## We highly value middle aged customers with short credit card durations!

*Ilora Bandyopadhyay* 

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The role of the analysis of the customer profiles for the bank's credit card division is pivotal to optimize profitability. A data driven strategic dashboard, the Risk profile dashboard (Figure 1) has been created to provide with insights and related recommendations. The target is to maximize the cash cow and star profiles. Here an analysis has been performed based on the customer's age and existing credit score, and its relation to other parameters like co-applicants, number of savings and checking accounts and duration. The middle-aged customers with high number of savings and checking accounts, high number of co-applicants and shorter duration are the cash cows. Young adults are question mark — the ones with low duration and high existing credits are the stars, however, there can be risky customers as well and further analysis has been done on this.

Prediction of customer profiles is done based on several parameters. For this analysis particular parameters have been selected. The focus is prediction of customer profiles based **on number of checking and savings accounts**- the higher the numbers, the safer is the profile; **duration**- the shorter duration profile is less risky than the longer duration one and, **co- applicants**- the higher the number of co- applicants denote to the safer the profile. The analysis also focuses on **existing credit scores** relation to age and risk level of the **profile (good or bad)**. It is to be ensured to maximize the good profiles and minimize the risky (bad) profiles of customers. The age groups have been classified as young adults (till age 30), middle aged (30-50 years) and seniors (50 years and beyond).

We seek to increase presence of middle-aged people with high co-applicants and high number of savings and checking account, and shorter duration like till 1 year. This profile has a sum of whopping 309 savings and 408 checking accounts, 214 existing credits (Figure 2). Although there are some cases where duration is more than 3 years, but there the sum of savings account is 172 and checking is 185 and sum of existing credit is 88 (Figure 3).

We would want to maximize young adults with duration of credit card till 1 year. They have high coapplicants with sum of 249 checking and 172 savings account and 112 existing credits (Figure 4). Seniors till duration of a year and high co-applicants as they have sum of 75 existing credits and 145 and 110 checking and savings accounts respectively (Figure 5).

We prefer to minimize the profiles and be cautious of young adults with duration 3 years onwards are risky. As observed, they have low existing credits (58) and 81 checking and 52 savings accounts only. Even though they might have up to 3 co- applicants, they are considered risky (or bad) profiles (Figure 6).

Young adults with duration up to 1 year can be risky as well when they have only 50 existing credits and 79 and 74 checking and savings accounts only (Figure 7).

Middle aged people with duration 2 years and beyond are risky profiles as they are having only 89 existing credits despite 118 checking and 126 savings accounts and low number of co-applicants (Figure 8).

Seniors with duration of credit card for 2 years and beyond are risky as they already have low existing credit (29) and 35 and 28 checking and savings account respectively with very low numbers of coapplicants (Figure 9).

## The actions we would take as next steps:

After seeing a scenario of the profiles based on age and existing credit scores, we would focus on optimizing profitability and reducing risk profiles. The following steps can be taken:

- Maximize cash cow profiles- to focus on middle aged customers with high co-applicants and high existing credits and savings and checking accounts. Shorter duration is preferred as it is a less risky profiles. Cash cows help to bring in large sums of money and the middle-aged group who prefer short credit card durations are the cash cows in this business.
- Minimize risky profiles- to be cautious of young adults with a duration more than 3 years, as
  they tend to have a relatively low number of savings and checking accounts and low existing
  credits. Similarly young adults with duration less than a year can also pose as risky if they have
  a limited number of checking and savings accounts and low existing credits.
- Question marks on young adults- it is important to thoroughly analyse the profiles of young adults, as the good profiles have the potential to be the star are well.
- **Seniors with caution** Seniors with duration more than 2 years should be approached with caution as they tend to have low co-applicants and low existing credits.
- **Utilize co-applicants a factor to mitigate risk** for seniors and young adults, this factor can be used to reduce associated risks.
- Continuous monitoring- this analysis needs to be continuously monitored to study the changing risk dynamics and ensure ongoing optimization of profitability.

