

High-Impact Factors (70% of total score):

Debt: Debt Score= $W_{\text{debt}} \times \text{Normalize_Debt}(\text{total_amount_in_debt})$ Debt Score= $W_{\text{debt}} \times \text{Normalize_Debt}(\text{total_amount_in_debt})$

Monthly Revenue: Revenue

Score= $W_{\text{revenue}} \times \text{Normalize_Revenue}(\text{average_monthly_revenue})$ Revenue Score= $W_{\text{revenue}} \times \text{Normalize_Revenue}(\text{average_monthly_revenue})$

Past Due Amount: Past Due

Score= $W_{\text{past_due}} \times \text{Score_Past_Due_Amount}(\text{max_past_due_amount})$ Past Due Score= $W_{\text{past_due}} \times \text{Score_Past_Due_Amount}(\text{max_past_due_amount})$

Overdue Installments: Overdue Installments

Score= $W_{\text{overdue_installments}} \times \text{Normalize_Overdue_Installments}(\text{num_overdue_installments})$ Overdue Installments Score= $W_{\text{overdue_installments}} \times \text{Normalize_Overdue_Installments}(\text{num_overdue_installments})$

Open Contracts: Open Contracts

Score= $W_{\text{open_contracts}} \times \text{Normalize_Open_Contracts}(\text{total_open_contracts})$ Open Contracts Score= $W_{\text{open_contracts}} \times \text{Normalize_Open_Contracts}(\text{total_open_contracts})$

Past Due Days: Past Due Days

Score= $W_{\text{past_due_days}} \times \text{Calculate_Past_Due_Days_Score}(\text{max_past_due_days})$ Past Due Days Score= $W_{\text{past_due_days}} \times \text{Calculate_Past_Due_Days_Score}(\text{max_past_due_days})$

Debt-to-Income Ratio: Debt-to-Income Ratio

Score= $W_{\text{debt_to_income}} \times \text{Normalize_Debt_To_Income_Ratio}(\text{Debt-to-Income Ratio})$ Debt-to-Income Ratio Score= $W_{\text{debt_to_income}} \times \text{Normalize_Debt_To_Income_Ratio}(\text{Debt-to-Income Ratio})$

Where:

$W_{\text{debt}}=0.30$ $W_{\text{debt}}=0.30$

$W_{\text{revenue}}=0.30$ $W_{\text{revenue}}=0.30$

$W_{\text{past_due}}=0.10$ $W_{\text{past_due}}=0.10$

$W_{\text{overdue_installments}}=0.10$ $W_{\text{overdue_installments}}=0.10$

$W_{\text{open_contracts}}=0.05$ $W_{\text{open_contracts}}=0.05$

$W_{\text{past_due_days}}=0.05$ $W_{\text{past_due_days}}=0.05$

$W_{\text{debt_to_income}}=0.10$ $W_{\text{debt_to_income}}=0.10$

Middle-Impact Factors (20% of total score):

Business Duration: Business Duration

Score= $W_{\text{business_duration}} \times \text{Normalize_Business_Duration}(\text{months_in_business})$ Business Duration Score= $W_{\text{business_duration}} \times \text{Normalize_Business_Duration}(\text{months_in_business})$

Payment Methods: Payment Methods

Score= $W_{\text{payment_methods}} \times \text{Normalize_Payment_Methods}(\text{payment_methods})$ Payment Methods

Score= $W_{\text{payment_methods}} \times \text{Normalize_Payment_Methods}(\text{payment_methods})$

Age: Age Score= $W_{\text{age}} \times \text{Normalize_Age}(\text{age})$ Age Score= $W_{\text{age}} \times \text{Normalize_Age}(\text{age})$

Dependents: Dependents

Score= $W_{\text{dependants}} \times \text{Normalize_Dependants}(\text{num_dependants})$ Dependents Score= $W_{\text{dependants}} \times \text{Normalize_Dependants}(\text{num_dependants})$

Where:

$W_{\text{business_duration}}=0.30$ $W_{\text{business_duration}}=0.30$

$W_{\text{payment_methods}}=0.25$ $W_{\text{payment_methods}}=0.25$

$W_{\text{age}}=0.25$ $W_{\text{age}}=0.25$

$W_{\text{dependants}}=0.20$ $W_{\text{dependants}}=0.20$

Low-Impact Factors (10% of total score):

Credit Inquiries: Credit Inquiries

Score= $W_{\text{credit_inquiries}} \times \text{Normalize_Credit_Inquiries}(\text{num_credit_inquiries})$ Credit Inquiries

Score= $W_{\text{credit_inquiries}} \times \text{Normalize_Credit_Inquiries}(\text{num_credit_inquiries})$

Regional GDP: Regional GDP

Score= $W_{\text{regional_gdp}} \times \text{Normalize_RGP}(\text{region_gdp}, \text{national_average_gdp})$ Regional GDP

Score= $W_{\text{regional_gdp}} \times \text{Normalize_RGP}(\text{region_gdp}, \text{national_average_gdp})$

Housing Status: Housing Status

Score= $W_{\text{housing_status}} \times \text{Normalize_Housing_Status}(\text{housing_status})$ Housing Status

Score= $W_{\text{housing_status}} \times \text{Normalize_Housing_Status}(\text{housing_status})$

Where:

$W_{\text{credit_inquiries}}=0.40$ $W_{\text{credit_inquiries}}=0.40$

$W_{\text{regional_gdp}}=0.30$ $W_{\text{regional_gdp}}=0.30$

$W_{\text{housing_status}}=0.30$ $W_{\text{housing_status}}=0.30$

Overall Credit Score Calculation:

Credit Score= $(0.70 \times \text{High-Impact Score}) + (0.20 \times \text{Middle-Impact Score}) + (0.10 \times \text{Low-Impact Score})$ Credit Score= $(0.70 \times \text{High-Impact Score}) + (0.20 \times \text{Middle-Impact Score}) + (0.10 \times \text{Low-Impact Score})$

2. Loan Amount Calculation

If Monthly Revenue $\geq 500,000$ TSH $\geq 500,000$ TSH: Approved Loan= $500,000$ TSH Approved Loan= $500,000$ TSH

If Monthly Revenue $< 500,000$ TSH $< 500,000$ TSH: Approved Loan= $\text{average_monthly_revenue}$ Approved Loan= $\text{average_monthly_revenue}$