PRESENTATION OF A RISK CULTURE FRAMEWORK

AND ASSESSMENT OF RISK CULTURE AT

GARANTI BANK, TURKEY

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# List of Acronyms

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<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>SME</td>
<td>Small-Medium Enterprise</td>
</tr>
<tr>
<td>ERM</td>
<td>Enterprise Risk Management</td>
</tr>
<tr>
<td>ABC</td>
<td>Attitude- Behaviour Culture (Model)</td>
</tr>
<tr>
<td>PWC</td>
<td>PriceWaterhouseCoopers</td>
</tr>
<tr>
<td>NBSM</td>
<td>New Business Strategy Manager</td>
</tr>
<tr>
<td>PQR</td>
<td>Portfolio Quality Review</td>
</tr>
<tr>
<td>NPL</td>
<td>Non-performing loan</td>
</tr>
<tr>
<td>KPI</td>
<td>Key performance indicator</td>
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<tr>
<td>IIF</td>
<td>Institute of International Finance</td>
</tr>
<tr>
<td>IRM</td>
<td>The Institute of Risk Management</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>HSE</td>
<td>Health and Safety Executive</td>
</tr>
<tr>
<td>CAS</td>
<td>Casualty Actuarial Society</td>
</tr>
<tr>
<td>COSO</td>
<td>Committee of Sponsoring Organization of the Treadway Commission</td>
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</table>
Abstract

Risk management has evolved from a traditional point of view towards a more holistic approach with more and more complicated risks. Risk culture, being the main influencing factor of human decisions, has become a critical factor for successful risk management implementation or failures due to lack of it especially after the late financial crisis of late 2000’s as organizational cultural problems were recognized to play a major role. Every employee should be aligned with the risk culture of an organization and be risk-aware on how they contribute to the big picture. Due to this fact, risk culture of employees in an organization has to be evaluated to implement better risk culture thus risk management practices.

This paper puts forward critical KPI’s to assess risk culture aspects at Garanti Bank, Turkey. It consists of eight categories and 40 questions to be used for data collection with surveying method. Target group is SME, Retail and Corporate Loans departments loan evaluation employees. In addition to putting forward musts of a solid risk culture in an organization, results of this study point out weaknesses and strengths of target group as well as providing areas of improvement for a better risk culture in Garanti Bank, Turkey related departments. This descriptive preliminary study can serve as basis for banking sector risk culture assessment with minor changes. It can be used to explore preliminary findings in an organization and weaknesses can be addressed with extensive cause-root analysis in target group to improve current situation according to needs.

Keywords: Garanti Bank, risk culture, risk culture framework, risk culture KPI, loan evaluation, banking
Foreword

This paper was written for Project Management and Operational Development MSc. Program at Kungliga Tekniska Högskolan Stockholm, Sweden under the supervision of Roland Langhe. The literature review has been carried to review present risk culture frameworks of management consultancy companies and institutions to come up with KPI’s and a risk culture framework to explore risk culture at Garanti Bank, Turkey. Survey that was sent to loan evaluation employees has been designed in cooperation with risk management department of Garanti Bank. Continuous communication has been achieved during the whole period as well as interviews with key employees in the related departments to discuss the results.

I would like to express my gratitude for my professors at Kungliga Tekniska Högskolan for the wisdom and knowledge that they have provided to me during the Msc. Program. I would also like to thank managers and department heads at Garanti Bank for suggesting different points of views in both creating the survey and as well as guidance in analyzing the results. My thanks also go to dear colleagues in my department for the motivation and support they have shown. Finally, I would like to thank the target group that has taken their time to participate in the survey as well as sharing their valuable comments.

Ömer Bostancı,
İstanbul, November 2013
1. Introduction

1.1 Background

Financial companies including banks are highly influential in the welfare of a society as during the lack of a healthy system with strictly applied regulations, they can put serious burden on governments and individuals during crisis times. It is highly critical that these organizations are supervised accordingly both by external financial authorities as well as functioning in line with their internal procedures. Following the worldwide consequences of the 2008 financial crisis, in addition to strict measures taken by financial authorities there has been an increasing focus on risk-aware culture within organizations.

According to Ernst & Young survey [1] carried out in 2008 during the first phase of the financial crisis with 36 banks worldwide, %73 of respondents stated the vital importance of developing a risk culture. Risk should be everybody’s concern from the top to bottom and the implementation of this mentality requires big changes in the way risk is managed. The achievement of a consistent risk culture throughout the enterprise and making sure that it is understood at every level from risk management organization to front line is crucial. According to State Street [2] carried out survey with asset managers and owners in 2012, 78% of attendants have declared that their organization has a very risk-aware culture today whereas only 30% of the investment organizations made this their highest priority in 2007. During the course of the 4-5 years after the crisis, it is obvious that organizations are working to build firm and unified risk cultures among their employees. Another survey carried out by Ernst & Young in 2012 [3] has measured the attention paid towards risk culture by senior management among the organizations that have been affected by the crisis. On overall, 39% of the attendants have declared that risk culture has been an area of focus since 2008 financial crisis, while this ratio reaches to 59% among severely impacted organizations. Taking further from these numbers, it can simply be summarized that organizations are becoming more risk-aware as a result of their focus on risk culture. At this point, it is critical that risk culture is defined and what can be performed to change an existing risk culture.

Stephen Hester, CEO of Royal Bank of Scotland, has emphasized the importance of the cultural change among banks in a speech: [4]

“Banks must undergo a wholesale change in their culture and refocus their behavior on meeting the needs of customers to restore trust in the industry.”

The question is that how this change is going to be possible. Culture, being the main focus of numerous studies over time, has been historically difficult to measure, thus making it harder to change as something that cannot be measured efficiently cannot be changed easily. According to Towers Watson [5], national and international regulators are placing higher emphasis for companies to prove whether they have effective risk management culture, thus inducting organizations to focus on it. As markets and rating agencies appreciate a company’s risk culture as an asset to its value, significant changes are required by financial institutions to meet these expectations. However, an organization can only effectively improve its risk culture if they are aware of their current culture. [5] Firstly, a general definition of risk culture has to be put forward. According to IIF [6] definition:
“Risk culture can be defined as the norms and traditions of behavior of individuals and of groups within an organization that determine the way in which they identify, understand, discuss, and act on the risks the organization confronts and the risks it takes.”

Through the light of this definition, risk culture is extremely important for risk management practices of a financial organization as it guides every risk-taking behavior of the employees working in the organization. For a successful organization, it is under every employee’s responsibility to acquire a risk-based way of thinking under the values of risk culture of the organization and apply this mindset to their decisions. It is of vital importance to an organization to measure its risk culture among its employees to implement necessary changes.

In Turkey, which has been moderately affected by the 2008 financial crisis due to its solid banking system, it is even more important to focus on risk culture. According to Ernst & Young [3], only 23% of attendants from moderately impacted organizations stated that risk culture has been an area of focus (Overall 39%). To prevent future crisis and take risk mitigation action, it is more important to create this risk-awareness in such organizations. Garanti Bank, being the second largest bank of Turkey in terms of asset size, serves as a suitable bank to carry out this risk culture study.

1.2 Goal

Is risk culture at Garanti Bank strong enough according to the key performance indicators of successful risk culture? What are the weaknesses and strengths in light of the current literature on the topic? Which groups of employees in target group are better according to some indicators so they could be benefited from upon the weak areas of the rest? What could be targeted upon for future scrutinizing or possibly further research to develop the current risk culture? These questions are to be answered within the nature of a descriptive study in loan evaluation departments of Garanti Bank.

1.3 Aim

The aim of this study was to analyze the current risk culture at Garanti Bank, Turkey loan evaluation departments. Due to the study’s descriptive nature, risk culture was analyzed according to key performance indicators (KPI) to explore weaknesses and strengths depending on categories, departments and organizational levels. Close ended and easy-to-comprehend questions on a likert scale were for more valid statistical analysis.

