

# **RISK INTELLIGENCE: HOW LESSONS FROM FOLKTALES/FABLES CONTRIBUTE TO THE IMPLEMENTATION OF RISK MANAGEMENT IN BANKS**

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## **Abstract**

The objective of this article is to outline credit risk in banks and how fables/folktales can provide with life lessons to implement risk management systems that should act as a stop-gate measure. Banking institutions need to show how proactively managing risk becomes a cornerstone to explore opportunities, rather than simply avoiding dynamites. Risk Intelligence gives companies the confidence to harness risk to explore new opportunities. Lessons were provided from folktales/fables from the animal kingdom. The article adopted a literature review methodology and the results were that, for a business to be successful the medicine does not lie in the policies but the therapy lies in the spirit of oneness in the banks from top management down to the shop floor employee in the branch. By working together the banks can afford to curb credit risks.

**Keywords:** Risk Intelligence, Risk Management, Folktales, Fables

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## **1. Introduction**

A leopard started a hare from his lair/habitat, but after a long run, the leopard gave up the chase. A baboon who was watching the race when he saw the leopard stop, he mocked him, saying “The little one is the best runner of the two on your competition.” The leopard replied, “You are foolish, that’s why your eyes are in the cave, you cannot even see the difference between the two of us: I was only running for a dinner, but the hare is running for dear life.” This fable explains the difference between objectives of two entities. The entity whose operation is only for dinner is not worried about risk management and the other one whose objective is for continuity and sustainability is worried about management of risk. For competitive advantage a company must take risk intelligence as an opportunity for competitiveness. Today’s business landscape is fraught with risk. Economic, technology and market conditions affect business on a daily basis. The constantly changing “risk landscape” is a discussion point in headlines, industry forums, media outlets and board rooms – the disappearing perimeter to defend, the hackers, thieves and spies, the crushing onslaught of regulatory changes (Roos, Edvinsson, & Roos, 1998).

While these challenges obviously pose risks to organizations, in reality, each change represents an opportunity - an opportunity for growth, an opportunity for innovation, an opportunity to take the organization to the next level. Because necessity is the mother of invention. All companies have risk,

regardless of the business model, industry, size and geographic footprint. Companies must determine the amount of risk they are willing to accept while doing business. Given the complexity of most organizations today, companies must focus their efforts to develop more agile, business-driven strategies and plans to identify, access and manage risk. Risk can either be a barrier to success or an enabler of your business (Apgar, 2006). Risk Intelligence gives companies the confidence to harness risk to explore new opportunities. Through Risk Intelligence, organizations can switch from navigating the Risk Landscape to exploring the Opportunity Landscape (Caldwell, 2008). The objective of this article is outline credit risk in banks and how fables/folktales can provide with life lessons to implement risk management systems that should act as a stop-gate measure.

## **2 Methodology: Literature Review**

This section provides an overview of the approach and methodology used to identify the relevant literature from the peer-reviewed research literature.

### **2.1 Framework for analyzing literature review: Within-Study literature analysis**

Analysis of literature takes one of two forms: within-study literature analysis or a between-study literature analysis (Tashakkori, & Teddlie, 2010). Both types of analyses are essential and should be conducted in

all literature reviews, except in the very rare occasion when the literature review involves a purposive selection of one work (for example single article, or book chapter), such that this work is not compared to any other work. A within-study literature analysis is going to be used in this article and involves analyzing the contents of a specific work. In contrast, a between-study literature analyses involves comparing and contrasting information from two or more literature sources. (Tashakkori, & Teddlie, 2010)

### 3 Literature Review

#### 3.1 Risk intelligence

According to David Apgar, the term denotes “an individual’s or an organization’s ability to weigh risks effectively,” and involves “classifying, characterizing, calculating threats; perceiving relationships; learning quickly; storing, retrieving, and acting upon relevant information; communicating effectively; and adjusting to new circumstances” (Apgar 2006). But according to Frederick Funston, coauthor of *Surviving and Thriving in Uncertainty: Creating the Risk Intelligent Enterprise* (Funston and Wagner 2010), risk intelligence is “the ability to effectively distinguish between two types of risks: the risks that must be avoided to survive by preventing loss or harm; and, the risks that must be taken to thrive by gaining competitive advantage,” and involves the ability to “translate these insights into superior judgment and practical action to improve resilience to adversity and improve agility to seize opportunity” (Evans, 2012).

