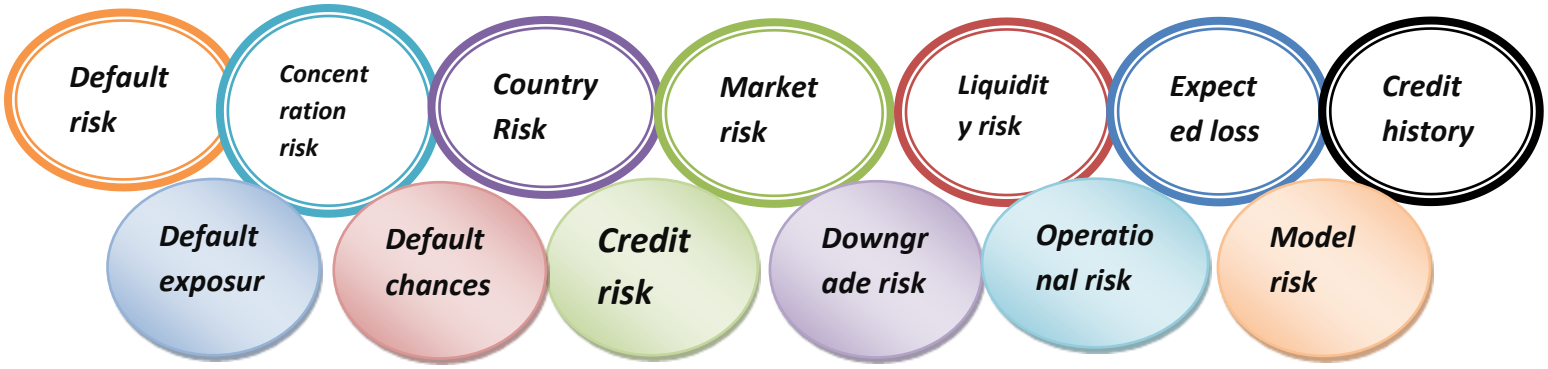
borrower's debt repayments. The credit report is a data of a customer's history of loan repayment from several institutions, such banks, credit card companies, charitable organizations, and governments. In order to determine creditworthiness, a mathematical algorithm is applied to credit data to produce credit score. This credibility report given by **CIBIL** is used *forCredit risk management.* Lenders use CIBIL reports and scores to assess borrower's credit risk. This information guides in making credit decisions, setting interest rates and determining loan terms.

Types of Credit Risk



These are the most important **types of credit risk** faced by the economy that can be controllable or uncontrollable depending on the circumstances. To evict the problem of credit risk, the financial institutions take the help of CIBIL to judge the risk association from based on individual's credit history. The TransUnion CIBIL in 2016 had also partners with National Institute of Bank Management (NIBM) to educate about risk management of credit and other banking operations to decrease the banking risk and allow smooth operations of financial institutions. There are multiple software as well to assess credit risk such as; LeadSquared, Actico, Highradius, and Abrigo that helps in real time credit risk report preparation.

Mechanism of Model for Credit Risk Management: CIBIL

In a broader way, it is observed that the credit rating is done on these four parameters given below that divides the borrower's applications. The lender will review the application to find the credit worthiness and proceed with other factors only if CIBIL score is high. The CIBIL score serves as the leader's first impression that means if the score is near 900 the scope of loan acceptability will be higher. The decision to sanction the loan or credit card is entirely up to the bank. CIBIL has no influence whatsoever on this choice. Usually, a 700 or higher credit score is considered as acceptable. Understanding it with the help of given table:

300-500	DOUBTFUL
550-650	SATISFACTORY
650-750	GOOD
750-900	EXCELLENT

Considering a deeper aspect to judge the risk probability and creditworthiness:

