



The Role of Electronic Accounting Information System in Measuring Credit Risk in National Bank of Oman.

Marwa Hamood Rashid AL-Masharfi¹, Dr. Maria Teresa Matriano²

Middle East College, Oman

Email: ¹18f18144@mec.edu.om, ²maria@mec.edu.om

Abstract

Purpose: The aims of this research was to identify in the current study, the relationship between Electronic Accounting Information System and Measuring Credit Risk in the National Bank of Oman is briefly summarized. Because there is always a link between AIS (Accounting Information System) and risk measurement in commercial banking.

Design/methodology/approach: The descriptive analytics research method is used in this study. A questionnaire and an interview were used to gather primary data. A random sampling strategy was used to pick samples. 87 samples were taken from people connected to and working in the National Bank of Oman's Finance and Accounts Department. After the data was obtained, Microsoft Excel was used to conduct the analysis.

Findings: Non-performing loans were much higher than typical at the National Bank of Oman when the economy entered the recession (Al Maamari, 2020). It is yet too early to tell whether the pandemic has had an impact on the ratio of non-performing loans (stage 3 loans), which grew slightly to 5.2% at the end of the first half of 2020 (from 4.9% of 2019).

Research limitations/implications: Based on the results, it was recommended that the National Bank of Oman focus on electronic accounting information system in order to reduce credit risk. This is to be more efficient to work by knowing customer information and focusing on employee morale.

Social Implications: This research will add collective knowledge about how electronic accounting information system affect credit risk and can influence decision-makers, rules and regulations.

Originality / Value: No research was found regarding electronic accounting information in measuring the credit risk of a bank in Oman. This research was an attempt to address the situation and shed light.

Keywords: Electronic Accounting Information System, Measuring Credit Risk, Credit Risk, AIS

Introduction

The research aims at the role of electronic accounting information system in measuring credit risk in the National Bank of Oman. In the National Bank of Oman, the extent of the credit and liquidity risks faced by the banking industry, as well as the stability of the banking system, are all discussed in more detail. Several findings emerged from the research, the most significant of which are as follows: While the National Bank of Oman was not adversely affected by the credit risk, certain of the bank's foundations were constrained as a result of the situation (Khudir, 2016). This chapter will serve as an introduction to the research project. active branches, ten of which were specialized in Islamic banking products and services.

Previously, there were many events in the financial sector around the world during the last decade of the twentieth century. Banking, in particular, experienced remarkable technical developments during this time period. Unprecedented, there has been the invention of new financial instruments, as well as the opening of financial markets to each other in different nations. Although there have been some beneficial improvements, there have also been crises in the financial system and still exist, both in emerging and established nations (Thimmaraya & Venkateshwarlu, 2018).

This had a detrimental effect on the economy of the countries concerned. It may have noticed that banking problems were a common denominator in the majority of countries that faced financial and economic crises during this period ([Thimmaraya & Venkateshwarlu, 2018](#)). The growth in banking risks, especially those arising from the credit, according to experts, is responsible for this development.

For example, the financial crisis of 2008, which led to the failure of many financial institutions, including the American Bear Stearns Bank of the Lehman Brothers, is an excellent example: The largest financial institution in the United States specializing in real estate financing ([Thimmaraya & Venkateshwarlu, 2018](#)). Many experts and researchers have emphasized that getting involved in the problem of mortgage obligations, which resulted from ignoring basic risk management principles such as caution and concern for the availability of creditworthiness as a prerequisite for lending, is the main reason for the current situation.

[Thimmaraya and Venkateshwarlu \(2018\)](#) stated that the criteria for credit quality, as well as the normal conditions that are taken into account when issuing credit, are rejected. As a result, it was necessary to re-examine all the regulations governing the credit-blocking activities of financial institutions. It is no longer easy to make a decision to refuse credit to any customer without a thorough investigation and assessment of the risks that the bank is willing to accept first. Before granting new credit, the bank has to consider a variety of factors, including measures of credit risk on loans to customers.

