KAUNAS UNIVERSITY OF TECHNOLOGY
SCHOOL OF ECONOMICS AND BUSINESS

MODEL OF INTERNAL AUDITING AND RISK MANAGEMENT INTEGRATION

Final Master Thesis

Accounting and Auditing (621N40002)

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SUMMARY

The thesis covers a study regarding Model of Internal Auditing and Risk Management Integration, in other word Risk Based Internal Audit (the RBIA). The risk management has become a crucial part of well-built organizations, and internal audit processes have been started to be planned over the risk factors to make companies able to meet their objectives.

However, the elements of the RBIA are still a debate issue and need to be clarified. The main goals of the study are explaining the RBIA, revealing its advantages and disadvantages and offering a feasible model which practically covers the steps of the RBIA implementation process.

As regards the results of the thesis, it is showed that the RBIA is only applicable together with the risk management function. The risk baes audit plan needs to be built over the results of risk assessment process. The collected data showed that the RBIA is applicable in SMEs, as well, since risk factor affects all members of the economics regardless their size. As the risk factor affects the small companies relatively less than big companies, the SMEs may not need full services of the risk management, but getting risk assessment and building an audit plan over it can protect SMEs from business fails. The study also reveals that the RBIA may be approached differently by different industries, since risk factors influence industries differently, and each industry may have their own risk factors. The thesis shows the differences of between processes and notions of traditional internal auditing and the RBIA, it becomes clear that elements of the traditional auditing have been influenced in different ways by the RBIA, some processes of the internal auditing have been stayed almost same. It is claimed that the RBIA brakes the needed distance between internal auditors and managers, and it damages integrity of the auditors, while the study exposes that the strong communication links between the managers and internal auditors within the RBIA is an advantage and makes companies closer to their objectives and able them to increase their corporate values.

Regarding to the practical model, the study offers the following steps as a feasible framework of the RBIA:

1. Understanding objectives of the company
2. Risk assessment
3. Audit planning
4. Audit reporting

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CONTENTS

List of figures

List of tables

INTRODUCTION

The topic of the thesis study is Model of Internal Auditing and Risk Management Integration, in other word – Risk Based Internal Audit (the RBIA). The RBIA is an internal methodology which being conducted by internal audit department in order to provide assurance that risk is being managed by the management according to the defined risk appetite level, and it helps the company to function its risk management. More precisely, RBIA links internal auditing and risk management of organization, and facilitates management's efforts to improve the risk management framework with its clear and valuable contribution (Griffiths, 2015).

Within the last few years, managing risk has become a crucial part of good corporate management, and the need to identify and manage the business risks put companies under increasing pressure (OECD, 2014). It is clear that detecting and managing risks is a responsibility of the management, sound internal control system plays essential and key role to manage the identified risk with providing assurance. Thus a professional internal auditor needs to position his/her work in the context of the risk management framework of organization in order to achieve its mission precisely. It also means that if an organization does not have a strong risk management framework, that company has a poor internal control system and is not ready for the RBIA (Chartered Institute of Internal Auditors, 2014).

RBIA is an area that evolving rapidly in recent years and however there is no consensus regarding the details of it (Chartered Institute of Internal Auditors, 2014). Elements and characteristics of the RBIA need to be clarified, and an ideal practical framework to implement the RBIA needs to be provided, which covers general steps are supposed to be in audit process.

Objectives of the study are clarifying the elements of the RBIA and providing general and applicable model of it.

The study provides information regarding advantages and difficulties of the RBIA, explains details, clarifies conditions over feasibility of the RBIA, and offers a model which includes steps need to be taken to implement the RBIA.

In-depth interview method has been used to collect the required data. It is a qualitative method assists researcher to conduct individual interviews with experts, evaluate the studied issues and reach a reasonable conclusion. Within the in-depth interview method researchers become direct implementers of the data collection process with face-to-face interviews, it makes them able to observe the data collection process, clarify the questions if there is a need, ask further questions and receive recommendations from the interviewed experts.

1. PROBLEM ANALYSIS OF THE RBIA

1.1. Definition of the Internal Auditing

According to The International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors, "Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes."

Internal auditing is an appraisal or monitoring activity established within an entity as a service to the entity. It functions by, amongst other things, examining, evaluating and reporting to management and the directors on the adequacy and effectiveness of components of the accounting and internal control systems. (BPP ACCA F8 Audit and Assurance, 2015). While the techniques used by internal and external auditing are so similar, the reasons and focus are different. The external audit is focused on the financial statements, however the main focus of the internal auditing is the operations of the entire business. For example, internal auditors may consider risks to reputation of the organization such as the usage of cheap child labor in foreign countries, or strategic risks such as producing excessive products in comparison with the resources available and etc. Variety of reviews and assessments are performed by internal auditor in order to provide the company board of directors with crucial information about whether their directives are being achieved or not Table 1 illustrates the key differences between internal and external auditing.

Generally, large organizations use internal auditing service, either provided by employees of the entity or sourced from an external company, in order to assist management in achieving corporate objectives.

