UNIT 2 EXAMPLE
PROMOTABLE DATA ANALYTICS, NOV 5 2018

Problem Statement

Analyzing credit trends is important for gaining a better understanding of the financial security of a population. Indeed, possessing a good credit score provides access to financing for major investments such as cars, housing, and education. However, a credit profile takes time to build and a short credit history is one factor that can have a negative impact on an individual's credit score.

Proposed Test

This analysis tested the hypothesis that credit scores are, on average, higher among older individuals.

Measurable Outcome

Using the Churn-Modeling data, I created a new Age Group column coded as:

1 = Young Adult (Age 18-29),
2 = Middle Age (Age 30-64),
3 = Older Adult (Age 65+).

I then examined the mean credit score across these three age groups to test the hypothesis that the average credit score would be higher among older age groups. The results of this analysis is provided below.

AVG(CreditScore)	Agegrp
651.1408	1
649.9812	2
662.6525	3

Overall, these results support the initial hypothesis. The older adult group's mean credit score of 662.65 is higher than the young adult (651.14) and middle age (649.98) group. Interestingly, the credit score for the middle age group is lower than that of the young adult group in contrast to the initial hypothesis—though the difference in the average credit score between these two groups is relatively small.

To better understand whether the relationship between age and credit score is consistent across multiple geographic locations in Western Europe, I further examined the distribution of mean credit scores by age group separately for France, Germany, and Spain. These results are provided below.

AVG(CreditScore)	Agegrp	Geography
652.8661	1	France
648.2920	2	France
669.1418	3	France
651.4194	1	Germany
651.3038	2	Germany
656.0571	3	Germany
647.1762	1	Spain
651.9955	2	Spain
656.2676	3	Spain

Overall, the initial finding that the oldest age group has the highest average credit score remains when looking at these individual countries. This provides further support for the relationship between credit score and age and suggests that this relationship does not vary appreciably across the three countries examined.