#### 3.2 Risk Management

Risk Management is a discipline at the core of every institution and encompasses all the activities that affect its risk profile. Risk management as commonly perceived does not mean minimizing risk; rather the goal of risk management is to optimize risk-reward trade-off. This can be achieved through putting in place an effective risk management framework which can adequately capture and manage all risks an institution is exposed to (Saunders, Cornett, & McGraw, 2006)

##### 3.2.1 Taxonomical processes in risk intelligence

**3.2.1.1 Risk Identification:** In order to manage risks, an institution must identify existing risks or risks that may arise from both existing and new business initiatives for example; risks inherent in lending activity include credit, liquidity, interest rate and operational risks. Risk identification should be a continuing process, and should occur at both the transaction and portfolio level (Tchankova, 2002).

**3.2.1.2. Risk Measurement:** Once risks have been identified, they should be measured in order to determine their impact on the institution’s profitability and capital. This can be done using various techniques ranging from simple to sophisticated models. Accurate and timely measurement of risk is essential to effective risk management systems. An institution that does not have a risk measurement system has limited ability to control or monitor risk levels. An institution should periodically test to make sure that the measurement tools it uses are accurate. Good risk measurement systems assess the risks of both individual transactions and portfolios (Fowler, & Rorke, 1983)

**3.2.1.3 Risk Control:** After measuring risk, an institution should establish and communicate risk limits through policies, standards, and procedures that define responsibility and authority. Institutions may also apply various mitigating tools in minimizing exposure to various risks. Institutions should have a process to authorize exceptions or changes to risk limits when warranted (Summala, 1988)

**3.2.1.4 Risk Monitoring:** Institutions should put in place an effective management information system (MIS) to monitor risk levels and facilitate timely review of risk positions and exceptions. Monitoring reports should be frequent, timely, accurate, and informative and should be distributed to appropriate individuals to ensure action, when needed (Macey, & Miller, 1988)

#### 3.3. Risk categories

Kim, & Santomero, (1988) opines that there are six most common risks in banking for example credit, liquidity, market, operational, strategic and compliance risks. But for the purpose of this article only credit risk will be the central focus. Description of these risks is as follows:

**3.3.1 Credit Risk:** Credit risk arises from the potential that an obligor is either unwilling to perform on an obligation or its ability to perform such obligation is impaired resulting in economic loss to the institution.

**3.3.2 Liquidity Risk:** Liquidity risk is the potential for loss to an institution arising from either its inability to meet its obligations as they fall due or to fund increases in assets without incurring unacceptable cost or losses. Liquidity risk includes inability to manage unplanned decreases or changes in funding sources. Liquidity risk also arises from the failure to recognize or address changes in market conditions that affect the ability to liquidate assets quickly and with minimal loss in value.

**3.3.3. Market Risk:** Market risk is the risk of losses in on and off balance sheet positions as a result of adverse changes in market prices i.e. interest rates, foreign exchange rates, equity prices and commodity prices. Market risk exists in both trading and banking book. A trading book consists of positions in financial instruments and commodities held either with trading intent or in order to hedge other elements of the trading book.

**3.3.4 Operational Risk:** Operational risk is the current and prospective risk to earnings and capital arising from inadequate or failed internal processes, people and systems or from external events.

**3.3.5. Strategic Risk:** Strategic risk is the current and prospective impact on earnings, capital, reputation or good standing of an institution arising from poor business decisions, improper implementation of decisions or lack of response to industry, economic or technological changes. This risk is a function of the compatibility of an organization's strategic goals, the business strategies developed to achieve these goals, the resources deployed to meet these goals and the quality of implementation.