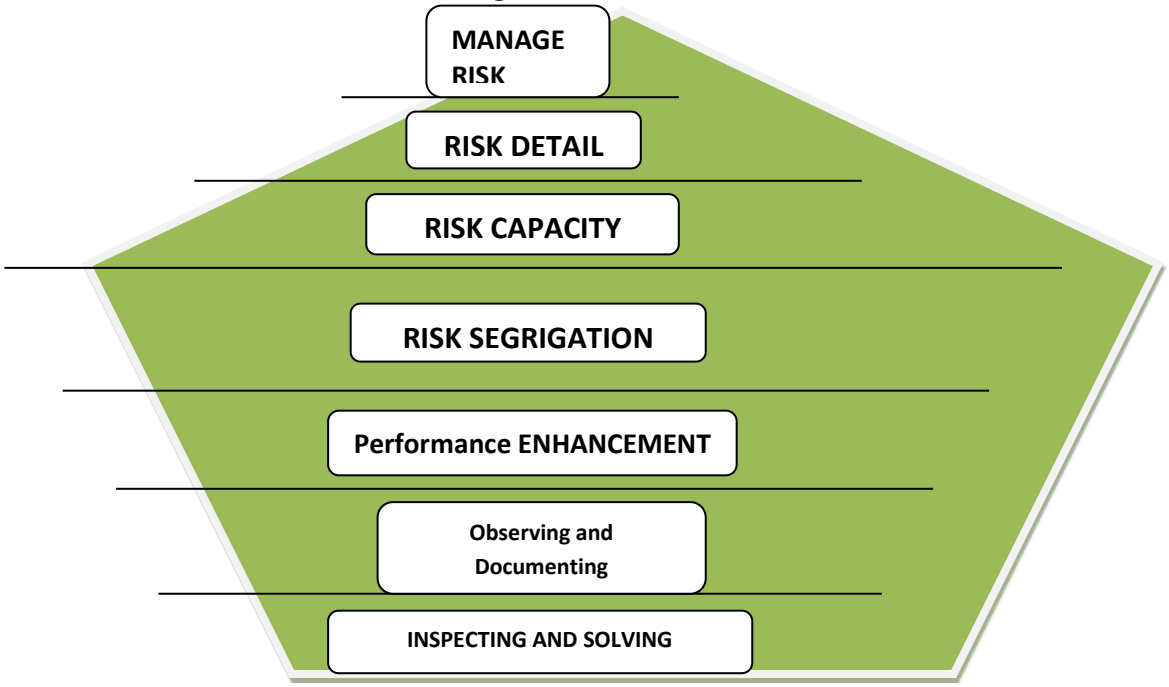
CIBIL SCORE	CREDIT WORTHINESS	Approval Probability
600-649	Poor	Difficult
650-699	Average	Possible
700-749	Good	Good
750-900	Excellent	Very high

Components to alleviate Credit Risk

- **Credit Review:** Maintaining control over high-risk customer accounts requires ongoing monitoring of the financial well-being of the clients. This can be assisted by regular credit risk assessments. Periodic reviews relate to the upgrading of credit data and ratings at current intervals of time in order to improve credit risk accuracy. Regular evaluations of credit risk can assist with this. Periodic reviews relate to the updating of credit data and scores at regular intervals of time in order to improve credit risk accuracy. Among the variables monitored are order size, seasonality, payment habit, and the kind of deductions made. The credit limit and score of a customer are affected by any modifications to these variables. Regular assessments enable you to stay on top of your clients' financial situation and take preventative action, like adjusting loan terms and keeping an eye out for potential delinquencies.
- **Uniform procedures for approval:** In the lack of established workflows, miscommunications occur and incorrect credit choices are made. The consumer must be informed as soon as possible about credit acceptance, credit denials, and any extra data required, in addition to internal communication. It is important to communicate with the customer as soon as possible to provide timely responses. A lot of mid-sized companies sometimes lack an efficient workflow for approving credit and distributing letters.

- **Use of credit scoring models:** The demographics of customers vary majorly depending upon the industry, region and necessary compliance procedures. For organizations to obtain precise scored for every consumer, a flexible scoring model is necessary. For credit scoring algorithms to function properly and enable firms to monitor all high-risk accounts, real-time data from reliable sources must be used. There are other credit scoring models such as: Experian's National Equivalency Score, TransRisk, CE Credit Score, FICO etc. Out of all credit models, the CIBIL's credit scoring is widely acceptable in Indian context.
- **Credit data aggregation:** Organizations should use data from independent credit agencies to investigate the financial histories of their customers in addition to the information supplied in the credit application form. Credit bureaus and rating organizations assist in forecasting the present and future financial well-being of their clients. This credit information helps in acquiring accurate information about borrower's credibility position for reducing credit risk. The following is a list of reliable sources of credit data for risk evaluation: FICO, Equifax, D&B, and Experian.
- **Standardized credit rules:** Establishing a strong credit control strategy is vital for firms as it serves as a foundation for credit teams. Although each business has its own unique credit policy, generally speaking, a credit policy should include explicit instructions regarding the conditions attached to providing goods or services on credit, Qualification standards for customers, the method of dunning. The implementation of a structured credit policy guarantees that the credit team employs a uniform approach in handling a customer's credit risk. Because there is an audit trail, this results in consistent credit choices and the elimination of compliance difficulties. A credit policy also facilitates the speedy onboarding of new personnel into the credit team because they can quickly get familiar with the rules and begin assessing credit risk.
- **Customer's onboarding process:** Since the onboarding process is where new employees typically make their first impressions within the company, it is an important process. Better customer experiences can be achieved by making the entire process smooth and hassle-free. However, the client onboarding process is sometimes laborious and tedious for enterprises, even mid-sized ones. Errors and significant delays are frequently caused by manual processing in complex workflows where permissions from different teams are required for data. E-workflows facilitate quicker onboarding by enabling automatic approvals—as long as the necessary conditions are satisfied. Faster customer onboarding and more standardization of the credit assessment process lead to improved credit judgments when the credit application and approval processing is automated.

