

Universiti Teknologi MARA

**Categorization of Personal Loan Eligibility
Using Expert System**

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ABSTRACT

This project developed a categorization of personal loan eligibility prototype using expert system. This prototype allows the loaner in determining their status whether they are eligible or ineligible to apply the loan. Currently the bank uses manual system to approve the eligibility of the loaner. They need to go through many processes in order to approve the applications. A forward chaining method was applied in this prototype. The phases that involved in the development includes knowledge gathering, knowledge analysis, knowledge comprehension, system design, system development, testing and evaluation and lastly is documentation. The identified variables that always lead the loaner to the ineligible categories is age, nationality, work, income, loan amount and their history debt. Each bank has different requirements to approve the application. If the loaner is ineligible, the prototype will notify the loaner the reason why they are not eligible to apply for the personal loan. If the loaner is eligible, the prototype will save the loaner details in the database. It will be easier to loan officer to check their status if they want to apply it to the bank. This information will be used by the loan officer and will contact the applicant. As conclusion, the prototype helps the loan officer to categorize the loaner application between eligible and ineligible. For future work, more features can be included such as collateral. Different bank have their own way to approve the loaner application based on their collateral. Besides that, some of the bank provide package for their services. The details of the package that is provided by the bank can also be included.

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CHAPTER 1

INTRODUCTION

This chapter is about an overview of the background of the project consists of research background, problem statement, research questions, project objectives, research scope, project significance, research outline and summary of the chapter.

1.1 Background of Study

Personal loans are loans that a bank or other lender provides that are not secured against any asset such as property. Personal loans are for government employees and selected private workers, listed of public company and its subsidiaries. Bank that offers personal loan are Bank Islam, Public bank, Maybank, BSN, CIMB, Bank Rakyat, Hong Leong bank, Agro Bank, RHB bank, HSBC and Ambank. Each bank have different calculation for the interest rate. Table 1.1 show the interest rate of some bank in Malaysia.

Table 1.1 Interest rate of bank in Malaysia

Bank	Base Rate(%)	Spread(%)	Effective Rate(%)
Affin Bank	3.99	0.76	4.75
Alliance Bank	4.00	0.65	4.65
Ambank	3.99	0.46	4.45
CIMB Bank	4.00	0.65	4.65
Citibank	3.70	0.90	4.60
HSBC Bank	3.90	0.95	4.85
Hong Leong Bank	3.99	0.81	4.80
Maybank	3.20	1.35	4.55
OCBC Bank	4.02	1.03	5.05
Public Bank	3.65	0.80	4.45
RHB Bank	4.00	0.65	4.65
Standard Chartered Bank	3.67	1.00	4.67
UOB Bank	4.02	0.73	4.75

(Source : loanstreet.com.my)