[Thimmaraya and Venkateshwarlu \(2018\)](#) stated that banks rely on their electronic accounting information system to provide useful information for credit risk assessment. This system is one of the most important controls in place because of its qualities, which are determined by the fast rate of execution of the calculation. Ensure that all relevant information is provided and that various pre-programmed paper tests are carried out to ensure that system requirements are met. The outputs are more accurate due to measures such as credit limit monitoring and ensuring that the data is processed from an accounting point of view in line with International Financial Reporting Standards (IFRS).

The National Bank of Oman plays an important role in the business activities that involve the issuance of credit in the Sultanate ([Khudir, 2016](#)). The importance of examining the reality of electronic accounting information system stems from the fact that they now serve as a basis for recording and processing a wide range of administrative and production activities and processes ([Khudir, 2016](#)). As a result, it is necessary to emphasize the importance of these system in order to ensure the quality of the accounting information they produce ([Khudir, 2016](#)). It is used to assess the risks associated with investments in these financial institutions, which is especially important given the current economic climate.

This research aims to determine the impact of electronic accounting information system in assessing the credit risk of the National Bank of Oman. As a result of studying the analysis of previous studies, in addition to the civil research in the company through the making of a questionnaire, it is possible to determine the views of the credit department of this bank on the factors under study.

Research Questions

1. What are electronic accounting information system constructs?
2. What are the credit risks for electronic accounting information system of the National Bank of Oman?
3. What is a measurement of credit risk in the National Bank of Oman?
4. What are the recommendations to enhance the assessment of credit risk in the National Bank of Oman?

Research Objectives

1. To identify the electronic accounting information system constructs.
2. To identify credit risks for electronic accounting information system of the National Bank of Oman.
3. To analyses the measurement of credit risk in the National Bank of Oman.
4. To recommend policy proposals to enhance the credit risk assessment of the National Bank of Oman.

Statement of the Problem

A number of previous studies have shown the value of using electronic accounting information system when making investment choices in financial institutions ([Kiviat, 2019](#)). Top management places a high value on the improvement of the quality of these choices. The research also showed that businesses should be particularly interested in discovering information system that might help them improve their decision-making processes.

The inability of those banks' divisions to implement electronic accounting information system, as well as using and exploiting them in order to serve and support their own operations in making investment choices,

puts them at risk of collapse ([Kiviat, 2019](#)).

Generally speaking, and decisions to give credit at the National Bank of Oman in particular, the vast majority of failures in the area of credit are the result of difficulties in estimating credit risk, according to the bank ([Kiviat, 2019](#)). This illustrates the current condition that Omani banks are in, which causes them to be more cautious when extending credit to customers. As a result, by making use of the peculiarities of electronic accounting information system in Omani banks, the researcher adds to the possibilities of enhancing the evaluation of credit risk for credit operations issued to consumers. Becoming important to know the mindset of employees and therefore the study was undertaken.

Review of Literature

Electronic Accounting Information System

According to [Shao et.al.](#) (2021) claimed a growing interest in information system can be attributed to the fact that they are a strategic resource for most projects developed in the modern information society; they provide the support necessary for achieving competitive advantages that contribute to promoting the site as well as ensuring its long-term survival and success; they are becoming increasingly complex. Increased levels of project operations performance and productivity, as well as increased customer satisfaction and improved staff morale, are required to attain this goal, which cannot be accomplished by accident ([Shao et.al.](#), 2021). Whenever a malfunction or problem develops in the already established information system, the facility may be presented with the chance to employ contemporary and sophisticated technical approaches that will allow it to give the finest information possible while also increasing its competitiveness ([Shao et.al.](#), 2021).