Companies need to take into account below mentioned factors in order to assess the need for internal audit function:

- Evaluate possibility, efficiency and effectiveness of outsourcing of the work
- Request from external stakeholders to build internal audit team
- Evaluation of the costs and benefits of internal audit department
- Scope and complexity of the activities, and efficiency of the system

Table 1. The key differences between internal and external auditing (The IIA Australia)

ASPECT	EXTERNAL AUDIT	INTERNAL AUDIT
Mandate	**Statutory opinion** to shareholders on the accuracy of the company's annual report and **financial statements**.	**Broad based assurance program** set with the Board and Senior Management. This usually includes the adequacy of the company's risk management framework, operational performance of business units, integrity of management reporting and other areas as requested by the Board and Senior Management.
Reporting relationships	Primarily responsibility to **shareholders** via the audit committee and Chief Financial Officer. Also available for questions by shareholders at the AGM.	Primarily responsibility to the **board** via the audit committee. Works closely with management, with the aim of providing independent insight to the senior management, the CEO and the Board Audit Committee.
Areas of focus	**Finance & accounting**	**Organisation wide** – all areas, all departments, all functions.
Standards	Governed by Australian Auditing Standards and relevant accounting standards.	Follows The IIA's Professional Practices Framework – a **broad based** program which ensures objectivity, professionalism & ethics.
Approach	Sufficient work completed to form an **opinion** on the **financial statements**.	Sufficient work undertaken to provide **insight** and given an informed **independent view** to the Board and Senior Management.
Independence	Is **external** to the organisation.	**Part of the organisation** but independent of management - independence is achieved by reporting to the Board (via the Board Audit Committee)
Risk & control	Identifies risks and assesses controls over **financial reporting** and places reliance on controls to the extent practicable. Emphasis is on gaining **sufficient audit evidence** to conclude that the financial statements present a true and fair view.	Provides an independent view on the organisation's risk management, risk assessment and governance processes. Reviews the adequacy of control design **to ensure that risks are effectively managed**, and then tests operation of key controls to ensure they are operating as intended and therefore are effective in managing the company's risk.
Driving results	**Makes recommendations** to improve the internal control environment.	Makes recommendations to improve the internal control environment and to improve the performance of the organisation. Also required by the IIA's standards to ensure that a follow up process is put in place to **drive results** and make sure that agreed recommendations are actioned.
Typical career path	University qualifications in accounting followed by a move into professional services firm, then followed by a move into the **finance department** of a large organisation **or** progression towards **Partnership**.	Broad intake including engineers, accountants and other specialists often with experience outside the audit profession. Will join a company or service provider initially before **fast-tracking into a management or senior finance position** within a sizeable organisation.

Organizations define the scope and nature of internal auditing according their company policy, and there are no general accepted requirements on becoming an internal auditor (BPP, ACCA F8 Audit and Assurance 2015).

IIA has defined four models which can be used to conduct an internal auditing to an organization:

1. In–house

- Internal audit service is managed by an in-house employee of the organization
- Internal audit service is implemented predominantly by in-house employees group of the organization

2. Co–sourced

- Internal audit service is managed by an in-house employee of the organization
- Internal audit service is implemented by a compound of service providers and in-house employees of the organization

3. Outsourced with in–house management

- Internal audit service is managed by an in-house employee of the organization
- Internal audit service is implemented by service providers who have contract with the organization for internal auditing purpose

4. Fully Outsourced

- Internal audit service is implemented by service providers who have contract with the organization for internal auditing purpose
- Internal audit service is managed by the service provider
- Service provider contract is approved by an in-house employee of the organization

1.2. Function of the Internal Auditing

Strategy of the company must drive internal audit designing process in order to prevent possible overlooking of key strategic issues (PWC, 2003). Internal auditors work with management in order to implement their two key roles – ensuring the effectiveness of risk management system and ensuring how organization implement its strategy according to business risk. More precisely, internal auditors' reviews are aimed to identify whether or not risks are managed properly in respect of strategic needs of organizations. Those reviews also identify need for innovations and actions need to be taken to increase effectiveness. Internal auditors may work in public, private and non-profit sectors.

As I mentioned earlier, the scope of internal auditing depends organizations. Thus, internal auditors may work across all parts of an entity. Financial control is core area of internal auditing, in addition to that auditors review the tangible aspects of organizations, such as supply chain or IT systems and intangible aspects such as culture and ethics. The audit committee need to contemplate internal auditing role within the organization, and consider whether remit and status of internal audit reflect the organization's requirement and overall assurance framework of organization (Institute of Chartered Accountants in England & Wales, 2004). According to IIA, internal auditing generally encompass (IIA 2014):

- Assurance services – objective examination of evidence in order to provide an independent risk management, control and governance processes assessment
- Consulting services – advisory and related activities which are designed to add value and improve organization
- Value adding services – focusing on the economical, efficient and effective usage of finances and resources

Internal auditors implement an approved audit plan in order to support boards via the following tasks (Marquette University, 2016):

- Verification of the presence of assets
- Recommendation safeguards for protection of assets against frauds
- Evaluation of internal control system
- Recommendation improvements for control system
- Assess compliance with international, state, federal and contractual obligations
- Review whether the operations are being implemented as planned
- Investigate possibility of fraud, embezzlement, theft, waste and etc.

International Professionals Practices Framework (IPPF) provision guidance for internal auditors which provided by IIA. Internal auditors are supposed to have efficient knowledge to appraise the risk of fraud in their organizations, and are required to report to the board about the fraud risks determined during auditing. According to IPPF, the internal audit activity covers evaluating the potential fraud and how the organization manages its occurrence. The board and management should be provided with objective assurance by the internal auditors which ensure that fraud controls are functioning effectively and able to identify fraud risks. During their assignments, internal auditors should allot an adequate time and attention to evaluating internal controls related to fraud risk management. Having a well-defined response plan is also obligation in order to cope with potential frauds uncovered while an internal audit assignment. (Deloitte, 2012).

According to the European Confederation of Institute of Internal Auditing (ECIIA), internal auditing composes the organization's third-line defense (Figure 1). An independent risk-based internal audit function provides assurance to the board of directors and senior management. This assurance answers the question whether or not the organization assesses and manages the risks effectively and includes assurance on the operations of the first and second lines defense. All elements of an organization's risk management framework (risk identification, risk assessment and response, communication of risk-related information) and all categories of objectives (strategic, operational, reporting and compliance) are encompassed by this assurance (ECIIA, EcoDa 2013).