It was not primarily intended to change or modify the current situation or extract cause and effect relationships. However, the interviews that were held with managerial level to discuss the results put forward hints what caused the differences between departments and categories. These comments may be used to construct hypotheses for further studies on the target group, but by themselves they were not enough to prove any causality, so proven cause-root analysis was not in the scope of this study.

1.4 Target Group

Garanti Bank Headquarters Loan Evaluation Associate and Supervisor level employees from Retails, SME and Corporate loans departments.
1.4.1 How Target Group is Chosen

According to PWC [7], when the current culture is being assessed in a company, it should always be addressed that most companies are not compromised on a single risk culture, but they are mostly a mixture of different subcultures. The fact that these subcultures will result in non-conformity as a whole should be taken into consideration. [7]

Target group that was chosen in this study was from only loan evaluation departments, so the job definition showed similar characteristics among each other. The reason why similar job definitions were looked upon is that two different departments may have very different risk exposures. An employee working in business development department and another employee making manual commercial loan decisions holding an average risk responsibility of 200,000 TL with one single decision will have very different understanding of risk. Thus, this target group choice of only loan evaluation departments provided a better environment for comparison. However, with a possible change of nature of questions, target group can be expanded to whole Garanti Bank to even reveal out sub-cultures within organizations. It was not under the scope of this study.

Another key choice was that loan evaluation employees only from headquarters was in the target group. As risk culture transfer is from top to bottom, communication is vital. It was assumed that employees at headquarters were ones who were mostly in touch with higher management levels, so this homogeneity made it more meaningful for comparison.

According to McKinsey [8], a successful risk culture model accounts for all the meaningful interactions that occur between all people from all organizational levels. [8] Thus, in terms of easy accessibility, associate and supervisor levels were chosen to assess whether risk culture was clear even at the lowest managerial levels in Garanti Bank headquarters.

1.4.2 Consequence of Project for Target Group

- The survey formed a clear framework highlighting the main points of risk culture, so attendants had a clear understanding of what shaped this culture.
- Results of survey were also shared with manager and department head level to provide an overview of their own employees’ risk culture.
- Discussions revolving around risk culture improvement can provide self development opportunities for the target group on long-term.

1.5 Methodology

1.5.1 Top Level Methodology

What was studied: The primary interest of this research was the analysis of risk culture and in loan evaluation departments of Garanti Bank headquarters at associate and supervisor level. Results have been evaluated for different departments and different categories as well as a whole pointing out strengths and weaknesses.

Resources: A budget allocated research over a long time span performed by a consultancy company with a high participation ratio from all departments of the bank, numerous interviews held with top management employees from each department and board of directors of the bank would have gathered much more data and sample to say a general statement about risk culture at Garanti Bank. It was assumed that there were enough resources to carry out this
study. As the target group was focused and easy to get in contact in terms of time allocation for the researcher, enough data has been collected. As risk culture had to be present even at the lowest level of organization, associate and supervisor level constituted a good employee portfolio to gather data. As the author of this research was an employee of Garanti Bank, it was easy to push the employees for participation to the survey as a result of support from department head level of the mentioned departments.

1.5.2 Second Level of Methodology

Scope: The scope of the research was defined by the risk culture framework that the survey was based upon and analysis of the results. In the literature review chapter, the arising need for risk culture, risk culture definitions and frameworks were presented to create a clear circle of literature review around the topic. Risk culture frameworks and surveys of management consultancy companies were analyzed to create the framework that was suitable for Garanti Bank employees.

Study type: The study type was descriptive and it analyzed the current risk culture at Garanti Bank depending on categories in the framework, departments and organizational levels. Interviews with managerial levels have been held to discuss the results and to shed light on any possible further study on the topic that may derive causality.

1.5.3 Third Level of Methodology

Survey method has been chosen for this research. The reasons for this choice are presented below:

Case study method was not an appropriate way to approach this study as it required participants from different departments. For a non-budgeted school project, it was not possible to gather participants from different departments as people worked on a tight schedule and were able to allocate time needed for a case study.

Interview method on its own was not very practical as it would have generated qualitative data from a narrow group of participants. However, if interviews were carried out for supporting survey method it will serve as a good combination to reveal out important facts for further studies.

For data collection, it was important that interviews and survey were designed in a supplementary way with each other. Firstly, according to the frameworks of McKinsey, PWC and other consultancy companies, main areas of focus for Garanti Bank were determined. According to these headings, questions were listed on each area and a total of 40 questions were prepared in cooperation with risk management department. Special attention has been paid that the questions were close ended, easy-to-comprehend and clear questions that would reveal only one specific fact per question.

It was a survey where the attendants have chosen their title, department and their answer out of a “totally agree” and “totally disagree” scale out of five (likert scale). The areas of focus (category) were not mentioned as it was believed that it would canalize the attendants to some specific answers. As a result, questions were mingled independent of their areas of focus. Additionally, survey was supported by a glossary highlighting main concepts of risk management and risk culture.
1.5.4 Fourth Level of Methodology

The literature review was first shaped by internet forums and business groups online by posting questions. According to recommendation from these forums and self-research, books, papers of consultancy companies, reports and surveys were covered in literature review. Web links were not a main source of literature as they were not very valid sources.

1.6 Delimitations

- It was essential to prepare a well-organized, accurate survey that was suitable for data analysis and for revealing the facts. To overcome this, general risk culture survey frameworks of McKinsey, PWC and IRM were analyzed deeply.

- Creation of a survey was critical in terms of extracting the exactly demanded information from the participants, so further reading on survey creation was performed to make questions precise and understandable.

- It was hard to have a high participation ratio from the loan evaluation employees of within a limited period of time. As they continuously evaluated loan applications and document sets, they were busy during the day time, so it was hard for them to allocate time. This fact was dealt by allocating a longer time period for attendants to fill out the survey.

- As risk culture was a newly developing area in Turkey, the participants had lack of information on some definitions related with the area, so questions were simplified for easier understanding and a glossary was provided to the attendants.

- The frameworks and methodologies that had been part of the literature review had high purchase fees for a non-budgeted project. Additionally, the survey frameworks of consultancy companies on the field of risk culture were confidential and only some parts of the survey were publicly distributed.

2. Literature Review

Literature review firstly focused on the evolution of risk management to what it is today and the arising need for a holistic risk culture. Following this short introduction, risk culture was defined. Risk culture survey frameworks that are in use today were discussed, the importance of risk culture was highlighted and the risk culture framework that is used to analyze Garanti Bank is explained.

2.1 Evolution of Risk Management and its Relation with Risk Culture

Risk management has been the focus of organizations for a couple of decades. In order to understand the importance of risk culture and enterprise risk management, the evolution from traditional risk management towards a more structured and holistic approach should be shortly introduced. A few traditional risk management definitions are as follows:

“Risk management is defined as “the logical and systematic means of minimizing the causes and adverse effects of accidental loss or destruction...” [9]
“Risk management is defined as the identification, investigation, analysis and evaluation of risks and the selection of the most advantageous method of correcting, reducing or eliminating identifiable risks” [10]

“Risk management is defined as the formulation of policies and the development of risk control options (i.e., measures to reduce or prevent risk” [11]

From the definitions above, risk management has started more in a “identify, investigate and reduce or eliminate” pattern. Risks were taken into consideration separately rather than integrated manner and risk vs. action lists were prepared and applied when needed.