In accordance with the vast majority of writers and information system specialists, accounting information system go through a life cycle that begins with the stage of analyzing the system before subjecting it to an organized practical study in order to improve its ability to achieve the desired goals ([Shao et.al.](#), 2021). The stages of developing all of the intricacies of a new system, followed by the stages of implementing and assessing the system to ensure that it is functioning properly and that it is capable of achieving its intended goals are all included. In most cases, they are concerned with either the design of a new consolidated accounting system or the design of the accounting subsystem when a new system is implemented or when an existing system is extended in operation ([Shao et.al.](#), 2021)

Credit Risks for Electronic Accounting Information System

The banking industry is one of the most important economic industries in the world, and it plays a major role and exerts significant influence on the growth and management of the economy on both a national and international scale ([Temirov, 2019](#)). As a result, it ranks second only to bank credit since one of the most essential banking operations in this business. However, it is also one of the most sensitive instruments available, as its influence is not limited to a bank's financial strength. Instead, it has an impact on the national economy as a whole, thus people in charge of it and those in charge of making credit choices must be as accurate as possible when making credit judgments ([Temirov, 2019](#)). Because of this, bank credit is an extremely significant economic activity that has entangled consequences on the national economies of all countries, and the success of the financial sector is dependent on it. It is necessary for banks to judge a borrower's financial appropriateness after they have completed their primary business activities, albeit this is not always the case because the suitability of a specific borrower may deteriorate over time for a variety of causes and conditions ([Temirov, 2019](#)).

The Measurement of Credit Risk in The National Bank of Oman.

Non-performing loans were much higher than typical at the National Bank of Oman when the economy entered the recession ([Al Maamari, 2020](#)). It is yet too early to tell whether the pandemic has had an impact on the ratio of non-performing loans (stage 3 loans), which grew slightly to 5.2% at the end of the first half of 2020 (from 4.9% of 2019). As a result, it anticipates seeing deterioration throughout the loan book and have reduced our Asset Quality Score to 'b+', given our relatively poor starting point. However, the full amount of the deterioration may not be apparent for some time as the borrower assistance programs are phased out ([Al Maamari, 2020](#)).

Procedure for Loan Review the Bank has created a distinct Loan Review System division with regulations to ensure that the loan portfolio's quality is continually assessed. The department assesses loan organizational effectiveness, credit rating procedure integrity, public and private nonperforming loans, portfolio quality, and other factors.

[Al Maamari](#), (2020) claimed the profitability of NBO was generally constant prior to the coronavirus epidemic, thanks to one of the best net interest margins in the industry and very modest loan impairment costs, which helped to keep the company's rating force rating stable. Because the bank increased its ECL to 0.6% of annual loans (from 0.3% in 2019), in expectation of a severe economic crisis, operating profit/RWA decreased to 1.1 % in the first half of 2020 from 1.7% in 2019. Despite the rise, this percentage remained towards the bottom of the peer group and was at the same level as during a milder year in recent history (2017). Ultimately, the degree of the economic crisis, the speed with which the economy recovers, as well as the efficiency of borrower assistance programs, will determine the eventual impact on profitability; nonetheless, this signals the possibility of larger provisions. With a negative trend on the bank's earnings score and profitability "bb-,"it was able to turn around the bank's previously lower earnings projection.

General stability may be found in the funding profile of the National Bank of Oman. Due to reliance on deposits from government-linked institutions, deposit concentration is lower than that of peers, showing a better retail banking franchise. However, it remains high relative to peers ([Al Maamari](#), 2020). The National Bank of Oman is vulnerable to liquidity limitations if the government withdraws deposits from the banking system, a risk that has worsened as a result of the country's dismal public budget situation. The company's liquidity is strong, with a liquidity coverage ratio of 199% at the end of the first half of 2020 ([Al Maamari](#), 2020).

Research Methodology

This research follows a descriptive analytics research method. The primary data was collected using a questionnaire and interview. Samples were selected based on a random sampling technique. 87 samples were collected from those who were related to and involved in the Finance and Accounts Department of the National Bank of Oman. The data was collected starting from April all the way to June. The data was collected using an online tool. Once the data was collected, the analysis was done using Microsoft Excel.

