**Use Case: 4**

**Domain:** Banking and Finance (Credit Score)

**Objective:**

how banks leverage artificial intelligence (AI) to calculate credit scores for individuals

**Data:**

1. **Total income:** Banks consider an individual’s total income when calculating their credit score. This includes their salary, any rental income, and other sources of income. Income can provide context for a borrower's ability to manage debt. Higher incomes can suggest a greater ability to repay loans.
2. **Credit history:** Banks look at an individual’s credit history to determine their creditworthiness. This includes their credit card payments, loan repayments, and, the amount of debt they have, and the length of their credit history.
3. **Transaction analysis:** Banks analyse an individual’s transaction history to determine their spending habits and financial behaviour.
4. **Work experience:** Banks consider an individual’s work experience when calculating their credit score. This includes their job stability and the length of time they have been employed. Stable employment history can indicate financial stability and a higher likelihood of repaying loans.
5. **User behaviour analytics:** Banks use user behaviour analytics to analyse an individual’s behaviour when interacting with the bank’s website or mobile app. This can provide insights into their financial behaviour and creditworthiness.
6. **Online Activities:** 
   * [**LenddoEFL**](https://youtu.be/0bEJO4Twgu4?feature=shared) claims users can install the company’s application onto their smartphones. The software uses natural language processing to analyse users’ social media posts and what they type into their browser for indicators of responsibility or risk-taking. Then, this information informs the predictive analytics algorithm that creates a credit score out of it. Banks and credit unions can then use the users’ LenddoScores to better understand the risk they pose of not paying back their loans.
   * **Kreditech** thousands of data points, including social media activity, online behaviour, and device usage, in order to create a comprehensive and dynamic credit profile for each individual. These would involve conversations about monetary exchanges, as well as data points from eCommerce sites and payment processing sites, such as Amazon and PayPal respectively. This data would have been labelled as positive or negative indicators of responsibility and creditworthiness.

A user could then feed the software with a potential borrower’s social media posts, for example, and the algorithm would search it for indicators of responsibility or creditworthiness and the algorithm might then label this activity as a positive/negative indicator of responsibility.

**Conclusion:**

These data points and parameters provide a comprehensive view of an individual's financial behaviour, responsibility, and capacity to manage credit and debt. Banks and credit scoring agencies use these factors in various combinations and algorithms to generate a numerical credit score that helps lenders assess the risk associated with extending credit to an individual.