CAS [12] states that as risks got more and more complicated and interactions between different types of risk have got more common, organizations had to adapt a holistic or in other words integrated risk management approach. This new risk management concept was emphasizing a more comprehensive view of risk and risk management replacing the old silo approach of managing different risks in an organization under the supervision of different departments. This new approach of risk management, ERM (Enterprise Risk Management), takes a portfolio view of all the risks that an organization may face and defines a systematic approach using a common risk language for all employees. [12]

ERM is defined through various frameworks, but all its definitions focus on its encompassing nature to cover all types of risks in whole organization and incorporate top management into risk management activities as well as all employees. Definitions for ERM are given below:

According to Casualty Actuarial Society (CAS) [12] ERM is defined as follows:

“ERM is the discipline by which an organization in any industry assesses, controls, exploits, finances and monitors risk from all sources for the purpose of increasing the organization’s short and long term value to its stakeholders. “

There are main points that have to be extracted from this definition. Firstly, ERM is a discipline which can be implemented in any industry. Secondly, it concerns all type of risks and for these risks ERM not only works for mitigation purposes but also for value generation purposes. Lastly, ERM takes into consideration all stakeholders of the organization, meaning it is not an activity for only top management but in general for all employees and customers. [12]

According to COSO framework [13]:

“Enterprise risk management is a process, effected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.”

Risk culture and this new concept of risk management (ERM) are highly correlated. According to [14], importance of culture has been described in various ways in theoretical ERM frameworks. Examples include “establishing context”, “organizational context” and “risk culture” terms in various frameworks. Culture is a vital part of risk management implementation and it has to be measured accordingly and improved if needed for successful implementation. It is also emphasized that risk management should not be seen as a different project to implement, but part of the organizational culture. [14]
2.2 Risk Culture Definition and its Importance

According to a very recent definition, Hillson [15] defines risk culture “as the set of norms and forms of behavior that are adapted naturally when a situation that is considered as risky or important is faced”. It consists of shared beliefs, values, knowledge and experience level of the individuals in a group or organization. As all these are absorbed at different levels by the individuals in the group mostly in an unconscious manner, it is hard to measure and thus change. On the other hand, it is important that risk culture in an organization is measured as it directly affects the risk appetite of people, meaning the tendency of an individual to take risk in a given situation. [15] The direct correlation of risk culture with risk appetite arose the need for management consultancy companies to create frameworks to analyze risk culture, because it is important to know how much an individual (whether management team or lower organizational levels) will take risk in a given situation. This is critical to prevent unnecessary risk taking that may lead to collapse.

A more detailed explanation according to IRM [16] points out the underlying cycle of risk culture formation. It reveals that culture of a group arises from repeated behavior in a group and this behavior is shaped by the attitudes of people in a group. These two concepts forming risk culture are defined as follows:

“Risk attitude is the chosen position adopted by an individual or group towards risk, influenced by risk perception” [16]

“Risk behaviour comprises external observable risk-related actions, including risk-based decision-making, risk processes, risk communications etc.”[16]

Due to the forms of behavior and attitude repeating in cycles, as well as individuals acting in a group by being affected from each other, meaning they gravitate to each other, risk culture has a naturally stable form if it remains unchallenged. This highlights the fact that an organization has to measure its risk culture to figure out the patterns among departments and organizational levels as well as measuring it over a time span to track the progress [16]. The creation of a framework for measurement is important in this sense.
In addition to the importance of risk culture to manage risk appetite and measurement of risk culture to prevent individuals gravitating towards each other if unchallenged, the third point that is in a good definition of risk culture is that risk culture should be aligned with the organization’s objectives for being effective and it should be unique in this sense. According to IRM [17], ten important factors have been listed for effective risk culture. Most important ones can be listed as distinct and consistent tone from the top, commitment to ethical principles, timely risk information flow, risk management skills and knowledge and appropriate risk taking behaviors. [17] These factors can be diversified for any organization depending on its business model, however it is important to create base frameworks that can be applied to variety of organizations. Management consultancy companies, risk institutions and risk measurement companies have come up with numerous frameworks. It is important to present these frameworks as they were main sources of literature review shaping the framework created to measure Garanti Bank employees.

2.3 Risk Culture Frameworks

Risk culture frameworks and surveys have been created by combining the main elements of effective risk management to come up with a systematic way of assessing risk culture in an organization. Enterprise risk management (ERM) is a main field that organizations are receiving consultancy upon from management consultancy companies on their way to establishing their risk management structure. During these, management levels and CEOs are interviewed and surveyed on their organization’s main risk failures and difficulties in implementing ERM to come up with key success factors for successful risk management. Vital importance of risk culture has been stated in these surveys over the years. Upon this feedback, management consultancy companies have created risk culture surveys to address this need by integrating main risk failures and success factors into the framework.

2.3.1 McKinsey Framework [8]

In the 2008 report by the Institute of International Finance (IIF), the concept of risk culture has been brought into highlight as a reason of the failures that led the banking system into credit and liquidity crisis. With more references to risk culture following the collapse and due to lack of a systematic approach to define risk culture, it was interpreted as a really hard concept to manage in an organization. According to McKinsey [8], “Risk culture is at the heart of the human decisions that govern the day-to-day activities of an organization”. As a result, it has to be defined, diagnosed and managed. The approach presented by McKinsey in its risk culture assessments shows similarity with the methodology followed in this study.

Risk culture diagnostic approach of McKinsey consists of two stages; Core Risk Culture Diagnostic (according to its main framework) and Intervention design. The first stage consists of a tailor made survey for the organization according to its main framework and explores the potential weakness and strengths by analyzing the survey results based on categories. This stage is parallel with the descriptive approach that was followed in this study in the assessment of Garanti Bank employees. The intervention design stage aims to build upon the results and perform root-cause analysis upon the failures to come up with solutions to improve risk culture. This second stage was not aimed in this study, however possible root causes upon failures at Garanti Bank were put forward based on interviews carried out. McKinsey framework that has been built around main causes of risk failures is below:
Figure 2. McKinsey Risk Culture Framework

According to this framework, McKinsey puts forward some key success factors of what makes a strong, solid risk culture. Some of these factors were incorporated in Garanti Bank framework to be measured and they are presented below:

- Warning signs about internal and external factors should be shared clearly.
- An organization should understand the risks that it is running at all organizational levels.
- Individuals should be able to challenge attitudes, ideas and even directly the culture itself.
- Individuals should be able to pass out bad news without being criticized.
- An organization should be able to effectively respond to changing conditions.
- Departments or individuals should act accordingly for the benefit of the whole organization rather than self or group interest.

These success factors from McKinsey framework as well as from the other frameworks to be presented were sought upon in this study.

2.3.2 Pricewaterhousecoopers (PWC) Framework [7] [18] [19]

PWC framework is more detailed in comparison with the McKinsey framework additionally assessing HR policies, risk management and control system efficiency as well as competencies of employees. However, as a common point with all risk management practices PWC [19] emphasizes the fact that risk management is more than setting up procedures and policies but its more enhancing a corporate culture where right people do the right thing at the right time. PWC further states that banks are entering a period of increasing regulatory expectations and regulators will focus more on risk reporting and decision making. Standard & Poors (S&P) has begun considering the effectiveness of a company’s ERM efforts when evaluating its credit rating. This focus will require company’s especially financial institutions to focus on risk culture. [18]

PWC’s risk culture survey also follows the same methodology and starts with the creation of a unique survey and continues with evaluation. Category and department based results are generated pointing out key areas of failures with the breakdown of results. PWC’s risk culture framework can be found below:
Figure 3. Pricewaterhousecoopers (PWC) Risk Culture Framework

In addition to the key success factors of risk culture pointed out by McKinsey, these main points can be extracted from PWC’s framework:

- Risk measurement controls must be adequate and evolving according to the needs.
- Individuals must be given adequate risk training to acquire the needed skills.
- Policies, objectives, mission and vision statements should be communicated clearly.
- Incentive focus should not be based on short-term objectives and disciplinary actions should also be used efficiently when needed.