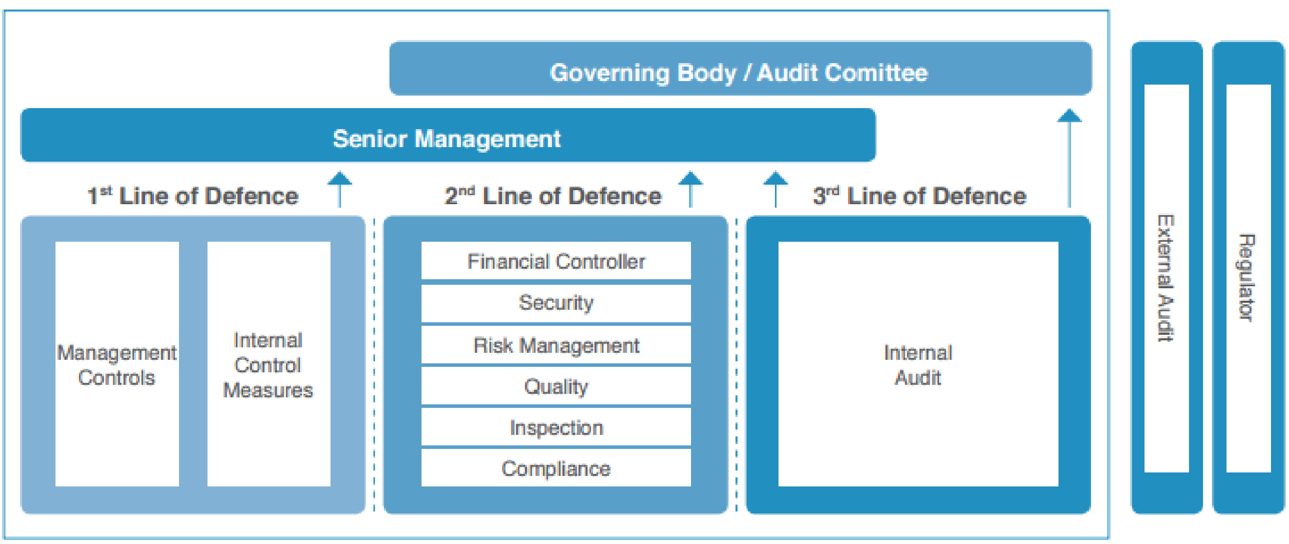

Figure 1. The "Three lines of Defense" structure – the internal control levels of an organization (ECIIA, EcoDa 2013)

Numbers and proficiency of staff are crucial in terms of sufficiency and efficiency of the internal audit function, as well. The chief audit executive (CAE) is responsible to report about any possible resource limitations to the board. The knowledge, skills, and other competencies should be possessed by internal audit staff in order to execute the internal audit function.

Anders Jansson divides internal auditing at least into the below mentioned categories according to the audit technique or objective (World Bank library, 2004):

- Systems based audit – refers to an in-depth evaluation on the internal control system in order to assess effectiveness of control, the completeness and accuracy of financial statements. Substantive testing of a number of account balances, transactions and etc. should be implemented by systems based audit in order to determine accuracy and completeness of the financial statements of the auditee.
- Performance audit or Operational audit – assesses whether or not the activities have been managed with economical, effective and efficient way.
- Financial or accounting audit – evaluates how the accounting related procedures and practices are implemented accurately.
- Compliance audit – which evaluates whether or not the entity conforms and adherences with relevant policies, plans, procedures, laws, regulations, and contracts.

1.3. Main Basis of the Internal Auditing

According to the IIA, effectiveness of internal auditing is articulated by core principles. All principles ought to be presented and operated effectively in order to function effective internal audit process. How an internal audit activity indicates accomplishment of the core principles could be quite different from organization to organization, but failure to achieve any of the required principles would imply ineffective internal audit activity.

Norman Marks, who was privileged being a member of the Re-look" Task Force (RTF – responsible modifications to the existing International Professional Practices Framework structure in order to benefit IIA members and strengthen ongoing relevance of International Professional Practices Framework for the foreseeable future), has mentioned on his blog that, "The RTF debated whether the IIA standards are rules-based or principles-based. We all felt that they are principles-based, so somebody asked what those principles are. After a lot of discussion, we developed ten that after minor word changes are the Core Principles listed below (normanmarks.wordpress.com, 2015)."

- integrity
- competence and due professional care
- objectivity and free from undue influence (independent)
- arrangement with the strategies, objectives, and risks of the organization
- positioning and resourcing adequately
- quality and continuous improvement
- effective communication
- provision risk-based assurance
- being insightful, proactive and future-focused
- support organizational improvement

Afterward the IIA announced proposed up-dates to the International Professional Practices Framework in 2014. The changes covers a new mission statement and a set of twelve core principles for internal auditors to follow, which includes two more principles in comparison with previous one:

- Being established and authorized appropriately within the organization
- Delivering with efficient and effective way

The publication of these principles are supposed to make understanding easier for internal auditors and mention the things are needed to pay attention. Moreover, the principles should improve effectiveness of communication with key stakeholders.

The principles could be classified under three groups with below mentioned way in order to provide a logical and useful segmentation:

1. The principles related to the individual internal auditor and collectively to the internal audit activity which could be defined as input.

