various loans and credit card issued to each consumer.
- EstimatedSalary: An estimated annual income (in AUD) based on the customer's transactions.

- JobExp: Whether the customer's employment has been identified as high-risk industry in which his/her income may significantly decrease and has an influence on his/her ability to repay the loan. 0: low risk; 1: high risk

*Notes:*

*The case study is adapted based on the following resources:*

- *MarketLine Westpac Banking Corporation Profile*
- *MarketLine Santander UK plc 2011 Case Study*
- *IBIS 2021 National and Regional Commercial Banks in Australia by Tommy Wu*