2.3.3 Institute of Risk Management (IRM) Model and Framework [16] [17]

Institute of Risk Management (IRM) highlights the important responsibilities of the board of directors in addressing risk culture of an organization. It is under board’s responsibility to set, communicate and enforce a risk culture that is aligned with the objectives and strategies of an organization supported by the needed risk functions and processes. IRM [17] emphasizes that this implementation starts with the attitudes, behaviors and thus the culture put forward by the board and reaches down through the organization. [17] The board should provide the answers to what the current risk culture is at the organization, what changes can be done to improve it and the suitability of that risk culture to where they would like the organization to be in the future. [17]

Institute of Risk Management (IRM), as one of the first organizations to put forward the concept of risk culture has generated extensive literature on the topic. Following an explanation of what forms risk culture (IRM Risk Culture Framework), IRM [17] has generated a risk culture aspects model similar to McKinsey and PWC framework to explore risk culture in an organization. The main components of risk culture are as follows according to IRM [17]:

<table>
<thead>
<tr>
<th>Key Attributes</th>
<th>Sub Attributes</th>
<th>Key Indicators</th>
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<tr>
<td>Leadership &amp; Strategy</td>
<td>Integrity and Ethical Values</td>
<td>Tone at the Top</td>
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<td></td>
<td>Communicate mission &amp; objectives</td>
<td>Personal Ethical Practices</td>
</tr>
<tr>
<td>Accountability &amp; Reinforcement</td>
<td>Assignment of Authority &amp; Responsibility</td>
<td>Policies &amp; Procedures</td>
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<tr>
<td>People &amp; Communication</td>
<td>Commitment to Competence</td>
<td>Assignment of Ownership</td>
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<td>Information &amp; Communication</td>
<td>Demonstrated accountability</td>
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<td>Risk management &amp; Infrastructure</td>
<td>Identity &amp; Assess Risk</td>
<td>Performance Indicators</td>
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<td>Establish Process &amp; Controls</td>
<td>Incentives &amp; Discipline</td>
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<td>Employee Competence Training</td>
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<td>Information Quality</td>
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<td>Top-down communication</td>
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<td>Communication across processes</td>
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<td></td>
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<td>Risk Assessment Practices</td>
</tr>
<tr>
<td></td>
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<td>Risk tools &amp; Processes</td>
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<td></td>
<td></td>
<td>Process Reliability &amp; Efficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Control Effectiveness &amp; Efficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>System Access &amp; Security</td>
</tr>
</tbody>
</table>
Personal predisposition to risk: Individuals in an organization have their own perception of risk as a result of their personal nature and backgrounds. This requires supplementary risk-based personality tests to explore the risk-taking tendencies of individuals and calibration tests to analyze if individuals are capable of estimating the risk they are taking. These tests are out of the scope of this study but the risk culture survey created in this study carried some questions to assess risk perception of individuals and their risk-taking behavior.

Personal ethics: Ethical values of individuals in an organization are also part of the risk culture as it significantly influences decision-making of individuals. Ethics of reasoning, obedience and care are important in this sense.

Behaviors: Behaviors of individuals and encouraged right way of behaving towards risk both contribute to overall culture of an organization as well being affected by the overall culture itself. The models and theories put in this field has been out of the scope of this study, therefore this has not been covered in the literature review.

IRM [17] states that risk culture change in an organization should be handled as a change management project on its own rather than simply mandating the new culture through written documents. Clear responsibilities of departments should be defined and especially risk management and HR departments should work closely to carry out the required changes. It should be pointed out that culture or risk culture in this sense is not a precise science and there is no right action plan or recipe for all. However, there are models and frameworks to define aspects of risk culture. IRM has its own risk culture aspects model to assess risk culture in an organization detailed below:

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**Table:**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Dimensions</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tone at the Top</td>
<td>Risk Leadership, Dealing with bad news</td>
<td>Clarity of direction, How organization responds to bad news</td>
</tr>
<tr>
<td>Decisions</td>
<td>Informed risk decisions, Reward</td>
<td>Well informed risk decisions, Performance measurement linked to appropriate risk taking</td>
</tr>
<tr>
<td>Governance</td>
<td>Accountability, Transparency</td>
<td>Clarity of accountability for managing risk, Transparency and timeliness of information</td>
</tr>
<tr>
<td>Competency</td>
<td>Risk Resources, Risk Skills</td>
<td>Status, resources and empowerment of risk function, Embedding risk skills across the organization</td>
</tr>
</tbody>
</table>

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**Figure 5. Institute of Risk Management (IRM) Risk Culture Aspects Model**
In addition to the main components of risk culture covered in McKinsey and PWC frameworks in the literature review above, IRM does not bring much very new to the table in terms of framework. However, as they published results of their risk culture aspects model and general problematic areas in risk culture in [16], these problematic areas are analyzed at the survey carried out in this study to assess whether they were also problematic in Garanti Bank. These problematic areas revealed from their risk culture aspects survey are as follows:

- Organizations have not realized that developing risk awareness among all employees is important. Individuals only have information about their responsibility in risk management, if they have any, rather than a wider skill base.
- The link is weak between risk capabilities and performance measurement.
- Individuals in an organization remain unclear under certain circumstances what is expected of them and the overall direction steered by the board.

2.4 Key Performance Indicators of Risk Culture Framework

There are main components of risk culture and these form the key performance indicators in assessment of risk culture. Literature review around these KPI’s is to be broadened in this section highlighting its importance in an organization. This section is to present the current literature review rather than its correlation with Garanti Bank. These KPI’s are to be assessed in the results section and statements about risk culture are to be presented in the research findings section.

2.4.1 Adherence to Rules & Ethical Issues

Every corporate organization sets rules for ethical conduct, defines mission and vision statement of the organization, rules and procedures as well as job definitions for every position. Bart (2001) [21] has found out that mission statement can affect financial performance of a company since it creates “commitment to mission” on the employee side. [21] This is an important indicator that rules of ethical conduct, written rules and procedures of a company are in direct relationship with how an employee will act performing his/her duties. Additionally, job definition comes into play in order to prevent unnecessary risk taking by going over the limits. Hillson [15] states that people start acting similar to each other, so it is critical that leaders follow ethical values to serve as good role models. This is in direct correlation with the facts put forward in the above frameworks that tone should be set at the top going down to the bottom and employees should act according to the rules in the organization.

2.4.2 Challenge and Response

According to McKinsey [8], in a corporate atmosphere it should be possible to challenge attitudes, ideas, actions as well as rules & procedures. This has been emphasized in McKinsey’s framework that actions should be continuously and constructively challenged at all levels of an organization. Top management or managers in a department forming a tight management style not allowing any internal debate can lead to serious strategic management mistakes. A leading European bank has been given as a bad example to support this point of view in the working paper of McKinsey, so it is especially important that in big organizations like banks challenge should be allowed and present. [8] Graupp [22] defines kata as “behavior routines, habits, patterns of thinking and conducting oneself”. It is further stated that continuous improvement and adaptation can be realized through the use of two katas.
Improvement kata, being one of them, puts challenge in the center of focus and encourages learning from obstacles and problems that are encountered on the way. The second kata, being the Coaching kata, is the art of teaching improvement kata to every employee level to shape their ways of thinking and acting. [22] These behavior models are a part of culture, so it is important to assess challenging atmosphere in an organization. If employees have a feeling that challenging mechanism is not operating well, they will not bother to explain the significance of their decision or strategies. As a result of challenge process comes the response phase.

2.4.3 Communication

Communication is one of the few categories that has been repetitively mentioned in all of the frameworks presented above all highlighting the importance of risk communication both from the top and between individuals in a department. According to WHO [23], the main goal of risk communication can be defined as “providing meaningful, relevant and accurate information in a clear and understandable way”. Additionally, awareness against specific risks, consistency and transparency should be targeted. Through the share of this information, a trusted and confidential atmosphere should be created. Risk communication, being an essential element of risk analysis should be aligned with effective risk assessment and management. [23] Schein [33] highlights the importance of communication by stating that culture in a group is formed through either communication from the leader or the individuals in the group. According to PWC [7], how the knowledge and information are communicated in an organization is important as well as the information quality in building risk awareness.

2.4.4 Competence & Training

HSE [24] defines competence as

“The ability to undertake responsibilities and to perform activities to a recognized standard on a regular basis. Competence is a combination of practical and thinking skills, experience and knowledge.”