- Integrity
- Objectivity
- Competence

2. The principles related to the internal audit activity and processes which could be defined as process.

- Being established and authorized appropriately within the organization
- Arrangement with the strategies, objectives, and risks of the organization
- Resourcing adequately
- Quality and continuous improvement
- Delivering with efficient and effective way
- Effective communication

3. The principles related to the results of the internal audit activity which could be defined as output.

- Providing reliable and risk-based assurance
- Being insightful, proactive and future-focused
- Promoting positive changes

Above mentioned principles are purposefully named as "core" principles, it means other principles could be applied to the internal audit activity, but these 12 have been deemed by the RTF as the most critical to indicating effectiveness. According to the RTF, future guidance would be required for the principles in order to guide practitioners (IIA, 2014).

1.4. Definition of the Risk Management

Many accepted definitions on risk management have been being used. According some definitions, risk management is based on the decision-making process which excludes the identification and assessment of risk, while others thinks that risk management is complete process which includes risk identification, evaluation and decisions around risk issues. Another well accepted descriptions: Risk management is a systematical approach to defining the best way of action under uncertainty by identifying, assessing, understanding, acting on and communicating risk issues (Heinz-Peter Berg, 2010). Risk management is aimed to ensure uncertainty does not deviate the effort from the strategic goals (Ricardo, Vicente, 2015). Risk management is the going on process to define, analyze, assess, and treat possible financial loss due to loss of use, damage or financial claim and monitor risk controlling and financial resources in order to diminish the reverse effects of loss (Marquette University).

Figure 2 illustrates steps of the risk management according to above mentioned definitions.

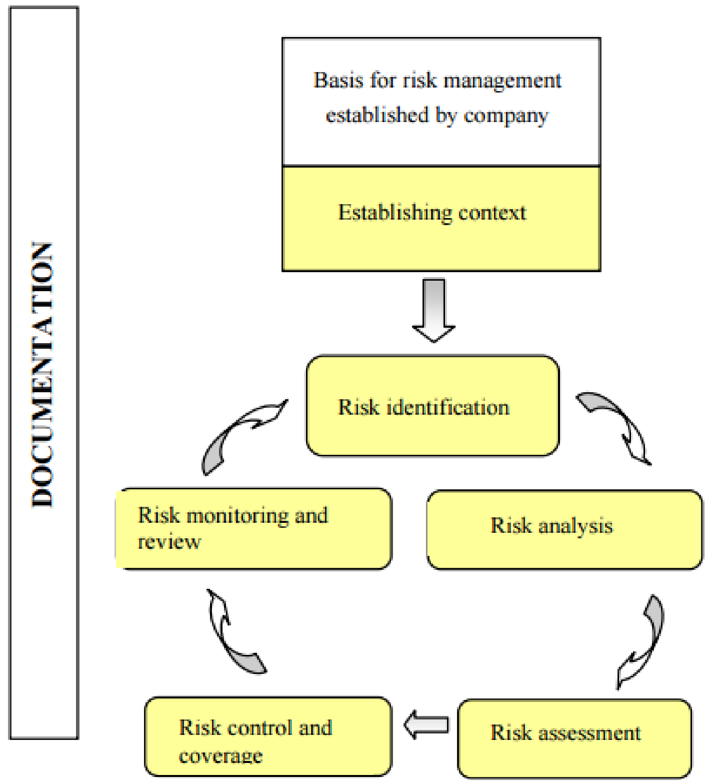

Figure 2. Risk management process (Marquette University)

According to the Committee of Sponsoring Organizations of the Treadway Commission (COSO), enterprise risk management is a process, effected by the 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 the risk appetite, to provide reasonable assurance regarding the achievement of objectives (COSO's Enterprise Risk Management – Integrated Framework, 2004). Enterprise Risk Management, expands the subject of risk management, and defines the risk as anything that can prevent the company from achieving its objectives (Marquette University).

1.5. Risk Management Standards

As risk management includes understanding, analyzing and addressing risk to make sure organizations meet their objectives, it has to be appropriate to the complication and type of organization. Below mentioned standards are used commonly on Risk Management (Institute of Risk Management, 2016):

- ISO 73:2009 – Risk Management – Vocabulary

Risk and risk management are defined differently, ISO Guide 73:2009 defines the risk as "effect of uncertainty on objectives". Guide 73 takes into account the application of this definition as well and states that positive or negative effect and a deviation from the expected result is possible, and that risk is often defined by an event, a changing in circumstances or a consequence. Thus, there is a link between objectives and risks. Therefore, application of this definition of risk depends completeness of organizations' objectives. Even in case that objectives are stated fully, testing of the assumptions, on which objectives are based, is a required part of the risk management process. All risk-involved activities of an organization should be managed. The risk management process assists decision making by considering of the possibility and uncertainty of intended or unintended future events or circumstances and their impacts on appointed objectives.

- ISO 31000:2009 Risk management — Principles and guidelines

Cope of this International Standard covers general principles and guidelines of risk management which is not specific to any industry or sector and can be used by any public, private or community enterprise, association, group or individual for wide range of activities, including strategies and decisions, operations, processes, functions, projects, products, services and assets. This International Standard is applicable to any type of risk, regardless its nature. ISO 31000:2009 is not supposed to use for the certification purpose and promote uniformity of risk management for all type of organizations. As different organizations have different objectives, context, structure, operations, processes, functions, projects, products, services, assets and practices employed, the design and implementation of risk management plans and frameworks need to be matched mentioned factors.

- ISO/IEC 31010:2009 - Risk Management - Risk Assessment Techniques

It has been mentioned that IEC 31010:2009 is supposed to support ISO 31000 and guide risk assessment with selection and implementation of systematical techniques. Risk assessment is implemented according to contribution of standard to other risk management activities. ISO/IEC 31010:2009 is not supposed to use for the certification regulatory or contractual purpose, and it doesn’t provide specific criteria for identification of need for risk analysis and specific risk analysis method for a certain application. It doesn’t cover all techniques, and doesn’t define validity of other techniques which haven’t been provided by this standard.

