



e-ISSN: 2319-8753 | p-ISSN: 2347-6710

IJIRSET

International Journal of Innovative Research in
SCIENCE | ENGINEERING | TECHNOLOGY

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 13, Issue 10, October 2024

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.524

9940 572 462

6381 907 438

ijirset@gmail.com

www.ijirset.com

CIBIL Score System

Dr. R.Selvavinayagam, M.Sc., M.Phil., M.Tech., Ph.D.,Department of Computer Science,
Raja Doraisingam Government Arts College,
Sivagangai, Tamil Nadu, India**N. Muthu Lakshmi**Department of Computer Science,
Raja Doraisingam Government Arts College,
Sivagangai, Tamil Nadu, India

ABSTRACT: A CIBIL system to maintain tracks of peoples credit scores and dues of a particular person. The system is same to the real CIBIL system with an enhancement (Here the defaulter can view his status and can apply for improvement by good behavior). This software system gives an option of admin login, CIBIL associates login and individual login. Here, CIBIL associates are banks or companies who want to report faulty members. They may pass faulty member data and this is passed on to the CIBIL admin. The CIBIL admin can vision the data and approve after inspection. The system gives an option of member login for which a member first needs to register. He can then check if he is listed in the black list and for what. If any blacklisted member may apply for the removal along with the receipt of fine paid or other documents of proved good behavior. Thus, the CIBIL system is a fully functional user-friendly process.

KEYWORDS: CIBIL, CIBIL TransUnion Score, Banks, Credit Information Report

I. INTRODUCTION

Banking is reputed as a profession of trust and confidence. Since bank loans are based on reciprocal relationship between lender and borrower, banks will consider the creditworthiness of the borrower by gathering a Credit Information Report (CIR) of the borrower from the Credit Information Bureau (India) Limited which is popularly known as CIBIL.

CIBIL is India's first credit information company. It generate immense value for financial institutes by providing objective data and tools to help them manage risk and devise proper lending strategies, thus reducing cost and maximizing portfolio profitability. CIBIL benefits both credit granters and consumers by collecting, analyzing and delivering information on credit histories of millions of borrowers. It gives its

members with information on both consumer and commercial borrowers, thus enabling them to make sound credit decisions across both individuals and businesses. It also provides services and education to consumers to better manage their finances.

CIBIL calculates credit score of the individuals already registered with some bank but provides no provision to calculate the score of a new user having no past record. The credit function is the heart of banking. Interest income is the main source of income for any bank. Risk is inherent part of bank's business. Accepting any loan to customer always involves some risk.

A credit risk is the problem of default on a debt that may arise from a borrower failing to make required payments. In the first spot, the danger is that of the lender and includes lost principal and interest, disruption to cash flows, and increased collection costs. Credit risk is one of the bank's risk of loss arising from a borrower who does not make payments as promised. Another term for credit risk is default risk. An Effective risk management is critical to any bank for achieving financial soundness. Credit risk causes whenever a borrower is expecting to use future cash flows to pay a current debt. Banks are required for assuming credit risk by way of interest payments from the borrower or issuer of a debt obligation.

The main drawback of general credit review system in many banks and the lack of precise methods for measuring credit risk are two important reasons why an expert support system is necessary. It is with this spirit researchers have taken up the tasks for checking the applicability of the integrated model on the data collected from the Banks.

II. LITERATURE REVIEW

Literature survey is the most main step in software development process. Before creating the tool it is

necessary to determine the time factor, economy n company strength. Once these things are assured, ten next steps are to determine which operating system and language can be used for developing the tool. Once the programmers begin building the tool the programmers need lot of external support. This support can be acquired from senior programmers, from book or from websites. Before building the system the above examination are taken into account for developing the proposed system.