It further states that it is essential that right person does the right job related to their experience and knowledge knowing the risks that may arise related to their job. Additionally, it is the organization’s duty to know the best way of transferring these skills and knowledge to the employee as well as the accessibility of these facilities. [24] Edmund [25] highlights the importance of risk management training and states that it should be tailored according to the needs of the group emphasizing risk management department’s duty in this sense. [25] Competence and training about risk management have also been mentioned as a key asset according to PWC [19]. PWC states that risk function should be seen as a strategic partner in lines of business sharing good practices, knowledge and providing training. High degree of collaboration should be sustained between risk and business going much beyond that simple reporting. [19]

2.4.5 Leadership

PWC [26] states the importance of tone from the top in shaping the organizational culture. Implementing systems to measure the effectiveness of leadership and behavior are critical in the continuity of the implemented risk culture. Employees should have full trust in their leaders so they will do as they say and as a result the right action will be awarded. [26]
Leadership has been emphasized in the frameworks above that bad news should also be communicated openly with top levels and management strategies should be carried clearly to the employees in addition to setting important role models for risk culture as leaders. In an environment where risks are shared with upper management through open and direct communication, risks are identified and communicated in an effective manner. If this atmosphere is created, employees will feel safe with the direction that their leaders head them to. According to Schanfield & Helming [31], one of the implementation challenges of risk management is that risk aware culture should be formed as a result of periodical top-to-bottom training with clear messages and this highlights the importance of leadership in a group.

2.4.6 Performance

PWC [27] highlights the importance of performance alignment with risk culture. Performance objectives and incentives must be aligned to risk based decision making, so that employees will be evaluating the risks that they own. Risk awareness must be an important part of staff evaluation and objectives as well as their training. [27] According to PWC [19] poor performance and compensation systems in addition to lack of punishment mechanisms for risky behavior were one of the main reasons of the downfall of financial institutions. [19] IIF [6] puts into focus that organizations should put formal risk responsibilities or indicators to employees’ job descriptions and performance evaluation to make sure that risk awareness is created in the organization and they are evaluated accordingly. This is a key action to lead people into risk-based decision making while they are performing their duties.

2.4.7 Risk Measurement

“Every employee must know the boundaries of acceptable risk” is stated according to [28]. As better tools are being provided for more effective credit risk management due to new technology and innovations, these tools must be used in an aligned manner with a strong risk culture. Additionally, it is declared that it is essential that in a strong risk culture that top management must make his/her wishes clearly known for every employee. [28] This requires that employees get adequate training if needed on the area of risk measurement, especially on credit risk when it comes to banking. Thus, it will be possible for them to decipher and apply the conveyed messages.

2.4.8 Risk Perception

Trimpop [29] puts forward that individual differences and personality also plays a critical role in risk perception. [29] It is important that employees are fully aware of the risks they take and they know how they contribute to the big picture. According to IRM [30], risk is defined as “the combination of the probability of an event and its consequences”.

While individuals are taking decisions, they should consider what may go wrong, how likely it may occur and what the impact of that event may be if it is to occur. IRM [6] puts it into highlight that one of the common issues of risk culture failings is “disregard for risk”. If employees do not assess the downsides of a decision due to being used to beat the system occasionally or over-confidence, this may result in distortions in their risk perception.
2.5 Key Components for Risk Culture Implementation

In addition to the KPI’s of risk culture, there are also two additional points highlighted in current literature that are to be mentioned as key components of risk culture assessment and implementation.

Organizational culture may also refer to the culture of a small organization with limited number of employees or a huge international corporation with numerous employees. PWC [7] states to bear in the mind the fact that organizational culture may exist in the form of a mix of sub-cultures. The differences should be spotted and attached to the change management project of risk culture, otherwise it may result in insisting a set of values and behaviors to a group that are not appropriate for the group and their job definition. [7] IRM [16] suggests that the board should ask itself with the help of department managers that whether in their organizations different subcultures exist and how much they are open to social communication or change for another culture. [16]

Another point that should be listed before analysis of results is the implementation challenges of risk culture change projects. PWC [19] has listed some key areas of competitive intelligence. Financial institutions performing well in these areas are better able to build an effective risk culture. The complete scheme put forward by PWC [19] is below. This scheme is better to be considered to give recommendations in risk culture assessment.

![Figure 6. PWC Competitive Intelligence Implementation Scheme [19]](image-url)
3. Research Findings

3.1 Survey Results

Garanti Bank loan evaluation department employees had been provided the survey and they had been asked to answer the questions designed with a likert scale based on eight different assessment categories that represent key attributes of risk culture. The likert scale answers correspond to a scale out of five as follows:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>2</td>
<td>Somewhat agree</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
</tr>
<tr>
<td>4</td>
<td>Somewhat disagree</td>
</tr>
<tr>
<td>5</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Figure 7. Correspondance of answers to scores

Lowest score areas had been presented as weaknesses of the risk culture at Garanti Bank and shown as an area of improvement with possible recommendations extracted from the interviews. However, it should be mentioned that this study was not designed to derive causes of failures but only to explore weak and strong areas of risk culture based on KPI’s. In this section, results have been presented depending on mean scores of each category.
### Figure 8. Main Results Table of Risk Culture Survey based on categories

<table>
<thead>
<tr>
<th></th>
<th>TARGET GROUP</th>
<th>DEPARTMENT</th>
<th>ORGANIZATIONAL LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEAN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adherence To Rules &amp; Ethical Values</td>
<td>1.61</td>
<td>1.55</td>
<td>1.58</td>
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<tr>
<td>ChallengedResponse</td>
<td>1.36</td>
<td>1.50</td>
<td>1.14</td>
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<tr>
<td>Communication</td>
<td>1.79</td>
<td>1.86</td>
<td>1.50</td>
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<tr>
<td>Competence&amp;Training</td>
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<td>Leadership</td>
<td>1.73</td>
<td>2.00</td>
<td>1.45</td>
</tr>
<tr>
<td>Performance</td>
<td>1.94</td>
<td>2.13</td>
<td>1.57</td>
</tr>
<tr>
<td>Risk Measurement</td>
<td>2.17</td>
<td>2.00</td>
<td>1.89</td>
</tr>
<tr>
<td>Risk Perception</td>
<td>2.01</td>
<td>2.08</td>
<td>1.71</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>TARGET GROUP</th>
<th>DEPARTMENT</th>
<th>ORGANIZATIONAL LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STANDARD DEVIATION</strong></td>
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<tr>
<td>Adherence To Rules &amp; Ethical Values</td>
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<td>0.37</td>
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<td>Communication</td>
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<td>Competence&amp;Training</td>
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<td>0.47</td>
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<tr>
<td>Leadership</td>
<td>0.46</td>
<td>0.53</td>
<td>0.29</td>
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<tr>
<td>Performance</td>
<td>0.62</td>
<td>0.64</td>
<td>0.53</td>
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<tr>
<td>Risk Measurement</td>
<td>0.57</td>
<td>0.53</td>
<td>0.45</td>
</tr>
<tr>
<td>Risk Perception</td>
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### DEPARTMENT & ORGANIZATIONAL LEVEL

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<tbody>
<tr>
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<td>1.38</td>
<td>1.05</td>
<td>1.53</td>
</tr>
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<td>1.80</td>
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<tr>
<td>Performance</td>
<td>2.35</td>
<td>2.00</td>
<td>1.88</td>
<td>1.45</td>
<td>2.03</td>
</tr>
<tr>
<td>Risk Measurement</td>
<td>2.72</td>
<td>2.53</td>
<td>2.40</td>
<td>1.68</td>
<td>2.08</td>
</tr>
<tr>
<td>Risk Perception</td>
<td>1.87</td>
<td>2.21</td>
<td>1.58</td>
<td>1.77</td>
<td>2.17</td>
</tr>
</tbody>
</table>
3.2 Category Based Analysis & Areas of Improvement