- A Risk Management Standard – IRM/Alarm/AIRMIC 2002 – developed in 2002 by the three main risk organizations of the UK

The IRM/ALARM/AIRMIC standard emphasizes the necessity of connection among risk management, strategic & operational objectives and culture of the organizations, and the opportunities & threats affect those objectives. Past, present and future activities of the organizations must be methodically addressed by risk management. Risk management should implement translation of the strategy to tactical & operational objectives and assign responsibility along the organization’s staff who is responsible for the risk management as part of their job. Moreover, risk management promotes operational efficiency at all levels with supporting performance measurement, accountability and reward, increases the prospect of success, and decrease both the possibility of failure and the ambiguity of achievement the overall objectives of organizations. Figure 3 provides information about the risk management process according to the IRM/ALARM/AIRMIC.

- Australia /New Zealand Standard AS/NZS ISO 31000: 2009

AS/NZS ISO 31000: 2009 is applicable to a very wide range of activities, decisions or operations of any public, private or community enterprise, group or individual. The elements of the risk management process are specified by that standard. It is stressed that providing uniform risk management systems is not purpose of this standard, and objectives, products and services, processes and employee specification of an organization influence the implementation of the risk management system. The objectives of this standard includes: a more certain and exacting basis for decision-making and planning; better recognition of opportunities & threats; gaining advantages of variability; pro-active rather than re-active management; more effective usage of resources; improvement of incident management and reducing the cost of risk, with the inclusion of commercial insurance premiums; improvement of stakeholder trust and confidence; improvement relevance to legislation; and better corporate administration.

- COSO - Enterprise Risk Management - Integrated Framework

Figure 3. Risk Management Process (IRM/ALARM/AIRMIC)

This standard describes ERM as a process that provisions a strong and comprehensive top-down view of key risks an organization can face. COSO highlights four areas that increase understandability of ERM:

1. Understand the risk philosophy of organization and concur with the risk appetite of organization
2. Know the extent of established risk management of organization
3. Review the portfolio of risk of organization and match it with the risk appetite of organization
4. Be informed about the most significant risks and appropriate responses

1.6. Basis of the Risk Management

According to the AS/NZS ISO 31000: 2009 (which supported by ISO/IEC 31010:2009–Risk Management, IEC/FDIS 31010 Risk Management–Risk Assessment Techniques and ISO Guide 73:2009–Risk Management–Vocabulary), there are eleven core principles on risk management (AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines, 01 Fact Sheet 2010):

1. Creation and protection of value: As the risk management process is supposed to add and maintain value to the organization, first principal covers organizational context. Management, staff and stakeholders should understand the benefits and contributes of risk management to the achievement of the organizations' objectives.
2. Being an integral part of the organizational processes: There should be integration between risk management and agency's governance framework within planning processes, at both the operational and strategic level. The risk management should not be understood as a stand-alone process, but should be integral part of routine continuing decision making and organizational processes.
3. Being part of decision making: As mentioned at second principle, risks should be considered on decision making process. Whenever decisions are made, the possible increasing and decreasing effects of process, product, operational, strategic decision and etc. of on risk have to be considered on risk levels. The risk management process support decision makers to choose the most appropriate action with making options more informative and identifying priorities.
4. Addressing uncertainty explicitly: Identifying of potential risks makes organizations able to implement controls and maximize the chance of gain while minimizing the chance of loss.
5. Be systematic, structured and timely: Risk management needs being systematical and structured and keeping the big picture in mind (managemenetstudyguide.com). Risk management process ought to be coherent across the organization in order to ensure consistency, efficiency and the reliability of results.
6. Being based on the best available information: It is crucial to understand and take into account all availability, relevancy and limitations of information on an activity in order to manage risk effectively.
7. Being tailored: Risk profile, internal and external operating environment should be taken into account by risk management framework.

8. Consideration of human and cultural factors: Risk Management should consider the human and cultural factors in order to ensure that each staff knows and is suitable his/her roles at each part of the risk managing process. More precisely, contribution people and culture on risk management needs and objectives achievement process need to be recognized.
9. Being transparent and inclusive: Full clarity need to be provided – how risks are identified, estimated, measured and controlled and etc. Communication and consultation are the key factors to identifying, analyzing and monitoring risk.
10. Being vibrant, iterative, responsive and sensitive to changes: The risk management process needs to be flexible. Organizations are required to consider the context for managing risk, identifying new emerged risks, making allowances for cleared-away risks.
11. Facilitate the continual improvement of organizations: Organizations should be capable to improve and enhance their risk management strategies and tactics in order to be able to manage continually-improved risks. Thus organizations need to invest to their resources over time in order to demonstrate the continual achievement of their objectives.

2. THEORETICAL SOLUTIONS OF THE RBIA

2.1. Introduction to the RBIA

It is obvious that internal audit is the crucial part to security strategy of any organization. Internal Audit ratifies whether or not existing control system protects business and determine when new requirements for control system, enable staff to meet regulatory requirements. In other word, internal auditors use the general checklists to determine compliance (The Institute of Internal Auditors, 2008). However, risk based internal auditing requires having deep knowledge about the business function and objectives of companies. As every company has different culture, structure and attitude to risk, internal audit departments need to absorb these differences in order to implement RBIA. In a risk-based audit approach, auditors are not just relying on risk; they also are relying on internal and operational controls as well as knowledge of the company or the business. Hence RBIA is more proper methodology to assess business risk, and allows managers to make informed decisions which based on risk appetites (the risk that a business is willing to accept) of their organizations (Ernst & Young, 2012).