Findings

Descriptive Statistics

Question 4: Using electronic accounting information contribute to increasing planning operation effectiveness at the bank.

Table 1 Q4 Descriptive Statistics

Q4	
Mean	3.034483
Standard Error	0.158892
Median	3
Mode	5
Standard Deviation	1.48205
Sample Variance	2.196472
Kurtosis	-1.41791
Skewness	0.049194
Range	4
Minimum	1
Maximum	5
Sum	264
Count	87

The data-centered average of the use of electronic accounting information in boosting the efficacy of planning procedures in the bank is about 3 in the following table 5. This suggests that the majority of ordinary employees

will respond with a neutral response to this question. Furthermore, the maximum frequency with the highest frequency is 5, because the goal here is that most workers agree on the relevance of accounting information for the bank's planning performance. With a low standard deviation, the data points are more likely to be near to the data set's mean. The technological advancement of information technology, the business facilities, especially the banks which are the subject of this study, have strategic plans in place because the use of information technology in the banking industry is considered as a competitive advantage which results in a higher rate of return on investment. As a result, banks must keep up with the rate of change. The process of system analysis is one of the most important stages of creating accounting information systems, and it is one of the most difficult stages to complete ([Abdelraheem et.al., 2021](#)).

Question 5: Electronic accounting information is of great importance in improving the level of risk solving.

Table 2 Q5 Descriptive Statistics

Q5	
Mean	2.988506
Standard Error	0.15724
Median	3
Mode	1
Standard Deviation	1.466639
Sample Variance	2.151029
Kurtosis	-1.37998
Skewness	0.020293
Range	4
Minimum	1
Maximum	5
Sum	260
Count	87

According to Table 6 the range shows that almost everyone agrees that electronic accounting information is of great importance in improving the level of risk resolution with a rating of 4. From about 87 respondents to this question, all agree on the importance of accounting information in reducing risks. Thus, the standard deviation is approximately 1.466. It means that there is a relationship between the interrelationship of accounting information and the strength of its presence in solving the risks related to accounting. Which will benefit the system analysis process consists of a series of processes and procedures that must be followed in order to test the current system or one of its branches and identify the source of the problem. As a result, the efficiency or effectiveness of the system is reduced or insufficient. In general, this step begins with the appearance of defects or weaknesses in the system ([Abdelraheem et.al., 2021](#)).

Histogram

Question 6: Electronic accounting information system work according to the financial system of banks.

Table 3 Q6 Histogram -

Bin	Frequency	Cumulative %
1	19	21.84%
2	17	41.38%
3	16	59.77%
4	16	78.16%
5	19	100.00%
More	0	100.00%