**3.3.6 Compliance Risk:** Compliance risk is the current or prospective risk to earnings, capital and reputation arising from violations or non-compliance with laws, rules, regulations, agreements, prescribed practices, or ethical standards, as well as from incorrect interpretation of relevant laws or regulations. Institutions are exposed to Compliance risk due to relations with a great number of stakeholders, for example regulators, customers, counter parties, as well as, tax authorities, local authorities and other authorized agencies.

## 4 Risk Intelligence as panacea in banks

### 4.1 Credit risk intelligence

Piramuthu,(1999) purports that credit risk arises from the potential that an obligor is either unwilling to perform on an obligation or its ability to perform such obligation is impaired resulting in economic loss to the institution. Credit risk arises from on balance sheet claims such as loans and overdrafts as well as off balance sheet commitments such as guarantees, letters of credit, and derivative instruments. For most institutions, loans are the largest and most obvious source of credit risk. In addition, an institution may also be exposed to credit risk when dealing with foreign exchange operations. This may arise when a domestic borrower involved in export business fails to compete in foreign markets due to domestic currency appreciation and thus resulting in inability to repay the domestic loan.

### 4.2 Common origins of credit problems in banks

- **Credit concentrations:** Bonti, Kalkbrenner, Lotz, & Stahl, (2006) opines that these are viewed as any exposure where the potential losses are large relative to the institution's capital, its total assets or, where adequate measures exist, the institution's overall risk level. This may be in the form of single borrowers or counterparties, a group of connected counterparties, and sectors or industries, such as trade, agriculture, etc or in the form of common or correlated factors e.g. the Asian crisis demonstrated how close linkages among emerging markets under stress situations and correlation between market and credit risks as well as between those risks and liquidity risk, can produce widespread losses.

- **Credit process issues:** Many credit problems reveal basic weaknesses in the credit granting and monitoring processes. While shortcomings in underwriting and management of credit exposures represent important sources of losses in institutions, many credit problems would have been avoided or mitigated by a strong internal credit process.

### 4.3 Risk Intelligence: Risk Measurement, Monitoring and Management

#### 4.3.1 Board and Senior management's supervision

The board of directors has a critical role to play in overseeing the credit-granting and credit risk management functions of the institution. It is the overall responsibility of institution's board to approve institution's credit risk strategy and significant policies relating to credit risk and its management which should be based on the institution's overall business strategy. To keep them current, the overall strategy as well as significant policies have to be reviewed by the board, at least annually (Daily, & Dalton, 1993).

#### 4.3.2 Responsibility of the Board

According to McGee, R. W. (2009) the Responsibility of the Board include and not limited to:

- describing the institution's overall risk tolerance in relation to credit risk;
- ensuring that institution's significant credit risk exposure is maintained at prudent levels and consistent with the available capital;
- ensuring that top management as well as individuals responsible for credit risk management possess sound expertise and knowledge to accomplish the risk management function;

- ensuring that appropriate plans and procedures for credit risk management are in place;
- ensuring that internal audit reviews the credit operations to assess whether or not the institution's policies and procedures are adequate and being adhered to
- reviewing exposures to insiders and their related parties, including policies related thereto;

#### 4.3.3. Senior management and all employees: *The folktale of two crabs*

One fine day two crabs came out from their home to take a stroll on the sand. "Child," said the mother, "you are walking ungracefully. You should accustom yourself to walking straight forward without twisting from side to side." "Pray, mother," said the young one, "do but set the example yourself, and I will follow you."

**Lesson:** When senior management does not walk the talk, all employees will do the same. This teaches that whatever policies are implemented for risk management, senior management should be bound first then all employees will toll the line.

#### 4.3.4. Risk intelligence Lessons from the fable of the four oxen and the lion

A Lion used to prowl about a field in which four oxen used to dwell. Many a time he tried to attack them, but whenever he came near they turned their tails to one another so that whichever way he approached them he was met by the horns of one of them. At last, however, they began quarreling among themselves, and each went off to pasture alone in a separate corner of the field. Then the Lion attacked them one by one and soon made an end of all four. United we stand, divided we fall.