Credit Information Bureau (India) Ltd. (CIBIL):

CIBIL is the highest agency in India providing credit reports and ratings to individuals and businesses. It is the only one of about 1000 companies of the world with an ISO 27001 rating, which is the highest security standard in the world. CIBIL, India’s largest credit information bureau, maintains two divisions: Consumer Bureau and Commercial Bureau[1] . The Consumer Bureau was launched in 2004 with 4 million records and now maintains more than 460 million records. The Commercial Bureau was launched in 2006 with 0.7 million records and now maintains more than 22 million records. CIBIL counts TransUnion International and Dun and Bradstreet as its technical partners, both of which are leading global agencies. Credit institutions verify an applicant’s CIBIL report and CIBIL TransUnion score before making lending decisions. Today banks and credit institutions can lend to customers confidently based on the information received from CIBIL on the customer’s past credit behavior as well as anticipate likelihood of default based on CIBIL TransUnion Score. CIBIL has also benefited the customers by helping make access to credit opportunities faster and easier while driving credit penetration[3] .

Credit Information Companies in India:

Setting up of credit bureaus in Asia really took off only after the Asian crisis in 1997. Even in India, there was need of putting in place, an institutional mechanism for collecting and furnishing, on request, information, on both the existing and the prospective borrowers of bank and other institutions. This would go a long way in arresting the growth of non-performing advances of banks and financial institutions. Therefore, a “Working Group to explore the possibilities of setting up a Credit Information Bureau of India” (Chairman N.H. Siddiqui) was set up in 1999. Based on Credit Information Bureau

(India) Ltd (CIBIL) was incorporated in august 2000. CIBIL launched its credit bureau operations in August 2004 and its commercial bureau operations in May 2006[4] . The Working Group had also felt that a master legislation should be enacted for facilitating, collection and sharing of information by proposed Bureau. This would take care of the need of making amendments to various banking legislations, the provisions of which prohibited disclosure of information. Accordingly, the Credit Information Companies (Regulation) Act (CICRA) was enacted in the year 2005 with a view to regulate credit information companies and to facilitate efficient distribution of credit. The rules and regulations for implementation of CICs were driven inprinciple Certificate of Registration in April 2009 to commence the business of credit information[5]. In order to calculate CIBIL Score for existing users, actual parameters followed by CIBIL is considered whereas, for the new users.

The CIBIL System should be able to generate Credit Information Report and provide Credit Score for both the existing as well as the new users. A new user is one, having no past record and is not associated with any bank.

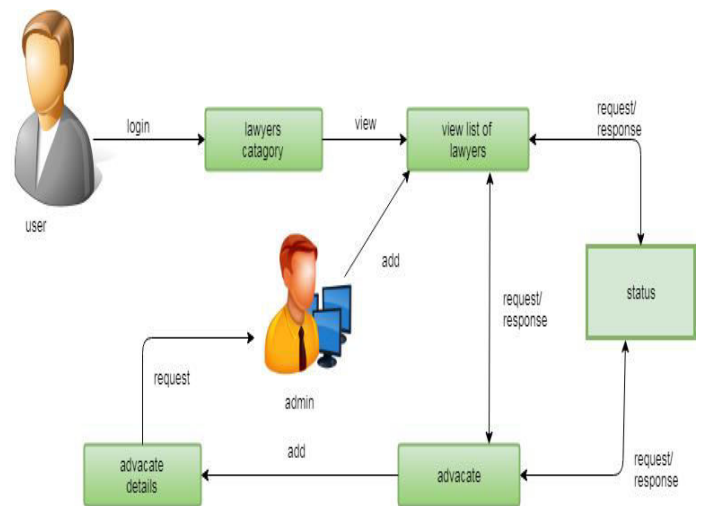


Fig.1.Flow diagram of proposed system.

The existing system does not consider the new users. Our work is an attempt to bridge this gap by calculating score for new users as well. We considered several parameters for this purpose. The parameters we considered are similar to those considered by the CIBIL.

CIBIL Transunion score is calculated on the basis of the information available in the “Accounts” and “Enquiry” section of CIBIL report. Avoid credit hungry behavior and applying for too many loans in short duration of time. Avoid the habit of providing guarantee for less creditworthy persons.

III. METHODOLOGY

STATISTICAL-BASED CREDIT SCORING MODELS:

Now a days, there are many statistical-based credit scoring methods that have been proposed such as linear discriminant analysis [6], decision trees [11-12], Markov chain analysis [13-14], probit analysis [10] and logistic regression [15-16]. The technique of linear discriminant analysis assumes that there are two populations of individuals, denoted as '1' for defaulters and '0' for non-defaulters; each is characterized by a multivariate distribution of a collection of attributes, X, including factors such as age, income, family size, credit history, occupation, and so on [52]. ap them into higher dimensional spaces so that they become separable in those spaces.