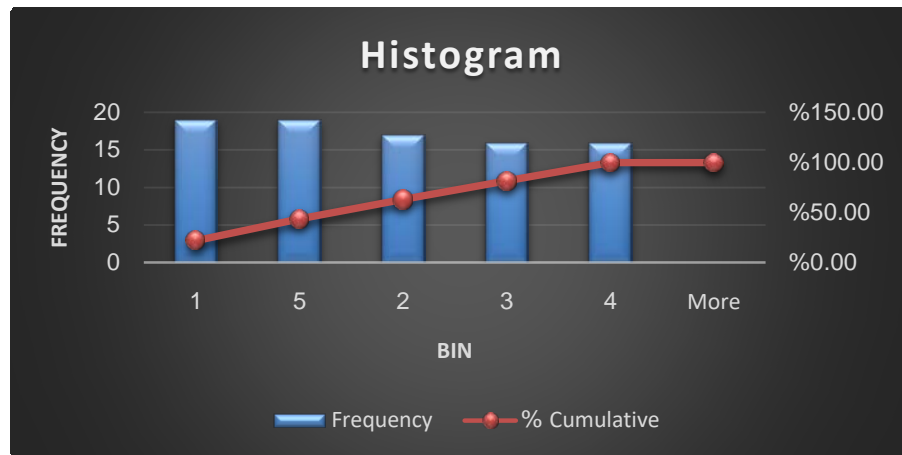


Figure 4 Q6 Histogram

Table 7 and figure 4 above show that electronic accounting information system work according to the financial system of banks. The respondents agreed, with an estimate of 100% that they strongly agreed. And that shows Frequency that 19 strongly agree. Strongly disagree, Frequency is 19 but Cumulative is 21.84%. It is considered that there is neutrality in that the electronic accounting information system operate according to a banking system. Any business data that has a financial impact on the bank must be included in an electronic accounting information system. It is through the different input screens for different types of system users and data entry, as well as different output formats to meet the needs of different users and different types of information, required by electronic accounting information system (Shao et.al., 2021). All financial information relevant to the business operations of the enterprise is included in the electronic accounting information system.

T-test

Question 7: Does the financial board of directors adopt a credit risk strategy?

Question 8: Do electronic accounting information system measure credit risk?

Table 4 t-Test:Q7,8

t-Test: Two-Sample Assuming Unequal Variances		
	Q7	Q8
Mean	3.022989	3.091954
Variance	1.85993	1.782144
Observations	87	87
Hypothesized Mean Difference	0	
df	172	
t Stat	-0.33707	
P(T<=t) one-tail	0.368238	
t Critical one-tail	1.653761	
P(T<=t) two-tail	0.736477	
t Critical two-tail	1.973852	

In the above table 8, it is shown that Although the group mean for question 8 is somewhat higher than the group mean for question 7. Assuming the null hypothesis that the mean is the same in both sample groups and testing the hypothesis with a t-test to see whether it is plausible. $P(T=t)$ has a one-tail probability of 0.36. As a result, the null hypothesis is not ruled out. This is done in order to create strategies and assess credit risk. Investment methods to measure exposure to potential credit risk are conceptually close to Value at risk techniques for assessing financial risk, with the added complexity of recognizing the partner for each payment and the compensating prestige (He et.al., 2019). The information system requirements will be comparable to those for the Value at risk estimate.

Correlation

Question 10: Is there credit risk in the National Bank of Oman?

Question 11: Does Oman International Bank reduce credit risk?

Table 5 Correlation Q10,11

	<i>Q10</i>	<i>Q11</i>
Q10	1	
Q11	-0.05483	1

Correlation analysis determines the strength of a relationship between two variables employed in study. Based on the numeric values measured, the correlation found might be positive or negative. A positive correlation means the variables examined be used in the same direction, whereas a negative correlation means they go in opposing directions. A negative correlation is shown in the above table, which suggests that the two assets are going in opposing directions. -0.05483 is the correlation. The two questions are negatively connected, indicating that the bank undervalues the likelihood of credit risk. This depends on the theory that there is a relationship between electronic accounting system and credit risk. To benefit from their applications in credit risk control, many banks adopt computerized accounting information systems. This system have become a need in the modern era, especially as a result of the global progress in the field of accounting information systems, which has led to new work patterns as a result of global developments and changes ([Echobu & Philomena, 2019](#)).

Regression Analysis

Question 9: Does credit risk affect accounting information system?

Question 12: Does credit risk affect the National Bank of Oman?

Table 6 Summary Output Q9,12

SUMMARY OUTPUT	
Regression Statistics	
Multiple R	0.004877
R Square	2.38E-05
Adjusted R Square	-0.01188
Standard Error	1.495268
Observations	86

Table 7 ANOVA Q9,12

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.004468	0.004468	0.001998	0.964451
Residual	84	187.8095	2.235827		
Total	85	187.814			

Table 8 Regression Analysis Q9,12

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	3.032462	0.353246	8.584561	4.07E-13	2.329993	3.73493	2.329993	3.73493
3	0.005056	0.113096	0.044702	0.964451	-0.21985	0.229958	-0.21985	0.229958