**Lesson:** From this fable, we learn that every member of a group should contribute towards defending the policies so that risk is reduced. But when everyone does his/her own things in an organization, surely risk will cause the bank to loose. Management of institutions is responsible for implementing institution's credit risk management strategies and policies and ensuring that every person from top to the shop floor employee follows the procedures put in place to manage and control credit risk and the quality of credit portfolio in accordance with these policies. The responsibilities of the Senior Management with regard to credit risk management shall include:

- developing credit policies and credit administration procedures as a part of overall credit risk management framework for approval by the board;
- implementing credit risk management policies;
- ensuring the development and implementation of appropriate reporting system with

respect to the content, format, and frequency of information concerning the credit portfolio and the credit risk to permit the effective analysis and the sound and prudent management and control of existing and potential credit risk exposure;

- monitoring and controlling the nature and composition of the institution's portfolio;
- monitoring the quality of credit portfolio and ensuring that portfolio is soundly and conservatively valued, uncollectible exposure written off and probable losses adequately provided for
- establishing internal controls including putting in place clear lines of accountability and authority to ensure effective credit risk management process; and (g) developing lines of communications to ensure the timely dissemination of credit risk management policies, procedures and other credit risk management information to all individuals involved in the process.

## 5 Policies, Procedures and Limits

Policies are never followed when there is no incentive attached. In the bank you may share the labors of the great, but you will not share the rewards as senior management eat the spoil. The following fable help to explain this:

The Lion once went hunting with the Fox, the Jackal, and the Wolf. They hunted and they hunted till at last they surprised a Stag, and soon took its life. Then came the question how the spoil should be divided. "Quarter me this Stag," roared the Lion; so the other animals skinned it and cut it into four parts. Then the Lion took his stand in front of the carcass and pronounced judgment: "The first quarter is for me in my capacity as King of Beasts; the second is mine as arbiter; another share comes to me for my part in the chase; and as for the fourth quarter, well, as for that, I should like to see which of you will dare to lay a paw upon it." "Humph," grumbled the Fox as he walked away with his tail between his legs; but he spoke in a low growl.

**Lesson:** The issue here is that on the next hunt the fox, the jackal and the wolf will not put any effort knowing very well that there is no incentive. The same applies with credit risk management, when senior management is taking three quarters of the spoil and employees taking peanuts, definitely the policies will not be followed and every employee will growl like a fox. When everyone shares and agreeable to the vision them a credit strategy is workable.

### 5.1 Credit Strategy

The very first purpose of institution's credit strategy is to determine the risk appetite of the institution. Once it is determined the institution could develop a plan to optimize return while keeping credit risk

within predetermined limits. The institution's credit risk strategy thus should spell out:

- the institution's plan to grant credit based on various client segments and products, economic sectors, geographical location, currency and maturity;
- target market within each lending segment and level of diversification/concentration; and
- pricing strategy.

It is essential that institutions give due consideration to their target market while devising credit risk strategy. The credit procedures should aim to obtain an in depth understanding of the institution's clients, their credentials & their businesses in order to fully know their customers. The strategy should provide continuity in approach and take into account cyclic aspect of country's economy and the resulting shifts in composition and quality of overall credit portfolio. While the strategy would be reviewed periodically and amended, as deemed necessary, it should be viable in long term and through various economic cycles.