The process in brief for a smooth Credit Risk Management



LITERATURE REVIEW

Overview Credit Risk Management

Ho andYusoff(2009)elaborated in his study that many financial institutions fail due to the illegal actions of customers who fail to fulfill their obligations regarding loan, transactions, contracts and other financial transactions. An important risk that must be managed and investigated correctly is credit risk. For most banks, loans are the largest and most significant sources of credit risk. Credit risk should be evaluated within the scope of financial risk as well as direct financial loss. This includes auction fees,

transaction fees, and expenses related to distressed properties. Where a company's credit risk is compromised can also expose it to other risks: A market disturbance can affect stocks and credit risk. The purpose of credit risk management is to increase the bank's risk adjusted return by controlling credit risk within acceptable limits. Banks must manage individual credit or commercial risks as well as the credit risk inherent in all loans.

Rehman *et. al.*(2019)outlined the impact of the tactics the commercial bank in Balochistan took to manage credit risk. The study's conclusions are significant because they will enable commercial banks to lower credit risk by comprehending the efficacy of various risk management techniques. The alternatives available to bank personnel for measures that can help lower credit risk are examined in this descriptive study. Four risk management techniques that are crucial for businesses to handle credit risk for the subject of this study. The influence of risk management of techniques such as corporate governance, hedging, diversification, and adequate capital is illustrated by the research model. The study's findings demonstrate that Balochistani banks are capable of creating sensible plans to enhance their CRM.

Afriyie*et. al.*(2018) explainedthat credit risk can be reduced by strengthening regulatory policies. In addition to establishing a good credit policy, banks must establish credit management and actions in the form of divisions or divisions to ensure that payments made to customer are observed. As a routine and suitable practice in credit risk management, authorities ought to be included in the credit risk assessment. The major responsibility is to analyze credit risk, defining credit conditions and limits, monitoring and managing and debts, ensuring that client information is updated accurately and collecting debtors. Additionally, high-risk clients can be managed by this department, and prompt action can be taken to settle any arising questions or conflicts. Better financial outcomes and the company's ability to continue operating are the two goals of the risk-reduction tactics and duties used by credit managers.

Konovalova *et. al.* (2016)observes the risks associated with consumer loans for the company's prospective customers by evaluating the credit risk management model based on retailer analysis. To lower and prevent future credit risk and enhance risk management in banking, the study's goal is to ascertain the degree of risk at various seller (debtor) groups. This study's primary outputs include the development of an internal debtor evaluation model and strategies to lower commercial enterprises' credit risk. All banks that provide loans to persons and legal entities are concerned with the subject of credit risk management and the quantitative assessment and analysis of credit risk and rating.

Lajili*et. al.* (2022)elucidated the risk of credit in commercial banks in Canada and Italy with the help of qualitative and quantitative analysis to assess bank credit risk disclosure. One of the biggest differences is that banks in Italy give more risky credit while Canadian banks provide more visibility into credit risk. It contributes to the lack of data on credit risk by identifying area for improvement in Canadian and Italian banks. The data has been collected from nine publically listed Italian banks and eight publically listed Canadian banks. The study calls on supervisors, experts to pay more attention to the reporting of credit risk of banking sector. Canadian and Italian banks can improve the quality of their risk reporting by focusing on areas of improvements. Better credit risk reporting will increase transparency and reduce information inequalities between domestic and external banking sector.

Sabeza*et. al.*(2015)conducted the research on the bank of Rwanda to see the problems arising related to unsatisfactory financial performance of BPR Ltd. The study focused on analyzing the issues tackled by the credit risk managers of BPR ltd. The sample has been collected from fifty respondents of Nyagatare branch of BPR ltd. out of 150 respondents and found the direct connection of credit risk manager and profitability of the organization. The result of the study suggests that the betterment of credit risk management policies is required.