MACHINE LEARNING METHODS:

Some of the AI-based methods being suggested and explored by researchers are artificial neural networks [19], genetic algorithms, and artificial immune system. Upon predicting the set of factors to be used, the weight for each factor will be set randomly. Then the AI-approach is used to generate the best combination of weights that can produce the highest percentage of correct prediction. Artificial Neural Networks are computational techniques that present a mathematical model based upon the neural structure of intelligent organisms and who acquire knowledge through experience. Introduced in the eighties, an artificial neural network processes certain characteristics and produces replies like those of the human brain.

FACTORS THAT DECIDE CIBIL SCORE:

Various factors that decide the CIBIL Score are: 1) Past Performance: Individual's past performance on their debt obligations is the most important criteria and contributes approximately 30 percent weightage to the credit score. 2) Credit Type and Duration: Type of loan availed whether secured or unsecured loan and the

duration of credit history availed contributes an additional 25 percent to the score.

IV. EXPERIMENTAL RESULTS AND DISCUSSION

User Activity

Use the calculator as a guide before applying for a home loan or car loan as it lets you understand what the loan amount you are eligible for is and what would the EMI be. So hereafter time you approach a Bank or financial institution for loan, you can apply as per your eligibility. User applying for the loans are personal loan, business, loan, house loan, vehical loan and then any type of loans are apply for bank. User verifying the details and then submit the data .user check the CIBIL score and then apply for loan or any private industries.



Fig. 2. User Activity

Update User Details

User enter the personal details in bank report form and then verifying the bank admin submit or any data are modifications in change for user details and then update for CIBIL administration . Credit used for any type of loans applied. And the monthly report bank administrator submit and update the for CIBIL administater. New credit used increasing for cibil score for the user. Minimum balance, account fines maintains for increasing cibil score in user.

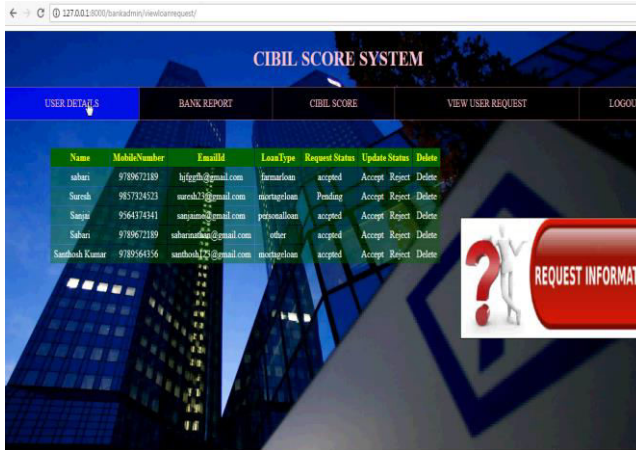


Fig. 3. Update User Details

User Performance

User credit score based for payment history, amount owed, length of history and another one is credit used. Payment history as old loan performance and loan durations, and complete duration time. Amount owed is user balance amount in renewal bank account. Length of history is base for ATM card usage and minimum balance maintenance processing and modifications of user details and another is check bounce problems is avoiding for the user.



Fig. 4. User Performance

CIBIL Score Analysis

The term "settled" has a very negative connotation. It implies that the lender had to compromise and had to forgo some of its legitimate dues. The credit history once spoiled hurts a person badly and that too for a long time. The data in CIBIL records maintain for seven years. The least CIBIL score for a personal loan is generally 750. Whatever above this would mean that the applicant is creditworthy and applications are processed without hassle.