The main focus of the RBIA is the objectives of the organization rather than internal control. It is the thing organizations expect from their internal auditors, since organizations fail when they do not achieve their objectives, this approach ensure the governance and management their organizations are on the true way to meet their goals. Internal auditors might take into account risk while doing an annual audit plan, but when it comes to implementation stage, they tend to focus on auditing internal controls which is familiar area and they feel more comfortable. Within the RBIA auditors are concentrating on the corresponding threats and risks which are biggest obstacles in front of organizational objective meeting process (Mefford, 2014).

The Chartered Institute of Internal Auditors defines RBIA (Risk Based Internal Auditing) as a methodology that links internal auditing to an organization's overall risk management framework (The IIA, October 2014) in order to provide assurance that risk is being managed by the management according to the defined risk appetite level.

In the last few years, the risk management started to be recognized as a crucial part of smooth organization governance practice. That trend is putting entities under increasing pressure to define all the business risks they may face and to clarify how to manage them. It is fact that the activities taken to manage risks are recognized as playing an essential and central role to maintain a sound internal control system.

As I mentioned earlier, every organization has different structure, processes, culture language and attitude to risk. These ideas need to be adapted to the by internal auditors in order to implement RBIA precisely.

Increased management involvement of auditors is required under the RBIA approach. As there are some elements in all parts of the organization which are covered under RBIA approach, audits may involve to strategic management never before done. In order to able to answer new challenges the internal auditor team may need to involve a greater number of more senior managers than might be involved in traditional audits (The IIA, May 2014). The chief officer of internal audit might be required to market the advantages and the need for RBIA. A much superior profile may be necessary in non-financial areas to initiate the way for audits that managers can understand and promote. Internal auditing team require more capable members which have business skills, facilitating, influencing, interviewing and problem solving in order to implement the RBIA. The expansion of the audit universe, in order to answer all risks which threat the objectives of organizations, requires the internal auditor to conclude on the design and implementation of responses to determined risks in areas that may be new.

Objectives, risks, processes for responses and monitoring controls, tests and reports are main elements of the RBIA (The IIA, May 2014).

RBIA provides an audit with guidance from an individual audit report back through tests, processes and risks to objectives, and forward to the audit committee report on whether those objectives are threatened (David Griffiths, May 2015).

An organization which has poor or no risk management is not ready for Risk Based Internal Auditing. More importantly, it also means that the organization has weak internal control system. RBIA is able to be implemented precisely only in risk enabled and risk managed organizations. Internal auditors of the organization should promote proper risk management practice in order to improve the internal control system.

The main difference of the RBIA is that it is driven by objectives and risks of the organization, rather than internal auditing. It means that objectives and risks define duration and extension of internal audit. There is not any separate list about objectives and internal audit risks, it depends different factors which affect company. While traditional internal audit is responsible to take controls on financial and fraud risks and possible IT risks, RBIA deals with the organization objectives and provides an opinion whether or not internal controls are able to reduce the risks, which threat achievement of those objectives, to an acceptable level.

Examination and testing stages need to be divided into individual audits at the risks with the highest inherent scores in practice. According to David Griffiths (2015), the first step of RBIA is determining existence of objectives, risks and internal control, the second is evaluating suitability of that determination as the basis for audit planning and establishing the 'Risk Maturity'. It means internal auditing is able to provide an opinion according to determined risks.

2.2. Advantages and Difficulties of the RBIA

An effective risk management framework improves an organization governance and assists to achieve its objectives over the long period. An advantage of the RBIA is making a clear and crucial contribution to the risk management framework by provisioning objective assurance and by facilitating management's efforts to improve the framework. It guarantees that internal audit resources are directed towards assessing the management of the most significant risks.

However, RBIA is a rapidly evolving area, there isn't general accepted way to execute it. It is more difficult to manage RBIA than traditional methodologies, but its advantages are much greater:

- Management identify, assess and respond whether risks are above or below than risk appetite
- The responses to risks within the risk appetite are effective for managing inherent risks with preventing excess
- Where it is identified that residual risks don't match with the risk appetite, appropriate actions can be taken to remedy that
- Risk management processes, including the effectiveness of responses and the completion of actions, are being monitored by management to ensure they continue to operate effectively
- Risks, responses and actions are being clearly categorized and reported.

Those enable internal auditors to provide the CEO with needed assurance on three areas:

1. Risk management process, how well it has been being designed and implemented

2. Management of key risks for organizations, includes the effectiveness of the internal control systems

3. Completeness, accuracy and appropriate reporting and classification of risks

RBIA is an effective way for the internal audit activity to achieve targets such as:

- The audit plan compilation which ensures that the internal auditing meets its charter
- Gaining acceptance from managers that it takes convenient action in order to manage risks within the risk appetite

- Providing of objective assurance in the three main areas (interest rate, investing and embezzlement & online fraud risks (Arthur F. Rothberg, 2013)) of risk management
- Keeping activities within the budget set

The following specialist knowledge may be required to answer the new challenges have been brought by the RBIA:

- Use already available specialist skills within the internal auditing, e.g. computer assisted auditing techniques
- Provide required training to auditors e.g. provide training about the regulations and practices of stress management to an auditor who already has an advanced qualification on Internal Auditing and Management
- Recruit temporal or permanent experts from inside the organization in order to assist RBIA, e.g. a warehouse manager from another subsidiary may audit warehouse processes of another
- Use temporary experts from outside of the organization in order to assist RBIA, e.g. treasury specialists

2.3. Practical Framework of the RBIA Offered by J. Mefford

First of all we need to remind the explanation of internal audit provided by the IIA. “Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes."