Richard*et. al.* (2008)emphasized on the credit risk management from the countries with already developed financial sectors and to check the implacability of those methods of managing credit risk by commercial banks in the non developed economies. The research is conducted to propose a valid code of conduct suitable for Tanzania's economy. The collection of data for proposing a valid code of conduct is done from both primary and secondary methods using sampling data from commercial banks along with the prevailing researches and documents relevantly discussed the suitable models for tackling the problem of credit risk management for Tanzania's economy.

Abdelrahim (2013)discussed thefactors, difficulties and evolving techniques for managing credit risk in Saudi banks. The "CAMEL" Model is used in a descriptive and analytical methodology to analyzeperformance of risk management. The study found that, in addition to bank size, which has a big, negative influence on the efficacy of credit risk management, liquidity has a significant, strong positive impact.On the other hand, the effectiveness of credit risk management is not significantly impacted by other factors such as capital adequacy, asset quality, management soundness, and earning.A lack of comprehensive financial analysis, poor corporate governance, low-quality assets, minimal credit diversification, a failure to levy a risk premium on riskier loans, dishonest credit officers, prioritizing loan guarantees over safety, and prioritizing profitability over repayment capacity are the issues that hinder effective credit risk management. Training credit officers, enhancing the quality of assets, bolstering corporate governance, conducting expert analyses of customers' financial situations, and having access to Credit Bureau data are all ways to increase the effectiveness of credit risk management.

Eveline(2010)examines how certain Swedish banks manage cre dit risk by examining the factors they take into account when ext ending credit to businesses. Open-ended interviews and a qualitative research methodology were used to conduct this study.

Three Swedish banks made up the sample group. The empirical data analysis revealed that credit risk management plays a crucial role in the loan decision-making process. Additionally, it demonstrates that while banks may face similar risks, they have different credit risk management strategies, different banks place different values on the data used to assess credit, and collaterals have a significant influence on credit decisions. Therefore, banks must value every piece of client data perfectly in order to achieve better credit risk management outcomes, as any overlooked data may be the main contributor to a problem or default.

Hesborn *et. al.*(2016)outlined the study's focus on the effects of credit policies, customer appraisal techniques, collateral replacements, and credit risk monitoring procedures on SACCOs in Kisii County; however, the study's overall goal was to investigate the ways in which credit risk management strategies affected these organizations' financial performance. The theories of capital asset pricing model theory, arbitrage pricing theory, and modern portfolio theory served as the study's guiding principles. Although the study focused on the effects of credit policies, client appraisal techniques, collateral substitutes, and credit risk monitoring methods on these organizations, the overall goal was to determine how credit risk management practices affected the financial performance of SACCOs in Kisii Country.

Afriyie*et. al.*(2018)showed that putting in place more robust credit management mechanisms lowers credit risks. To make sure that funds given to borrowers are tracked down and recovered, banks should establish credit control procedures and operations as a unit or department in addition to having stringent credit policy requirements. As a standard minimal practice in credit risk management, the department head should be fully involved in credit risk assessment. Credit risk is the possibility that a financial institution would experience such a loss of revenue from a borrower's deteriorating financial situation that the value of an asset, including off-balance-sheet assets, will be diminished or eliminated. This knowledge may be applied to a deeper appreciation of the elements of commercial bank's (CBs') credit risk management (CRM) systems in developing nations.

Bayyoud andSayyad (2015)explained that credit risk and profitability are unrelated in a way that would suggest that credit facilities have an impact on bank profits. Most of the managers attested to how widely credit risk management principles are applied in their organization for assessing uncertainties and creative value connected to the company. Collateral is used to impose upper and lower bounds on the amount of loan facilities. It is important to remember those operational administrations, asset monitoring, bank size, credit risk in relation to capital sufficiency, and operational administrations all play a significant role in the financial performance of banks in Palestine. Moreover, the banks employ a variety of criteria to assess the profitability of their operations. The two most important ones are return on equity and return on assets. However, the majority of earlier studies concluded that return on equity is efficiently used. The study concludes that there's no relation between credit risk management and profitability of the commercial banks.

Soares*et. al.* (2011) discussed the finance medium- and long-term investment projects, banks evaluate company credit applications.. There are several pertinent elements to this kind of credit examination. It first suggests assessing the operation's business possibilities for the bank, taking into account the length of the client-bank connection, the quantity of deposits, and other regular activities this customer performs. Second, it entails determining whether the planned investment's projected return and risk are acceptable, as well as whether the timing of the financial operation is suitable to support this project. Third, the bank's choice affects not just whether the credit application is approved or denied, but also how the application is categorized into various risk categories if it is approved. Accordingly, these risk groups correlate to various spreads in rating systems. Lastly, the study cannot be solely dependent on past data, which would permit the direct application of methods like discriminant analysis or logit and probit regressions.