## **5.2. Policy communication**

To be effective, policies should be communicated in a timely fashion, and should be implemented through all levels of the institution by appropriate procedures. Any significant deviation/exception to these policies must be communicated to the senior management/board and corrective measures should be taken. At minimum credit policies should include:

- general areas of credit in which the institution is prepared to engage or is restricted from engaging such as type of credit facilities, type of collateral security, types of borrowers, geographical areas or economic sectors on which the institution may focus on;
- detailed and formalized credit evaluation/appraisal process, administration and documentation;
- credit approval authority at various hierarchy levels including authority for approving exceptions such as credit extension beyond prescribed limits;
- concentration limits on single counterparties and groups of connected counterparties, particular industries or economic sectors, geographical areas and specific products. Institutions should ensure that their own internal exposure limits comply with any prudential limits or restrictions
- authority for approval of allowance for probable losses and write-offs;
- credit pricing;
- roles and responsibilities of units/staff involved in origination and management of credit;
- guidelines on management of problem loans; and
- the credit policy should explicitly provide guidance for internal rating systems including definition of each risk grade; criteria to be fulfilled while assigning a particular grade, as well as the

circumstances under which deviations from criteria can take place.

In order to be effective, credit policies must be communicated throughout the institution, implemented through appropriate procedures, and periodically revised to take into account changing internal and external circumstances.

## **5.3. Right Procedures**

### **5.3.1 Credit Origination**

Establishing sound, well-defined credit-granting criteria is essential to approving credit in a safe and sound manner. The criteria should set out who is eligible for credit and for how much, what types of credit are available, and under what terms and conditions the credits should be granted. Institutions must receive sufficient information to enable a comprehensive assessment of the true risk profile of the borrower or counterparty. At minimum, the factors to be considered and documented in approving credits must include:

- the purpose of the credit and source of repayment;
- the integrity and reputation of the borrower or counterparty;
- the current risk profile (including the nature and aggregate amounts of risks) of the borrower or counterparty and its sensitivity to economic and market developments;
- the borrower's repayment history and current capacity to repay, based on historical financial trends and cash flow projections;
- a forward-looking analysis of the capacity to repay based on various scenarios;
- the legal capacity of the borrower or counterparty to assume the liability;
- for commercial credits, the borrower's business expertise and the status of the borrower's economic sector and its position within that sector;
- the proposed terms and conditions of the credit, including covenants designed to limit changes in the future risk profile of the borrower; and
- where applicable, the adequacy and enforceability of collateral or guarantees

Once credit-granting criteria have been established, it is essential for the institution to ensure that the information it receives is sufficient to make proper credit-granting decisions. This information may also serve as the basis for rating the credit under the institution's internal rating system. Institutions need to understand to whom they are granting credit. Therefore, prior to entering into any new credit relationship, an institution must become familiar with the borrower or counterparty and be confident that they are dealing with an individual or organization of sound repute and creditworthiness. In particular, strict policies must be in place to avoid

association with individuals involved in fraudulent activities and other crimes. This can be achieved through a number of ways, including asking for references from known parties, accessing credit reference bureau, and becoming familiar with individuals responsible for managing a company and checking their personal references and financial condition. However, an institution should not grant credit simply because the borrower or counterparty is familiar to them or is perceived to be highly reputable.

Institutions should assess the risk/return relationship in any credit as well as the overall profitability of the account relationship. Credits should be priced in such a way as to cover all of the embedded costs and compensate the institution for the risks incurred. In evaluating whether, and on what terms, to grant credit, institutions need to assess the risks against expected return, factoring in, to the greatest extent possible, price and non-price (e.g. collateral, restrictive covenants, etc.) terms. In evaluating risk, institutions should also assess likely downside scenarios and their possible impact on borrowers or counterparties. A common problem among institutions is the tendency not to price a credit or overall relationship properly and therefore not receive adequate compensation for the risks incurred. Institutions can utilize credit risk mitigants such as collateral, guarantees, and credit derivatives or on balance sheet netting to help mitigate risks inherent in individual credits. However, credit transactions should be entered into primarily on the strength of the borrower's repayment capacity. Credit risk mitigants should not be a substitute for a comprehensive assessment of the borrower or counterparty, nor can it compensate for insufficient information. It should be recognized that any credit enforcement actions (e.g. foreclosure proceedings) typically eliminate the profit margin on the transaction. In addition, institutions need to be mindful that the value of collateral may well be impaired by the same factors that have led to the diminished recoverability of the credit.