In conclusion, this analysis emerges as a cornerstone to optimize profitability while minimizing risks at bank's credit card division. By maximizing cash cows and star profiles and the minimizing risky ones, the department can steer towards sustained growth and stability.

By a comprehensive examination of age, existing credit scores, and other parameters like coapplicants, duration and savings and checking accounts, key insights were discovered. Middle aged people with high savings and checking accounts, high co-applicants and shorter durations are cash cows, and young adults represent a potential star category, although there are associated risks as well. It is imperative to tread cautiously with profiles exhibiting risk, such as young adults with extended duration and seniors with long duration, low co-applicants, and existing credits. It is to be noted to cautiously handle risky profiles to ensure the bank has less number of risky assets.

Next steps involve targeted approach, to maximise cash cows and cautiously monitor the risk dynamics. By leveraging data driven insights and strategic decision making, the bank can navigate the complexity of customer profiles confidently and achieve twin objectives of profitability maximization and risk mitigation.

## Appendix:

Link of Risk profile dashboard: A1 Data Viz | Tableau Public

Figure 1: Risk profile Dashboard



Figure 2: Good profile- Middle-aged people with short duration (till 12 months)

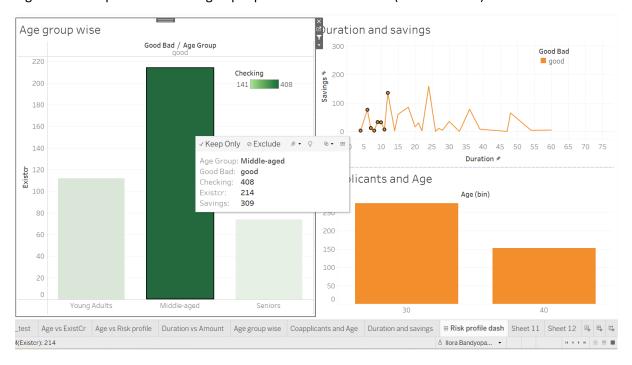


Figure 3: Good profile- middle aged duration more than equal to 36 months



Figure 4: Good profile- young adults with duration till 12 months



Figure 5: Good profile- seniors till 12 months



Figure 6: Bad profile- young adults more than equal to 36 months

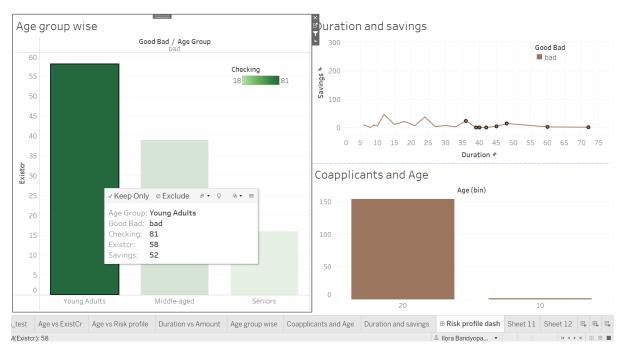


Figure 7: Bad profile- young adults till 12 months



Figure 8: Bad profile- Middle aged more than equal to 24 months



)uration and savings Age group wise Good Bad / Age Group Good Bad ■ bad Savings \* 200 80 35 40 45 50 55 60 65 70 75 Duration ★ Coapplicants and Age 40 Age (bin) 30 √ Keep Only 
Ø Exclude Age Group: Seniors Good Bad: bad Checking: 35 Exister: 29 Savings: 28 Middle-aged \_test | Age vs ExistCr | Age vs Risk profile | Duration vs Amount | Age group wise | Coapplicants and Age | Duration and savings | ## Risk profile dash | Sheet 11 | Sheet 12 | ## ## ## ## ## (Existor): 29 å Ilora Bandyopa... ▼

Figure 9: Bad profile- seniors more than equal to 24 months

Figure 10: Hovering over the dashboard for information