3.2.1 Adherence to Rules & Ethical Issues

This category was questioning whether upper management conducts good role models for their employees and whether rules, procedures, mission, vision and objectives are written out clearly and communicated efficiently to the employees. This was one of the highest scoring categories with a mean value of 1.61 and a deviation of 0.33. It meant that without leaving some employees behind (low deviation) the target group as a whole has a clear sense of rules and performs their duties considering these. Additionally, the fact that there was no difference in scores between organizational levels and departments suggested that these rules had been clearly communicated in an equally distributed way by Garanti Bank to the target group. Given the fact that IRM [16] lists the fact that some employees do not know under some circumstances what is expected of them as a reason for risk culture failure and the importance of clearly communicated objectives for successful risk culture as PWC [18] states, it can be put forward that the target group demonstrates strongly in this category. As it was defined in the literature review section according to Bart (2011) [21], the financial performance of a company depends on creation of rules & procedures, mission and vision statements. As interviews put forward as a proving point, this high score was supported by the loan quality indicators of Garanti Bank in compare with Turkish banking system average according to [32] support this fact. Non-performing loan (NPL) quality ratios of Garanti Bank were historically lower than sector average even in crisis times of 2009 (2012: 2.30% vs. 2.85%, 2011: 1.83% vs. 2.67%, 2010: 2.99% vs. 3.71%, 2009: 5.43% vs. 4.50%). To sum up in this sense, this target group successful in this category also performed well in terms of low non-performing loan ratios and this may be given as an example to prove Bart [21]’s point.

Areas of improvement: Among the target group, retail loans associate level has performed lower than the rest of the target group with a mean score of 1.91. Possible reasons of this had been asked in the interview and no specific reason had been revealed for this score, but they can be provided a few hour sessions with supervisor or even department manager and the knowledge level can be improved easily.

3.2.2 Challenge & Response

This category questioned whether behavior and ideas could be challenged and efficient responses could be provided for improvement. This was the highest scoring category and the strongest component of risk culture that target group possessed. Mean of 1.38 and lowest standard deviation of all categories hints that the target group was open for constructive challenges and responded positively for constructive criticism. McKinsey framework [8] listed the fact that individuals should be able to challenge attitudes, ideas and maybe directly the culture itself and organizations should be able to adapt to changing conditions. These were listed as critical success factors of strong risk culture and the lack of these attributes lead to autocratic decisions thus mistakes for huge failures especially in the financial system. Graupp [22] also adds that through improvement and coaching employees should be able to challenge thus improve. Only this way, strategies could be challenged and gain more significance through this process. The target group performed in uniformity in this category stating that they have the important attributes addressed in all three frameworks.

Areas of improvement: Supervisor level have performed better than associate level with a means of 1.27 and 1.52 respectively in general. This gap mainly resulted from the gap between associate and supervisor levels in corporate and SME departments. As revealed from
the interviews, this may have been resulting from differing responsibilities in SME and corporate departments between different levels. SME and Corporate associate levels can be provided more opportunities to have more responsibility and to work together with their supervisor levels. This way, they can gain more confidence to challenge and respond accordingly. Additionally, SME Supervisor level scored a mean of 1.05 in this category. As a result of the interviews, possible reason for this high score was the fact that they are much more actively involved in project meetings with the department manager thus gaining more confidence in their behavior and attitude. This was reflected to their responses. However, this cannot be provided as the exact and sole answer for success recipe, but further research can be performed to explore their motivation for their high score and this can be applied to other employees.

3.2.3 Communication

This category addressed risk communication, the category addressed with highlighted importance in all of the frameworks. Easiness, effectiveness and quality of risk communication were shown as vital attributes for successful risk culture. The target group has scored a mean of 1.79 with a standard deviation of 0.43. There is significant difference between SME department (1.50) and Corporate & Retail departments (1.86). The lowest scoring Corporate & Retail departments reported lack of experience and information sharing as well as questioning the efficiency of reporting tools and information screens with the relevant questions. IRM [17] lists the lack of risk awareness as one of the biggest failures of risk culture. Risk communication is important to distribute risk awareness in the target group evenly. To sum up, according to PWC [17]’s key indicators of information quality and efficiency of tools have attracted attention as problematic areas in the target group.

Areas of improvement: Mean score of 2.08 for the question on information screens and mean score of 2.25 for the question about reporting tools provide hints that they can be used more efficiently since the results were relatively low in compare with verbal communication. In general, it can be put forward that verbal communication at the same level and with superiors scored relatively high, but the information screens and reporting tools can be used more efficiently in terms or availability and relevancy of information. It was stated in the interviews that SME department works in a project-based manner to improve their reporting systems and information screens, thus they provided higher scores in this category. Same implementation know-how can be used for corporate and retail departments and on-demand reporting tools can be developed according to their needs to improve their risk communication. According to PWC Competitive Intelligence Implementation Scheme [19], communication is one category with medium impact on risk culture but it takes a lot of effort due to its frequency and time consumption and has hard implementation due to its complexity. It is under related department’s responsibility to interpret the results and decide upon its prioritization. Additionally, as an implementation challenge listed previously in literature review, differences between different departments’ subculture should be taken into consideration in application of present know-how in the area.

3.2.4 Competence & Training

This category addressed the competences of employees whether they had been compatible with the job description they were performing, whether they had been willing to receive further training and if training facilities had been easily accessible for them. PWC framework emphasized the need for adequate risk training for individuals to acquire needed skills and listed this success factor as one of the key components of strong risk culture. This category
was one of the highest scoring categories with a mean of 1.67 and a standard deviation of 0.44. Supervisor level have performed better than associate level especially on the question addressing whether they had adequate basic knowledge on risk management to fully perform their job as well as on general with mean scores of respectively 1.58 and 1.80. It was another consideration that there was a big gap between associate and supervisor levels on this question addressing their current knowledge and this gap was also reflected to the question addressing if they were willing to take additional training. Associate level was on focus in this category addressing their lack of knowledge in the area but they have also stated they would like to receive further training to perform their job better. In this sense, results have revealed that target group saw risk function as a strategic partner in performing their job and this was one of key success factors of PWC’s framework. They have put forward their competences were enough in performing their general duties but lack of knowledge in risk management field.

**Areas of improvement:** It has been stated in literature review that it is critical that risk management training should be tailored according to the needs of the target group. It is important in this sense that HR and risk management departments collaborate to provide the required training for the group. Extensive surveys can be carried out in this sense to define particular areas on which they would like to be trained. As an additional point, higher results of SME Supervisor level had been discussed in interviews and due to strong interaction between upper management and other departments with the supervisor level have resulted in this. NBSM (New Business Strategy Manager) project was held in SME department with contribution of supervisor level for a long period of 2-3 years for the creation of an automatic decision making system for loan evaluation. It has been realized in this period and continuous updates to this system are being designed. Every update is being treated as a sub-project and nearly all supervisors have shown significant contribution to this main project by different sub-projects. This has resulted in higher scores in competence and training category. It has been suggested that the involvement of Corporate and Retail departments in such projects regarding their processes would be positive in terms of competence and training.

**3.2.5 Leadership**

This category addressed whether the upper management in departments clearly conveyed risks associated with the strategies, set the tone from the top and if the leadership is open and participative when the employees desired to challenge these strategies. It was one of the categories addressed very clearly in McKinsey, PWC and IRM frameworks by its importance in defining risk culture in an organization. There was a general mean score of 1.73 with a mean of 0.46 reflecting no uniformity between departments and organizational levels. Retail department scored the lowest in this category with 2.00, corporate scored 1.64 while SME department has scored an impressive 1.43. It has been revealed that during the NBSM project in SME department, employees in that department had a chance to work with the department head closely. The interviews stated that the department head is participative and open to hearing new and innovative ideas during the project cycle. This was one of the key contributors of higher scores in SME department. In addition to this SME department scoring better in communication category (mean of 1.50 in compare with 1.86 mean in general) and reflected effective communication with upper management in interviews hints that effective communication supported by an open leader can both contribute to communication and leadership areas of risk culture.