Arora (2012) investigate the relationship between bank size and a wide range of CRM strategies related to four aspects of CRM that are CRM organization, CRM policies, CRM operations and systems at transaction level and portfolio-level CRM systems and processes. In order to achieve this, sample banks were divided into three size categories-small, medium, and big financial institutions based on the value of their advances portfolio. The results of the chi square test and discriminating analysis revealed a substantial correlation between the size of the bank and a few CRM techniques, especially when it comes to CRM organization, operations, and system at transaction level. It was shown that when choosing that CRM strategies, large-sized banks typically place an emphasis on the components of specialization and centralization. The results also showed that all of the sample banks, regardless of size, generally used a combination of credit risk avoidance, credit risk reduction and credit risk control approaches.

Adam (2002)explored how firms ideal hedging methods are impacted by the credit risk premium. The model predicts that enterprises will employ convex hedging strategies if the credit risk premium is relatively minimal. When there is a significant increase in the credit risk premium, businesses use concave hedging strategies. Convex and concave qualities are combined in collar strategies, which are used by businesses that operate in the middle of the two extremes. Lastly, businesses that use linear approximations of the best course of action are probably unlevered, have low investment levels, and face few non-hedging risks. Every known hedging strategy employed in the gold mining industry is faithfully simulated by the computer. The best combination of instruments to hedge for businesses with limited resources is determined by this study, together with the proper configuration of other parameters including position size and direction, strike prices, etc. This study so clarifies why certain businesses selected convex or concave hedging strategies, while others make use of linear or neither concave nor convex strategies.

Weber (2011)presents a mixed approach study of the environmental risks integrated into credit management in this research. According to the qualitative and quantitative evaluations, managing environmental hazards in credit management is a strategy used by Exports Development Canada, credit unions, and Canadian commercial banks mitigate financial risks. Some of the organizations even link sustainability and environmental concerns to their overarching business plans. Since all six of Canada's commercial banks which account for more than 90% of nation's' assets systematically assess environmental risks for credits, loans, and mortgages, Canadian banks rank among the finest in the world. The conclusion is drawn that environmental loan examinations by Canadian banks are conducted in a proactive manner and that great accounting related reporting on environmental risk management in financial institutions is important.

NJANIKE (2009) elucidates the definition of the two concepts—sensitivity indicator and switching value and how they are utilized to conduct a sensitivity analysis. The numerical example, allowing us to reduce project risk and evaluate the impact of changes in important variables. The most significant financial portfolio of a nation is its public debt, which represents the intricate and dangerous financial arrangements that pose serious threats to the state's financial stability and legacy. The necessity to reduce exposure to liquidity risk and other vulnerabilities that put states' economies at risk of external shocks has been brought to light by recent crises. It becomes imperative to manage public debt structures in a wise and feasible manner, since failing to do so can result in severe macroeconomic effects such as inability to pay back debts, significant output losses, and exorbitant associated costs.

Suresh (2010)expounds with the goal of creating a methodology for evaluating and managing credit risk for fifteen private banks based on a private bank portfolio of loan advances and non-performing assets (NPAs). For the analysis, every credit advance portfolio from every region was taken into account. The total non-performing assets (NPAs) of private sector banks were discovered to be connected with the NPAs of individual banks, and the occupation portfolios had a significant impact on the contribution of NPAs. Every region values personal loans, which are inversely correlated with non-performing assets (NPAs). Even though the services sector accounts for 62% of India's GDP, loan advances to it are extremely low.

Singh (2015) interpret how risk management of credit (CRM) affects banking in India including public sector banks as well as private sector banks.Credit risk arises when clients don't fulfill their debt servicing obligations, leading to either a whole or partial loss. Bad credit is the main factor increase credit risk. Banks will benefit from improved risk management by seeing an improvement in their performance (return). The researcher used the capital adequacy ratio (CAR) and non-performing assets (NPAs) as two independent variables and one dependent variable is return on assets. (ROA). One performance metric is the ROA. An indicator of credit risk management is the CAR and NPAs. A two way regression model has been used by researchers.

Ali andDhiman(2019)examines the statistical relationship between public sector financial performance and credit risk management indicators. Commercial banks that were the subject of an eight-year study, from 2010 to 2017. The study's overall conclusions demonstrate that the profitability of the PSBs during the study period is strongly impacted by credit risk management strategies.It is discovered that the capital adequacy ratio and ROA have a favorable association. The amount of money that banks have on hand to cover losses is known as the capital adequacy ratio, which also protects depositors and fosters bank stability. A positive correlation between CAR and ROA indicates that as CAR rises, profitability rises as well, and vice versa.