Regression analysis is a reliable way of determining which factors have an effect on a certain issue. Regression analysis helps to accurately establish which elements are most important, which factors may be ignored, and how these factors interact. Credit risk affects accounting information system as well as the National Bank of Oman. The value of R Square is 2.38E-05, which is convenient. The closer the regression line (reading) gets to 1, the better it fits the data. F has a significance of 0.964451. It is preferable to discontinue using this collection of independent variables if the Significance F is more than 0.05. So to avoid credit risk the bank procedure for loan review the Bank has created a distinct Loan Review System division with regulations to ensure that the loan portfolio's quality is continually assessed. The department assesses loan organizational effectiveness, credit rating procedure integrity, public and private nonperforming loans, portfolio quality, and other factors ([Al Maamari, 2020](#)).

ANOVA

Question 10: Is there credit risk in the National Bank of Oman?

Question 11: Does Oman International Bank reduces credit risk?

Table 9 Summary ANOVA Q10,11

SUMMARY				
Groups	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Column 1	87	242	2.781609	1.777332
Column 2	87	266	3.057471	2.008287

Table 10 ANOVA Q10,11

ANOVA						
Source of Variation	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	3.310345	1	3.310345	1.748906	0.18777	3.896092
Within Groups	325.5632	172	1.892809			
Total	328.8736	173				

The analysis of variance (ANOVA) is a statistical method that splits a data set's total observed variation into two parts: systematic variables and random components. Random factors have no statistical impact on the supplied data set, but systematic influences do. In a regression research, analysts utilize the ANOVA test to measure the influence of the independent variables on the dependent variable. The data summary emphasizes the significance of research theories as well as employee answers. As a result of the business's challenges and losses. The majority of employees believed that credit risk had an impact on bank and accounting data. These figures show how the ideas investigated in the study converged. It shows that risk containment is further strengthened by the use of conventional data backup techniques and the availability of a hot backup disaster recovery location that is tested on a regular basis ([Al Maamari, 2020](#)). The Fundamentals of Financial Market Infrastructure (PFMI) are the basic risk management requirements followed by the Central Bank of Oman. The International Monetary Fund (IMF) evaluates payment system from time to time as part of the Financial Sector Evaluation Program or the International Monetary Fund assessment program supported by the Gulf States, which covers all banks, including the National Bank of Oman ([Al Maamari, 2020](#)).

Discussion

The study's most important findings may be stated as follows:

The study's findings revealed that the credit risk detection component of electronic accounting information system has a statistically significant impact ([Qudah, 2021](#)). The electronic accounting information system was discovered to contain access and registration rights for the accounting staff. For loans, that control is applied to the inputs of the bank's computerized accounting information system, which, in addition to producing transparent information, is developed in accordance with general supervision and regulatory oversight ([Qudah, 2021](#)). The negative correlation is shown in table (9), indicating that the two origins go in opposite directions. -0.05483 is the correlation. This indicates that the bank reduces the possibility of credit risk. This is based on the theory that there is a relationship between electronic accounting system and credit risk. By establishing and developing a system that connects the company's accounting system to its website on the Internet, as well as offering realistic rules and processes that contribute to the accounting system's outputs being secure, reliable, and assured, with e-commerce. The study's findings revealed that the features of electronic accounting information system had a statistically significant impact on credit risk measurement at the National Bank of Oman ([Qudah, 2021](#)). This finding is in line with the findings of research that found that controls have a substantial influence on system documentation and development in terms of boosting the accuracy of accounting data ([Qudah, 2021](#)). The proper efficiency characteristic to assess the bank's credit risk is statistically significant, as it was discovered that the electronic accounting information system assists the bank's management by giving quick information about clients who are late in repaying loans.

This system also serves to create an immediate modification to the burdens of loans, which is similar to the results that showed that the computerized accounting information system in the National Bank of Oman have a degree of high quality, speed, medium level of flexibility, and ease ([Al Maamari, 2020](#)).