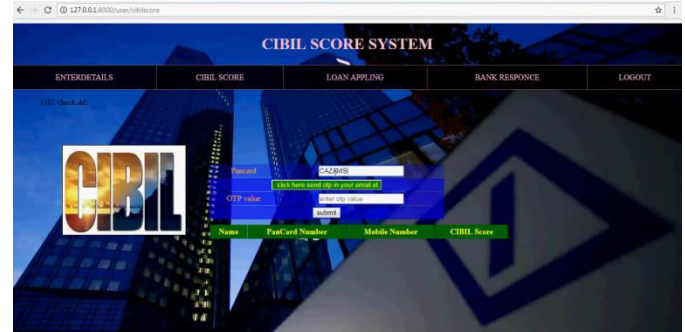


Fig. 5. CIBIL Score Analysis

V. CONCLUSION

CIBIL ratings are most increasingly prominent in our financial system. According to member institutions, currently, largely comprise banks and credit card issuers and other financial institutions extending credit, it is likely that insurance companies and telecom companies may soon join the fray. CIBIL score is the deciding factor for many banks when considering one's loan application. The higher the score, greater are the chances that one's loan application will be reviewed and approved. However, the approval of one's loan application is completely dependent on bank. CIBIL as an main institution does not play any role here. It is advisable to maintain a good credit history as it is the most important financial report that can help a person to avail loans without any difficulty.

REFERENCES

[1] Samreen, Asia, and Farheen Batul Zaidi. "Design and development of credit scoring model for the commercial banks of Pakistan: Forecasting creditworthiness of individual borrowers." International Journal of Business and Social Science 3, no. 17 (2012).

[2] De Bock, Reinout, and Mr Alexander Demyanets. Bank asset quality in emerging markets: Determinants and spillovers. No. 12-71. International Monetary Fund, 2012.

[3] Karim, Mohd Zaini Abd, Sok-Gee Chan, and Sallahudin Hassan. "Bank efficiency and non-performing loans: Evidence from Malaysia and Singapore." Prague Economic Papers 2, no. 2010 (2010): 118-132.

[4] Vojtek, Martin, and Evžen Koèenda. "Credit-scoring methods." Czech Journal of Economics and Finance (Finance a uver) 56, no. 3-4 (2006): 152-167.

[5] Mpfu, T. Peter and M. Mukosera. "Credit scoring techniques: a survey." International journal of science and research 3 no. 8 (2012): 165-168.

- [6] Bansal, Gaurav, Atish P. Sinha, and Huimin Zhao. "Tuning data mining methods for cost-sensitive regression: a study in loan charge-off forecasting." *Journal of Management Information Systems* 25, no. 3 (2008): 315-336.
- [7] Poulsen, J. and A. French. "Discriminant function analysis (DA)." *Journal of forensic sciences* 56 (1996): 297-301.
- [8] Koh, Hian Chye, Wei Chin Tan, and Chwee Peng Goh. "A two-step method to construct credit scoring models with data mining techniques." *International Journal of Business and Information* 1, no. 1 (2015).
- [9] Mircea, G., M. Pirtea, M. Neamtu, and S. Bazavan. "Discriminant analysis in a credit scoring model." Paper of Faculty of Economics and Business Administration West University of Timisoara, Romania (2011).
- [10] Abdou, Hussein A., and John Pointon. "Credit scoring, statistical techniques and evaluation criteria: A review of the literature." *Intelligent Systems in Accounting, Finance and Management* 18, no. 2-3 (2011): 59-88.
- [11] Bastos, J. (2007). Credit scoring with boosted decision trees, (8156). Retrieved from <http://mpr.ub.unimuenchen.de/8034/nhttp://mpr.ub.unimuenchen.de/8034/1/paper.pdf>
- [12] Zhang, Heping, Richard S. Legro, Jeffrey Zhang, Leon Zhang, Xiang Chen, Hao Huang, Peter R. Casson et al. "Decision trees for identifying predictors of treatment effectiveness in clinical trials and its application to ovulation in a study of women with polycystic ovary syndrome." *Human Reproduction* 25, no. 10 (2010): 2612-2621.
- [13] Smith, L. Douglas, and Edward C. Lawrence. "Forecasting losses on a liquidating long-term loan portfolio." *Journal of Banking & Finance* 19, no. 6 (1995): 959-985.
- [14] Greenidge, Kevin, and Tiffany Grosvenor. "FORECASTING NON-PERFORMING LOANS IN BARBADOS." *Journal of Business, Finance & Economics in Emerging Economies* 5, no. 1 (2010).



INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

 9940 572 462  6381 907 438  ijirset@gmail.com



www.ijirset.com

Scan to save the contact details