#### **5.4 Risk Measurement and Monitoring**

Institutions should have methodologies that enable them to quantify the risk involved in exposures to individual borrowers or counterparties. Institutions should also be able to analyze credit risk at the product and portfolio level in order to identify any particular sensitivities or concentrations. The measurement of credit risk should take account of (i) the specific nature of the credit (loan, derivative, etc.) and its contractual and financial conditions (maturity, interest rate, etc); (ii) the exposure profile until maturity in relation to potential market movements; (iii) the existence of collateral or guarantees; and (iv) the potential for default based on the internal risk

rating. The analysis of credit risk data should be undertaken at an appropriate frequency with the results reviewed against relevant limits. Institutions should use measurement techniques that are appropriate to the complexity and level of the risks involved in their activities, based on robust data, and subject to periodic validation. Institutions' management should conduct periodic stress tests of its major credit risk concentrations and review the results of those tests to identify and respond to potential changes in market conditions that could adversely impact their performance.

#### **1.5. Credit Administration**

Credit administration is a critical element in maintaining the safety and soundness of an institution. Once a credit is granted, it is the responsibility of the business function, often in conjunction with a credit administration support team, to ensure that the credit is properly maintained. This includes keeping the credit file up to date, obtaining current financial information, sending out renewal notices and preparing various documents such as loan agreements.

#### **5.6 Managing Problem Credits**

According to Bris, & Welch, (2005), the bank should establish a system that helps identify problem loan ahead of time when there may be more options available for remedial measures. Once the loan is identified as problem, it should be managed under a dedicated remedial process. Responsibility for such credits may be assigned to the originating business function, a specialized workout section, or a combination of the two, depending upon the size and nature of the credit and the reason for its problems. When an institution has significant credit-related problems, it is important to segregate the workout function from the credit origination function. The additional resources, expertise and more concentrated focus of a specialized workout section normally improve collection results.

A problem loan management process encompasses the following basic elements:

- **Negotiation and follow-up:** Proactive effort should be taken in dealing with obligors to implement remedial plans, by maintaining frequent contact and internal records of follow-up actions. Often rigorous efforts made at an early stage prevent institutions from litigations and loan losses.
- **Workout remedial strategies:** Sometimes appropriate remedial strategies such as restructuring of loan facility, enhancement in credit limits or reduction in interest rates help improve obligor's repayment capacity. However, it depends upon business condition, the nature of problems being faced and most importantly obligor's commitment and willingness to repay the loan. While such

remedial strategies often bring up positive results, institutions need to exercise great caution in adopting such measures and ensure that such a policy must not encourage obligors to default intentionally. The institution's interest should be the primary consideration in case of such workout plans. It is important that competent authority approves such workout plans before their implementation.

• **Review of collateral and security documents:** Institutions have to ascertain the loan recoverable amount by updating the values of available collateral with formal valuation. Security documents should also be reviewed to ensure the completeness and enforceability of contracts and collaterals/guarantees.

• **Status Report and Review:** Problem credits should be subject to more frequent review and monitoring. The review should update the status and development of the loan accounts and progress of the remedial plans. Progress made on problem loans should be reported to the senior management.

### Conclusion and recommendation

Team work and shared vision are the cornerstone of any institution to curb risk. From the fables given above in the article, there is wisdom in the crowds and by working together with the spirit of oneness, organizations can achieve curbing risk. In the fable of the lion, the fox, jackal and the wolf, any banking institution should learn incentive plays central in the implementation of a shared vision. Institutions should have policies covering the acceptability of various forms of collateral, procedures for the ongoing valuation of such collateral, and a process to ensure that collateral is, and continues to be, enforceable and realizable. With regard to guarantees, institutions should evaluate the level of coverage being provided in relation to the credit-quality and legal capacity of the guarantor. Institutions should only factor explicit guarantees into the credit decision and not those that might be considered implicit such as anticipated support from the government.

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