Oino (2016)evaluate the ways in which risk management practices of private and public banks varied from one another. The data, which covers 14 institutions from 2009 to 2012, shows that private banks have higher capitalization than public banks.For commercial banks, the CAR is 17%; for public banks, it is 13%. The CAR for Indian banks is set by RBI at 9%, which is greater than the average for developed nations. The public sectors' capital adequacy ratio is still falling as a result of increased loan demand and the need to make larger provisions as a safeguard against declining asset quality.
According to the analysis, public sector banks experienced a far higher NIM fall than private banks. This might be the result of private banks using diversification to hedging. As a result of study, it shows that Credit Risk Management highly influence both banks even though private banks are more
better capitalised and have superior asset quality control than pu blic banks. Future studies must, focus on the bank's sizes along with additional macroeconomic factors when evaluating the profitability and capital sufficiency of both public and private banks.

Sharma and Kumar (2022) elucidates in their study regarding the initiatives taken to raise the government banks of India's asset quality. The study evaluated the Credit Risk Management (CRM) practices applied to commercial loan approval. It will accomplish this by pointing up any gray regions that need to be examined and perhaps reorganized. The capital adequacy ratio (CAR) and nonperforming assets (NPAs) are taken into consideration while evaluating the efficacy of banks. The CAR and NPAs are examples of credit risk management indicators. Institutions must use credit risk management techniques to keep their exposure to credit risk within appropriate and reasonable bounds. Effective risk management, accountability, and transparency are essential components of any prosperous financial establishment.

Das *et. al.*(2007)studies the sophisticated panel data methodologies, that ensures the specification issues and estimation bias are avoided. The next section of the paper gives a summary of the institutional framework of the Indian banking industry and shows how problem loans have changed over the course of the study period. By providing empirical support for the

use of macro- and microeconomic data to forecast projected credit losses, the study advances our understanding of credit risk. There isn't much research that can be used to improve how well the financial sector operates. It is thought that the biggest economic upheavals have their genesis in a banking crisis.

Brahmaiah (2022) elucidates about thean important aspect of Indian banks' success in the field of credit risk management is the identification and control of credit risk. The study's findings support recommendations for credit risk management made by the RBI. The findings demonstrated that banks conducted risk assessments, evaluations, monitoring, and management in addition to ensuring that commercial banks identified credit risk early. In terms of credit risk, PVBs perform significantly better than PSBs. Based on the survey results, banks use a range of credit risk management tools, including securitization, exposure limits, prudential limits, loan review procedures, loan review mechanisms, risk-based pricing, portfolio management, Value at Risk (VaR), Sensitivity Analysis, and risk-based pricing.

METHODOLOGY

Statement of problem

There are various reasons of credit risk that occur either due to borrowers non credibility or due to other uncontrollable factors that are credit spread risk, downfall risk, concentration risk, institutional risk which lead to bank's interrupted cash flows and rising collection expenses.The Cibil score can helps in minimizing the credit risk with the help of basic principles applied to assess the credit positioning of the borrower with the help of 5C's of credit that includes credit history, repayment ability, capital, terms of the loan, and related collateral or with the help of rating scale given by TansUnionCibil from300-900 (300-poor,900-excellent) depending upon the risk involvement. (In some countries with different rating system, the credit rating is done as BBB, A, AA, or AAA)

Objectives of study

1. The credit risk management with the help of credit information about the borrower.
2. To identify various measures used for assessing bank's profitability affected by credit risk.
3. To study the procedure followed for smooth credit risk management by commercial banks.
4. To analyze the credit risk culture and causes of risk management failure.

Design of Study

This research is focused on studying the significance of credit scoring by CIBIL for credit risk management adhered by various financial institutions (focusing the commercialized banks) in different countries around the globe. The qualitative research technique is used to study various measures undertaken by commercial banks for credit risk management, including its applicability and potential with credit information about borrower (provided by CIBIL).

Data Collection

The research is an exploratory study so the data is collected from previously conducted researches. The data for the study is mainly collected from secondary sources which includes publications of Reserve bank of India, Bank's annual report, Case studies,Scopus Journals and bulletins, books and newspapers.