Associate level also performed lower in this category with a score of 1.83 in compare with the 1.66 in supervisor level. According to interviews, this has been put forward to have been
resulting from lack of exchange environment between associate level with the department heads and upper management. Although SME associates have performed better than other departments, it is a finding from the results that especially retail associates scored lower than other departments in this category.

Areas of improvement: According to Schanfield & Helming [31], one of the implementation challenges of risk culture has been stated as risk-aware culture and it has been suggested that this can only be created through periodical top-to-bottom meet-ups. This can be in the form of strategic message carrying, risk sharing and training. This could be one of the possible reasons of highest score in SME department. This can be applied to retail and corporate loans departments. Although they are more frequently in direct communication with the branches to acquire information and due to their lack-of-time, these frequent meet-ups can be scheduled. By this way, the target group will acquire a chance to get to know their upper management much more and they will be able to know how to challenge them constructively. The lowest scoring question was if the importance of risk management is communicated from upper management with a mean score of 2.14. These meet-ups can be useful to address this need and it can be useful both to address leadership and communication within target group. As an additional point, according to PWC Competitive Intelligence Implementation Scheme [19], leadership category is an area with high impact on risk culture but also stands out with its easiness of implementation due to the small number of individuals (upper management or department heads) to change. Through the light of this point, leadership category can be prioritized to be addressed as soon as possible within the target group.

3.2.6 Performance

This category addressed self-assessment routines and performance tracking of upper management. It has been emphasized in the literature review that it is important that both the target group assessed the results of their own decisions as well their superiors evaluated them. McKinsey [8] focuses on the importance of performance indicators being evaluated frequently including their alignment with the benefit of the whole organization rather than individuals and lists it as a must for strong risk culture. PWC [27] focuses on the importance of performance systems alignment with the risk culture at the organization. In this sense, it was important that performance category was addressed at Garanti Bank for further improvement. Target group has scored a mean of 1.94 with a deviation of 0.62 in this category meaning one of the highest scored categories with the highest deviation in all categories. It was not so effective to explore the performance systems with only limited number of questions, but it should be noted that the highest deviation in this category hints employees who are not pleased with the performance indicators within the group. The difference between SME (1.57) and Retail (2.13) departments indicate an area of improvement within the target group. Interviews have revealed that in SME department, due to heavy workload of implementation of projects, promotions are more frequent. This can be a shown as a reason of diversity between these two departments. However, the question addressing whether performance evaluation is more frequent rather than only in performance evaluation periods have shown an area of improvement with a mean score of 2.53. This was an area of improvement for all departments. Additionally, the question addressing whether employees self-evaluate the results of manual decisions has resulted in a key area of improvement for retail loans departments with a mean score of 2.13.

Areas of improvement: It is a critical key attribute of risk culture according to most of the frameworks that performance evaluation should be more frequent for target group to improve their risk culture. This was a weakness among the target group. Performance evaluation by
superiors (supervisor level on associate level or department managers on supervisor level) should be carried out more frequently. Unofficial meetings between levels can be arranged to share feedback of superiors on their performance, especially related with risk. According to PWC Competitive Intelligence Implementation Scheme [19], HR systems are the hardest to implement with the hardest effort due to different needs among the target group, but once they are effectively working they can have huge impact on risk culture. This should be taken into consideration while looking for improvement in this weak area. According to interviews, it was put forward that additional research, possibly surveying, can be carried out in the target group to explore wider dimensions and distinction within the target group regarding this area. The focus of this study and the limited number of questions in performance category was not able to derive cause-root relationships or more focused areas of improvement. As an additional point, an easier to implement improvement can be suggested. It is important that both an employee and its superior monitor the results of their decisions after a given period. This weakness was more present in retail department, but it can also be applied to other departments. With the help of department heads and manager, target group can define key performance indicators to evaluate their loan decisions after a given period of time. In this way, it can be more likely that same risky decisions would not repeat in the later decisions.

3.2.7 Risk Measurement

This category addressed to what extents risks are being measured, point of view and knowledge of attendants towards risk measurement and the tools used for this. This was the lowest scoring category with a mean of 2.17 and a deviation of 0.57 (the second highest). PWC [19] states the increasing need for risk management practices for enhancing employees to do the right thing at the right time. Additionally, with the increasing regulatory measures especially in the financial industry, this category has gained more importance as a key category. SME and corporate departments have performed better in compare with retail department as retail department has scored a mean of 2.60 in this category. There was also a significant difference between associate and supervisor level with 2.33 and 2.05 mean scores respectively. The interviews have revealed that it was a normal consequence with more experience that supervisor level had more knowledge in the area of risk management that had been addressed as part of this category. The question addressing whether target group knows how credit risk is measured has generated a mean score of 3.22. PWC [18] point of view addressing risk training as a key contributor of solid risk culture can be used to reveal this area as an important weakness in this area. Additionally, target group has been addressed whether they were comfortable that risks they may face were shared with them scored a mean of 2.44. This question also can be shown as a point to support weak communication in the target group concerning risks as well as the fact that some risk management practices were not shared with the target group.

Areas of improvement: This category was also important for risk management department of Garanti Bank to inform them about the sharing of their own practices. PWC and McKinsey stated that risk management practices should be evolving for needs and it should be carried out with HR department if it is to change risk behavior of the target group. Embedding ERM and risk culture in an organization requires solid risk management knowledge and this is one of the hardest implementation challenges. In this sense, HR and Risk Management department of Garanti Bank can be defining the scheme for basic risk management knowledge and how to implement this knowledge among the target group. Due to low results from this category followed by suggestions from the interviewees, it can be put forward that extensive research can be performed about the knowledge of target group on risk management practices
according to this basic knowledge scheme. Following the results, a training program can be carried out for the target group to increase their knowledge.

3.2.8 Risk Perception

This category addressed risk awareness, risk based decision making and risk-taking levels of the target group. In this category, target group has responded a mean score of 2.01 with a deviation of 0.36. This was the category where there was no significant difference between associate and supervisor levels with respective scores of 1.99 and 2.03. Department have also scored similar scores to each other with SME department scoring better with a score of 1.71. IRM [17] puts forward that personal predisposition to risk is at the core of risk culture as it influences behavior and attitude. It also mentions the importance of risk-awareness being present at every single employee in an organization. Considering this fact, this category as a whole, regardless of department or organizational level differences, was a weakness for the risk culture of target group.

Areas of improvement: Trimpop [29] has advised the importance of the awareness of employees about the risks they take and how they contribute to the big picture. For improvement in risk perception, in addition to more frequent communication, target group must be more aware about how they contribute to general risk of the bank. Portfolio Quality Review (PQR) presentations prepared quarterly by Credit Analytics department reflecting portfolio development in different lines of business, can be presented to them in order to increase their awareness. Thus, target group can be aware of what the bank has performed in that quarter, what potential areas of development are planned and the major risks they may face related to the conditions of the market. Analytical breakdown reports of whole customer portfolio can be shared with them to that they will have better risk perception about their own portfolios. In addition to this easy to implement suggestion, interviews have also stated that additional risk perception tests of target group can be carried out. Such tests provide more valid results regarding the personal attitude towards risk and risk-taking behavior as it has been mentioned in literature review. Upon application of such tests on target group, risk management department and related departments can work in cooperation to improve risk perception in target group.
4. Conclusion

This study has assessed the current risk culture at Garanti Bank loan evaluation employees by assessing key performance indicators in a framework created by shaping the current risk culture frameworks according to the needs of banking industry in addition to reviewing existing literature around modern risk management practices. Through extensive literature review, the arising need for solid risk culture and its direct relationship with effective risk management has been defined. Current risk culture frameworks applied by institutions and management consultancy companies have been covered and success factors, KPI’s and main causes of risk culture failures have been listed for assessing risk culture at target group. During the creation of this risk culture framework, key interviews also have been held both with target group’s managers as well as the risk management department of Garanti Bank for design of a survey that could assess target group better.