According to the findings, the bank's electronic accounting information system monitors and sends any revisions to the denominator and numerator in the expected return on total loans to the credit and risk management department ([Al Maamari, 2020](#)). Table (7) and figure (4) above showed that electronic accounting information system work according to the financial system of banks. The respondents agreed, with an estimate of 100% that they strongly agreed. Compatibility of current guarantees with facilities provided to calculate the amount of provision, as well as data on the validity of current guarantees with facilities granted to determine the number of regulations, as well as the feasibility of their distribution. The portfolio contains facilities with an in-kind guarantee, with the value of the guarantee determined in the bank by the client, and this result is compatible with this outcome. The importance of accounting computer hardware and software in protecting property by implementing adequate security and protection processes and controls was highlighted in this study ([Al Maamari, 2020](#)).

According to the interview, the authority to deal with approved exceptions to the Loan, Control and Monitoring Program has been delegated. Credit risk management is coordinated with business divisions and implemented in accordance with established procedures. Problem detection policies, early warning lists, watch lists, rating criteria and risk assessment adjustments are part of the risk management framework.

Conclusion

Finally, the function of electronic accounting information system in monitoring credit risk at the National Bank of Oman is the focus of this research. Executing the process of reviewing credit risks in the electronic accounting information system on a regular basis, paying attention to the impact of these risks on the bank's credit process and the necessity to foresee and address them before they arise.

The Electronic Accounting Information System Constructs.

The first objective proves the importance of having an electronic accounting information system at the end of the research because, in the event of a malfunction or a problem in the existing information system, the facility may be given the opportunity to use modern and advanced technical approaches that allow it to provide the best possible information while increasing its competitiveness ([Shao et. al., 2021](#)). That the use of information technology in the banking business is regarded as a competitive advantage that results in a greater rate of return on investment, strategic plans are in place, especially for the banks that are the topic of this study. As a result, banks must adapt to the changing environment. One of the most crucial steps of developing electronic accounting information system is system analysis, which is also one of the hardest to complete ([Abdelraheem et.al., 2021](#)).

The system analysis method entails a number of steps that must be followed in order to test the existing system or one of its branches and pinpoint the source of the problem. In the end, the system's efficiency or efficacy is lowered or inadequate.

System infrastructure is available as needed. Consideration is given to the human resources represented by these two aspects an extremely significant component of the system infrastructure at all levels, particularly those pertaining to personnel ([Al-Zoubi](#), 2017).

Credit Risks for Electronic Accounting Information Systems.

The relevance of credit risk measurement stems from the fact that bank credit is a vital economic activity with far-reaching implications for all countries' economies, and the financial sector's success is dependent on it. Banks must assess a borrower's financial fitness once they have completed their core business activities, albeit, this is not always the case because a borrower's suitability may worsen over time for a variety of causes and conditions ([Temirov](#), 2019); that whenever a customer fails to meet his commitments to the bank on time, the bank may suffer financial losses, which can hurt the bank's income and capital. Because credit risk is linked to the potential that the borrower or a third party would fail to satisfy their commitments at the periods set by the bank, the researcher believes that the bank should undertake an accurate and timely assessment of credit risk to reduce the occurrence of this problem ([Echobu & Philomena](#), 2019). Because credit risk is linked to the qualities of accuracy and quickness.

Analyze The Measurement of Credit Risk in The National Bank of Oman.

Since the economy entered a recession, the National Bank of Oman's non-performing loans were substantially greater than usual ([Al-Maamari](#), 2020). This is because, after an agreement on the amount of money is reached, the bank places a set amount of money at the customer's disposal for use within a specified period of time ([He et.al.](#), 2019). Furthermore, the bank will prolong the loan under specified terms in exchange for a big return agreed upon by both parties and assurances that the bank will be able to collect its loan if the consumer fails to repay. Credit risk can be measured in a variety of ways; current market practice can be classified into two categories: transaction methods and portfolio approaches. For small transaction techniques, requirements for electronic accounting information systems; The multiplier of each transaction should be looked up in the multipliers tables that were previously produced to determine potential exposure. The sum of existing and potential counterparty credit risk for each counterparty transaction in the company's portfolio is the total counterparty credit risk. Portfolio approaches take into consideration the correlations between the possible exposures of various transactions with the counterparty, as well as netting arrangements, to compute the potential exposure of all the company's transactions with the counterparty at the same time.