FINDINGS FROM PAPER REVIEW

In the study of (Afriyie S., Ayamba E., Akomean M. 2018) discussed about the CRM process and the objective of paper is to analyzed the system through regression model taking the variables as Elimination of bad customers, State of economy, Quality of staff, credit appraisal, Financial stability of the customers, Collateral, Credit manualand other constantsand found the result that Collateral and Credit manual positively influence the decrease in credit risk. The borrowers who doesn't have strong financial position are the main reason of increased risk. The collateral helps the lender to have financial security incase borrower default to repay. AnjuArora, 2012), there is a mix and balance seen in all the banks of risk avoidance methods including mitigation of risk and controlling risk that the study analyzed with the help of chi-square test. (Khalil Elian Abdelrahim, 2013) In this study, the profitability is compared to the financial positioning of the banks of Saudi with the help of CAMEL analysis. The CAMEL that is enough capital, quality of assets, management, profits, liquidity, and sensitivity is seen positively impacting the profitability of the banks financial positioning. (Liaqat Ali,2019) in his study analyzed the CRM effect on profitability with the help of regression equation model using Camel's rating taking the variables of return on assets, capital adequacy, earning, liquidity parameters and concluded the positive relation between ROA and capital adequacy which means the banks that maintain enough capital remain profitable in long term. (Asha Singh, 2015) in the study analyzed the risk involvement in private and public sector banks related to credit risk management taking the adequacy ratio of capital, asset return and doubtful assets and the three variables and using regression coefficient concluded that the better financial performance is seen in private sector banks that handles the non performing assets better to maintain low defaulters and hence lower credit riskas compared to public sector banks. (Felix Sabeza, Jaya Shukla, GauravBajpai, 2015) in their paper evaluated the banks performance in Rwanda and concluded that desirability taking parameters and credit risk management are positively correlated such as profitability, respondent group, NPL, risk management and credit policies. (Catherine Soke Fun Ho, NurukIzzaYosoff, 2009) in their research on CRM strategies in Malaysian Financial Institutions that how and what policies does Malaysian banking institutes pertain to cure banking financial crisis due to credit risk and found that the diversification of risk is done by risk mitigation and upskilling workers to practice diversification in terms of geographical boundaries, industries and type of loans. (Natallja Konovalova, Marina Kudinska, InetaKristovska, 2016) This paper studies the various Risk assessment models to cure the problem of credit risk by borrower and give a robust model for future betterment by use of discovered model for borrowers that is a general statement defining. (B.S. Bodla, RichaVerma) in their

study defined that the losses or credit risk are resulting from a reduction in the value of the portfolio due to actual or perceived drops in credit quality. Credit risk arises from transactions a bank conducts with an individual, business, bank, financial institution, or a sovereign. It concluded that direct lending causes the higher risk of credit however in India the credit risk is comparatively low to that of some other countries because of RBI regulations to be followed while lending. (NgwaEveline, 2010) studies the system of risk management of banks in Sweden and analyzed their system of lending for managing Credit Risk. The study discussed the 5 C's of credit to study the credit risk engagement. The study states that Sweden bank's have a strict governance for the concern of credit risk and pay high attention for this problem and make sure the customer will repay the debts on time so that there won't be any chance of Credit risk to arise. (KaoutharLajili, Sana Mohsni, Salvatore Polizzi, EnzoScannella, 2022) The study elaborates about the Canadian and Italian banks that are taking into consideration for the purpose of Credit risk disclosure. It concludes that disclosure practice by the banking institutions are very important as it helps the banks to maintain an appropriate balance between investors and stakeholders and disclosure comes to an important aspect when credit risk related information need to be focused. Also it has been concluded that Italian banks have comprehensive while Canadian banks have holistic disclosure methodology. (MoronyaAshaHesborn, ArvinlucyOnditi, Michael Nyagol, 2016) The study examines how credit risk management techniques affected Sacco in Kisii county financial performance, while its particular goal was to examine how credit policies affected client appraisal. This study, which looked at credit risk monitoring techniques and collateral alternatives in Sacco in Kisii county, was informed by contemporary portfolio theory, which uses portfolio theory and capital asset pricing models for study analysis. The study revealed that there are no well-tailored policies in Sacco that might definitively manage their actual borrowing process. (Isaiah Oino, 2016) This paper elaborates on the significance of risk management and consistent regulatory capital in maintaining the stability of the financial industry. The aim of this is to analyzethe way private banks differ from public banks in terms of credit management. It was discovered that both private and public sector banks' profit ability is significantly influenced by nonperforming assets (NPAs), with higher NPAs having a negative impact on the organization's profitability. In addition to a number of market variables and economic conditions brought on by legislative changes, recessionary conditions, a lack of resources for effective management, and strained labour relations have negatively impacted the state of business and forced borrowers to fall behind on their loan payments. (Zia Ur Rehman, Noor Muhammad, Bilal Sarwar, Muhammad AsifRaz, 2019) This study focused on study of credit risk management in Balochistan, Pakistan with relevance to commercial banks that how they deal strategically from credit risk. The strategies used for handling CRM are diversification, hedging and corporate governance by commercial banks however there are still a few banks that fail to cope with credit risk so there is a need of literacy about balancing capital adequacy and hedging as discussed in the paper . Joao O. Soares, Joaquim P. Pina, Manuel S. Ribeiro, Margarida Catalao-Lopes, 2011) This paper provides evidence on the prevalent practices used by the Portuguese banking sector by discussing Credit Risk Assessment and model of predicting default in Portuguese banks. The credit assessment is processed using the multicriteria decision analysis model, for this purpose. The outcome reveals that the major criteria are matching the three primary domains, which are the market of financial performance, competitiveness, considering the expertise and dependability of the management. According to the report, the primary basis for credit analysis is judgment, relying on the analysts' subjective evaluation. Mohammad Bayyoud, NermeenSayyad, 2015) examines the profitability and credit management of investment banks and the commercial banks in Palestine. It concludes that there are no appreciable differences in how the two operate in terms of their relationships. Although this paper shows no direct correlation between risk of credit and earning capacity also the bank earnings are not impacted by facilities of credit. It is still important to understand how bank size, credit risk, and operations administrations affect bank financial performance in Palestine.