We will have the following results, if we summon this definition – as an auditor, we are supposed to add value and make operation of organization improving in order to assist objective accomplishment process.

If we sum up principles of internal auditing with the definition, we will see that – internal auditors are supposed have independent, objective, systematic and disciplined approaches.

The definition also provides information that risk management, control and governance are the areas we need to evaluate and improve.

Jason Lee Mefford mentions on his book that, when he shows below mentioned table (Table 2) to the auditors during trainings, they respond left column. After providing information regarding RBIA, and necessity of internal auditing to help organizations to meet their objectives, they change their minds regarding audit universe. Mefford mentioned that the items on the right column contain higher risks, and have much more influences to most companies accomplishing their objectives.

Table 2. The items are highest risk (Mefford, 2014)

Which is the highest risks?	
Adequacy & effectiveness of accounting controls	Corporate planning
Capital expenditures	Health & safety
Physical security of assets	Investor relations
Financial systems	IT strategic planning
Systems under development	Human resources
Expense reports	Marketing

The question is needed to ask, if the items on the right column contain much more risks for the organizations, why does the conventional internal auditing spend much more time to audit the items on the left? Hence, Audit Universe is supposed to cover the activities which have much more effects on objectives.

The RBIA framework consists of seven components (Mefford, 2014). These components combine the risk management and internal audit concepts, and provide ideal risk-based internal auditing approach:

1. Understanding. Success rate of implementing RBIA is limited with our objective understandings. In other word, internal auditors are supposed to understand the objectives of organization to be able to help the organization on objective accomplishment process. Hence, organizational objectives are the starting point while developing audit plan within risk-based internal auditing, and risk assessment is performed to rank audit universe. Beside objectives, internal auditors need to understand external & internal contexts, and culture of the organization.

Within establishing the context, organization articulates its objectives, identifies external and internal parameters need to be taken into consideration while managing risk and sets scope and risk criteria for the remaining process (AS/NZS ISO 31000:2009).

- The external context covers environment in which the organizations operates to meet its objectives. Forces, events and conditions of the external environment may have either positive or negative effect on the firm. On the website of Chartered Accountants Australia and New Zealand followings mentioned as the forces of external environment – social, regulatory, legislative, cultural, competitive, financial, and political. Mefford mentions industry, market, technological, social, regulatory and geopolitical categories as the forces. It should mentioned that as environment is a dynamic notion, and opportunities, threats change and it is required to reassess the actions need to be taken and control measures.
- The internal context. It covers internal environment in which the firm operates to obtain its objectives. According to the ISO 9001:2015, internal context includes – offered product and services, structure of the organizations, roles in the governance, accountability, regulative requirements, goals and strategies to achieve them, assets like property, plant, equipment, facilities and technology, capabilities in terms of resources and knowledge like capital, people, time, systems and processes, formal and informal information flows and decision-making processes, internal relationships within the firm, culture of the organizations, models and guidelines employed by the firms. Mefford refers culture of the organizations separately from internal context. Chartered Accountants Australia and New Zealand counts risk tolerance and risk appetite of the firms as a factor within internal context.
- Culture – as I mentioned above, Mefford take into account culture as a special area within the RBIA. He divides it into four categories: ethical which covers beliefs regarding responsible behavior and integrity to answer the question how extent our organization is ethical, risk culture constitutes risk appetite, model of risk-taking behavior and impact of risk on decision-making process to answer the question what is the extent of the risk we are ready to take, governance culture makes up allocation of decision-making authority to answer the question what is the extent of collaboration within our company, and workforce culture which includes employee satisfaction and loyalty to answer the question which extent our employees concern about the future of the firm.

2. Identification. It is the second step which information gained about objectives, external & internal context and culture are being taken into consideration to assess areas of high risks internal auditors should consider for audit. Auditors start to sort forces out three groups; opportunity – the forces cause desirable effects, threat – the forces cause undesirable effects on the objectives achievement and requirement – the forces obligate the firm to set particular rules.

Table 3 covers an example to implement Understanding and Identify steps of the model before deciding over investment options in two different countries. First of all we need to decide on financial assumptions regarding options in order to have a general map about expectations. Then we need to understand internal and external forces, afterwards we can identify opportunities, threats and requirements regarding the each options. After identification of opportunities, threats and requirements, it is time to decide on possible audit projects to meet the objectives.

Properly developed audit plan is one of the key step of the RBIA and it should be based on the objectives of the organizations. That step involves risk management steps. Mefford mentions that risk management process follows these steps within the RBIA regardless the framework is used.

- Understand the organizational context and culture
- Understand the objectives of the organization
- Understand the key strategies being used to accomplish the objectives
- Identification of opportunities, threats and requirements to obtaining objectives
- Determine whether or not actions and controls has been implemented by the management to reduce risks to an acceptable level
- Identify the key performance indicators (KPIs), key risk indicators (KRIs), and key compliance indicators (KCIs) are being used by the managers to monitor and obtain information on effectiveness actions and controls
- Assessment of the levels of inherent reward, risk and conformance to the risk analysis criteria for the firm
- Identify items whose inherent reward, risk and conformance exceed the tolerance level of organization in their audit universe
- Rank the items of the risk universe which having the highest impact on the organization on objective accomplishment process

Summing up the steps say us, audit plans based on inherent risk (this risk is not posed by failure of control, it originates from an error, fraud or omission before consideration the effectiveness of internal control) within the RBIA. Then tests are needed to decide the level of residual risk (risks remain after implementation of control) and determine whether risk is being managed within risk appetite or not. Finally, we need to rank the items of the risk universe which having the highest impact on the objectives.