The additional problem of defining the counterparties for each transaction and the offsetting status, portfolio approaches for assessing exposure to possible credit risk are conceptually similar to Value at risk methods for evaluating market risk. The information system needs will be comparable to those for the Value at risk calculation.

Recommend Policy Proposals to Enhance the Credit Risk Assessment of the National Bank of Oman.

In conclusion, our analysis suggests that the bank's risk management framework be strengthened. This strengthening focuses on including a credit risk control and internal control function into the structure in order to monitor risk management implementation under the second line of defense represented by accountability. This is accomplished by bolstering computerized accounting data systems. This job is only focused on risk management and internal controls, and it is in-charge of coordinating risk management and control management procedures, as well as their continual improvement, including the risk management framework, rules, and guidelines.

The Risk Management Policy and the Risk Appetite Statement were both reviewed in order to provide a more methodical approach to risk identification, assessment, and management. Bank concentrate on their basic ideas, and a new risk management guide will contain all of the intricacies of the risk management approach.

The study focuses on addressing and attempting to prevent the occurrence of these dangers. In order to acquire acceptance of the ideas put up in the study, the preceding literature relating to the objectives, as well as the analysis of the questionnaire and the interview, were used. As a result, electronic accounting information system have a favorable impact on the National Bank of Oman's ability to measure credit risk in accordance with the Central Bank's proposed rules.

Suggestions

Emphasizing the importance of electronic accounting information system for the National Bank of Oman because it affects the improvement of credit risk measurement through the following mechanisms:

The importance of the electronic accounting information system is highlighted because it deals with debts as soon as they become due. That using an electronic accounting information system, the bank checks the borrower's ability to repay the loan in accordance with the agreed terms.

The bank must use an electronic accounting information system to collect information on the impact of delaying the payment of the assignment. This is to take advantage of the electronic accounting information system because it provides real-time data that complies with industry standards to manage risk and enforcement costs.

Which makes special attention to the advantages of using an electronic accounting data system to deal with doubtful debts in accordance with the administration's supply policy.

In its quest to increase the degree of credit risk measurement, the National Bank of Oman continues to adhere to the advantage of understanding risk through electronic accounting information system, particularly in relation to the following:

Comply with the authorized capital adequacy guidelines issued by the National Bank of Oman Committee, as well as the rules of the Central Bank of Oman. By defining the tasks and duties of loan officers. In addition to the responsibility of processing data using the electronic accounting information system in line with an agreement with the Central Bank of Oman. It must be done to focus on data processing through the electronic accounting information system in accordance with the approved specifications. That the accounting practices be in line with the requirements of global financial reporting in the Bank. By examining the efficacy of the bank's internal controls and approved procedures, the bank should enhance and strengthen the loan review mechanism team, ensuring that all shareholders follow strong and solid practices. In areas of concern relating to the credit approval process and analysis procedures within the Bank, the loan review mechanism also undertakes independent specialist evaluations, investigations, and assessments as required by management. The Head of Risk Management, the Risk Management Committee, and, if necessary, the Board Risk Committee receive the major outcomes report.

Using an electronic accounting information system to reduce its risk of not granting credit. By improving the ability of risk management to achieve objectives by tightening control processes in accordance with the Omani international standards of control. This helps control the outputs of the bank's electronic accounting information system. In addition to improving credit awarding techniques through designing IT ethics. The focus should be on conducting investigations into the integrity of accounting data in a technology environment. This is because of the considerations affecting the approval of credit in terms of financial and economic factors and their direct behavioral impact on the bank.

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