FINDING FROM THE RESEARCH

The observations and researches support the fact that credit risk has always been impacting the financial growth of the institutions and it is the critical requirement of financial institutions to frame a credit risk management framework for smooth functioning and minimizing losses. The CRM can be framed with the help of credit scoring as discussed below:

Formulating plan for Credit Risk Management:

Develop a Comprehensive Credit Risk Management Policy: To direct risk management initiatives across the company, a thorough credit risk management policy ought to be created. The policy should specify the procedures for determining and evaluating credit risks, the roles and responsibilities of stakeholders, and the risk management tactics that will be used.



Ensuring Risk Assessment

Conduct Regular Credit Risk Assessments: To find possible credit risks and create effective risk management plans, regular credit risk assessments should be carried out. This entails determining possible credit risk scenarios, evaluating each scenario's impact and likelihood, and creating risk management plans that successfully reduce the risk.

Reduction of credit risk:

Put in place strong mechanisms for mitigating credit risk: To reduce possible credit risks, strong credit risk mitigation procedures must to be put in place. This entails putting into practice efficient credit scoring models, creating reliable underwriting procedures, and routinely assessing the creditworthiness of borrowers.

Enhanced Manpower

Provide Regular Employee Training: To make sure that staff members comprehend the significance of credit risk management and how to conduct it successfully, regular training is essential. This covers instruction on response plans, credit scoring models, underwriting procedures, and credit risk management policies.

Acting plan for Response to Risk of Credit

Response Plan: To guarantee that the company can react promptly and efficiently to any credit risk events that arise, a thorough credit risk response strategy should be created. Establishing precise procedures for locating and containing credit risk events, informing impacted parties, and carrying out a post-event review are all part of this.

Adherence to rules or regulations

Ensure Compliance with Regulations and Standards: Compliance with relevant regulations and standards, such as the Banking Code of Practice or the Australian Prudential Regulation Authority (APRA) regulations, is essential for effective credit risk management in the banking industry.

In conclusion, banks need to effectively manage credit risks to minimize losses, protect customer trust, and ensure compliance with relevant regulations. By developing comprehensive credit risk management policies, conducting frequent credit risk assessments, implementing robust credit risk mitigation mechanisms, routinely training staff, developing comprehensive credit risk response plans, conducting credit risk reviews, and ensuring that rules and guidelines are followed, risk professionals can help their organizations manage credit risks and maintain customer trust. By prioritizing credit risk management, banks may differentiate themselves from the competition and demonstrate dedication to safeguard the security and privacy of clients.

CONCLUSION

As previously mentioned, credit management is essential to every organization. The role's significance within a company's management structure keeps growing. A growing number of businesses are evaluating value by contrasting the risk of non-payment (client insolvency) with higher sales volume; this is a difficult balance that can only be achieved with an effective credit

management system. Since then, technology has advanced significantly, but these legacy solutions often use antiquated methods of data management, such as labor-intensive manual procedures for updating data, manual coordination with internal and external business teams, and expensive IT support expenses for deployment and routine patch and update installations. Using a cloud-based technology platform, creative new technological solutions expand the usage of credit risk management throughout the company. Reliability, mobility, and scalability are all advantages of cloud-based solutions, which can save money on IT, data infrastructure, and upgrades. These technologies make it possible to implement dynamic credit management processes and process enhancements, which minimize risk while simultaneously enhancing reaction times, cutting expenses, and enhancing customer care.

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