Based on the results of this study, primary task of this study has been to present key findings and suggestions depending on each category of the framework. The results have been compared with what has been presented as success factors for solid risk culture and following these weaknesses and strengths of cultural aspects within the target group have been put forward. This snapshot of the current risk culture was the main aim due to the descriptive nature of the study and the limitations of the surveying method that has been used. In addition to these facts, as a secondary task, strengths and weaknesses have been shared with key employees from each department to explore the results and hear possible causes of the risk culture at its current state. Easy-to-implement suggestions have been listed depending on the results based on these interviews. However, it should be noted that the suggestions only reflect the opinions of key employees and do not reflect any cause-effect relationships that was derived from this study. In some categories, extensive research has been suggested to figure out possible causes of current state depending on interviews. If the current state has to be improved, new research can be performed and change management projects can be shaped according to the needs of the target group.

On a wider perspective, in today’s banking industry with increasing regulatory measures, the framework presented in this study can be used as a tool to assess risk cultures of other banks with minor changes in the questions. The main limitation of this study was the small target group and considering this fact generalization of the results requires greater target group. Application of this framework to other banks and comparison of results between different target groups at different banks could provide better risk culture assessment.

The main areas of improvement of this survey can be summarized as below:

- Risk communication should be enhanced both within and between departments as a way of creating risk awareness. This can be expected to create an environment where employees can be expected improve both their competence as well as feeling more comfortable and connective with their leaders. This can be expected to improve leadership scores as well.

- Leadership can be improved through more frequent meet-ups between different organizational levels in each department and assignment of further responsibility for lower organizational levels. These meet-ups can be in the form of strategy meetings or risk training.
Performance evaluation both from superiors as well as self-assessment of manual decisions after a given period should be performed not only in performance evaluation periods but also in the form of unofficial meetings between associate and supervisors.

As two correlated categories, risk perception and risk measurement could be improved through HR and risk management department cooperated trainings. Basic risk management knowledge could be given to the target group. Additionally, general portfolio could be reviewed quarterly to give the target the exact sense of how they contribute to the big picture.

In addition to these points, two additional suggestions revealed from interviews that can result in higher scores in each category and can be implemented easily are as follows. However, the schedule, content and timeliness of these suggestions are subject to extensive research within the target group.

Cross-department short time rotations will provide an important basis for loan evaluators to increase their portfolio risk knowledge. It will also be essential for them to position their job duties in the big picture. Rotations to SME, Retail and Corporate marketing departments will help them better understand the workflow and strategies concerning their job duties.

On-the-job trainings both from risk-related analytics departments (Credit Analytics, and Risk Management departments) and experienced colleagues within departments will enhance them to perform their duties better. It will also serve as a great source for motivation since it will be a periodical contact point between associate and supervisor levels.
Tables & Figures

Figure 1. Risk Culture Formation, the ABC (Attitude-Behaviour-Culture) Model [16]
Figure 2. McKinsey Risk Culture Framework
Figure 3. Pricewaterhousecoopers (PWC) Risk Culture Framework
Figure 4. Institute of Risk Management (IRM) Risk Culture Framework
Figure 5. Institute of Risk Management (IRM) Risk Culture Aspects Model
Figure 6. PWC Competitive Intelligence Implementation Scheme [19]
Figure 7. Correspondance of answers to scores
Figure 8. Main Results Table of Risk Culture Survey based on categories
References


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[22] Graupp, Patrick & J. Wrona, Robert [2010], “Implementing Twi; Creating and Managing a Skills-Based Culture”, pg xxxiii


[26] PWC [2010], “Tone from the top, transforming words into wisdom” retrieved from www.pwc.com

[27] PWC [2010], “Developing a strong risk culture”, pg 2, retrieved from www.pwc.com


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<table>
<thead>
<tr>
<th>Adherence To Rules &amp; Ethical Issues</th>
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<tbody>
<tr>
<td>I am aware of mission, vision statements and code of conduct of Garanti Bank.</td>
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<tr>
<td>My colleagues are performing their job responsibility in an aligned manner with their job definition.</td>
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<tr>
<td>I take rules and procedures into consideration with every loan/limit decision I am making.</td>
</tr>
<tr>
<td>The rules, procedures and policies about credit risk are written precisely and well communicated.</td>
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<tr>
<td>Upper management of my unit illustrates a positive example for ethical conduct.</td>
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<tr>
<td>Challenge &amp; Response</td>
</tr>
<tr>
<td>I believe Garanti Bank provides fast and accurate responses to changes in market conditions.</td>
</tr>
<tr>
<td>I can challenge and discuss the policies and rules if I have an opinion that they are not functioning well.</td>
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<tr>
<td>If I am challenged by upper management levels on my way of performing my job, I would put in every effort to change it.</td>
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<tr>
<td>I am well aware what I should do against specific risks.</td>
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<tr>
<td>Communication</td>
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<tr>
<td>Information screens that I use for loan/limit decisions inform me well about possible risks.</td>
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<tr>
<td>I believe warning signs about risks are communicated efficiently within the department.</td>
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<td>I believe experienced colleagues are sharing their expert opinions to generate insight for new-comers.</td>
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<tr>
<td>For applications exceeding my limit, communication with upper management levels is effective.</td>
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<tr>
<td>The reporting tools that are used in my department enhance good communication.</td>
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<tr>
<td>Details about customers are communicated efficiently with related parties so maximum information is captured for making a loan/limit decision.</td>
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<tr>
<td>Competence &amp; Training</td>
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<tr>
<td>At all times, I have a standard way of approach for the job I am performing.</td>
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<tr>
<td>I follow the new policies, changes in market conditions and possible effects to my job.</td>
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<tr>
<td>I believe further risk management training will enhance me to perform my job better.</td>
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<tr>
<td>I have adequate basic knowledge on risk management to fully perform my job.</td>
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<td>Information to improve my competences are easily accessible from intranet.</td>
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<tr>
<td><strong>Leadership</strong></td>
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<tr>
<td>I feel comfortable to share possible risks or mistakes with upper management. Upper management decisions are results of clearly communicated strategies. Leadership style at the department is open and participative. For the risks that I am well aware of, I share my opinion and feedback about how it may affect my colleague's portfolio. Upper management levels in my department communicate me importance of risk management and risk measures in a clear and consistent way.</td>
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<tr>
<th><strong>Performance</strong></th>
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<tr>
<td>At the times I am doing periodical work on regular basis, I always pay attention to the risks that are likely to repeat every time. I periodically monitor the results of my manual decisions. People in my department are promoted and rewarded fairly. My performance is shared with me periodically at short time intervals not only at performance evaluation period.</td>
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<tr>
<th><strong>Risk Measurement</strong></th>
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<td>I believe it would be highly beneficial if officially required risk stress tests are performed on shorter intervals. I am aware how credit risk is measured at the risk management department of Garanti Bank. I believe flexible pricing for different customer segments according to risk ratings of customers functions better than a fixed pricing policy. I feel comfortable that possible risks I may face are shared with me. I think the software system Garanti Bank uses in my department generates accurate results with right data.</td>
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<th><strong>Risk Perception</strong></th>
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<tr>
<td>I am well aware of the major risks and scenarios related to the general loan portfolio of the bank. I believe awareness about risk management department definition, risk management guidelines and risk policy is important for performing my job. At my every decision, I assess the things that may go wrong, possible risks and its severity that I may face and what I can do to mitigate the risk. If employees in my department monitor and control their own risks related to their own portfolio, the total risks can be mitigated to a lower level. I believe Garanti Bank will get in a more risky situation and we will start facing a variety of risks if our loan volume increases at this pace. It is more important for Garanti Bank to hold its quality customer portfolio rather than investing in new business areas at current time of rising problematic loans.</td>
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