Table 3. Details of Understand and Identify steps of the model (Mefford, 2014)

	Purchase Option 1 in Country A	Purchase Option 2 in Country B
Financial assumptions	• Anticipated 50% increase in sales • Low labor costs • Anticipated 20% profit margin	• Anticipated 20% increase in sales • High labor costs • Anticipated 5% profit margin
Internal forces	• Existing team, no existing executive • IT infrastructure is weak • HR infrastructure is moderate • Legal infrastructure is moderate	• Existing team and executive • IT infrastructure is strong • HR infrastructure is moderate • Legal infrastructure is strong
External forces	• #160 on Corruption Index • New government elected 6 months ago on promise to increase incentives for of foreign investment and business • Low corporate tax rate • Skilled salespeople available	• #15 on Corruption Index • Stable government with national elections in 6 months • High corporate tax rate • Skilled salespeople plentiful
Opportunities	• Greater than expected increased level of sales • High profit margin • Lack of senior executive would allow for easy transition of existing company expat to run new business • Foreign investment incentives • Weak IT infrastructure would allow for change to standard company IT system soon after acquisition	• Current executive and team means little need for management change at first • Plentiful amount of skilled salespeople may be willing to work for lower wages, should not be a problem replacing employees • Low corruption index implies a stable on honest business climate
Threats	• Possibility of corruption is high • Weak IT infrastructure may lead to poor operational performance and difficulty in reporting • If desire is to let acquired company operate independent it may be difficult without an executive	• High labor costs could mean collective bargaining agreements, union negotiations and significant employee entitlement benefits. • Anticipated sales increase of 20% may be overstated in M&A work resulting in organization not attaining at least 20% sales increase in next year • National election in six months could bring in new government with different agendas and regulations
Requirements	Foreign investment regulations	• High tax rate and possible complex regulatory environment • Complex labor laws and regulations

Regarding the Audit Universe, internal auditors need to take into account stakeholder expectations of board members, other managers or audit committee from internal audit activity within the RBIA. In other word, internal auditors can contact with all authorized people before drawing Audit Universe.

RBIA should start with the objectives, the key strategies is used to achieve objectives and then opportunities, threats and requirements are listed to identify risk, and audit project.

Simple spreadsheet model need to be created to rate each audit project systematically. It also helps us to see which audit projects might have the much more impact to assist our organization to ensure that organization accomplish its objectives.

Certain criteria need to be established to rate the projects. According to ISO 9000:2005 (Fundamentals and Vocabulary) and ISO 19011:2011 (Guidelines for Auditing Management System), audit criteria is used as a comparative reference against which audit evidence. Criteria is a way to assess whether or not an organization's performance which subjected to audit meets audit objectives. Auditors assess the performance against this criteria which is the standard of performance (Office of the Auditors General Canada, 2013). Followings should be considered to set the criteria;

- Sufficient number of criteria – usually 5-7
- The criteria should help the internal auditors to identify what is most important to the main stakeholder.
- Objectives of organizations should be taken into account in criteria analysis
- Process, policies, procedures and etc. of the firm
- Regulatory requirements

We can use the next example (Table 4) to explain some details regarding concept. We will assume that an organization aims to increase its revenue by 20% as an objective, and the organization is planning to purchase shares of a foreign company in a foreign country to meet mentioned objective. Firstly, possible opportunities, threats and requirements are going to be clarified, before starting to identify risks and audit projects.

Table 4. An example of Project Identification

Objective	**Strategy**	**Opportunities, threats and requirements**	**Identified risk**	**Inherent risk**	**Audit projects**	**Hours**
Increase revenue by 20%	Purchase company XYZ	Bribing is high level (rank 119/168) in the operational country according to the Transparency International index	Illegal acts	High	Anti-corruption actions and controls at the company	320
Increase revenue by - 20%	Purchase company XYZ	Currency of the country is fluctuating significantly over the last two years	Currency risk	High	Foreign currency strategy of the company	240
Increase revenue by 20%	Purchase company XYZ	Return on investment can be lower than expected within Mergers and Acquisitions work	Investment and Valuation	Medium	Post-modern audit (risk focus, people oriented) of the company	160

After this step, we need to select a particular audit project that will assist us to decide whether or not management's actions and controls are efficient to diminish the risk to a level below risk tolerance. But before we need to establish criteria. I think following five criteria are useful in our case:

- Findings of prior audit

- Interest or concern of management
- Changes in staff compared prior year
- Impact of implemented projects on objectives
- Materiality of project

Findings of prior audit – if there are findings or issues in selected areas of the firm in the past, we will be closer to uncover findings and issues in the future.

Interest or concern of management – we need it to meet stakeholder expectations. Especial concerns or requests of management team should be identified and considered in the internal audit process.

Changes in staff compared prior year – if new people have been attended, it means they are in their initial learning periods and within the learning curve much more mistakes and errors made by employees.

Impact of implemented projects on objectives – projects with higher impacts should be tested first. Projects should be ranked according relations to key organizational objectives. It will definitely increase impact if audit project on objective achievement, and it is the main difference of the RBIA.

Materiality of project – higher priority need to be given, if the project area covers a considerable part of assets or generate huge part of annual revenue.

We need to assign domain ratings which help us to decide whether the project area holds high, medium or low for considered criteria. Table 5 is a practical example for the Domain rating.

After determination of the rating steps, we can draw a table combines audit projects and criteria. We have three projects from Table 4 – anti-corruption actions and controls at the company, foreign currency strategy of the company, post-modern audit (risk focus, people oriented) of the company and five criteria based on the domain rating from the Table 5.

Table 5. An example of Domain Rating

Criteria	**Low**	**Medium**	**High**
Findings of prior audit	0 – 2 findings	3 – 6 findings	7+ findings

Interest or concern of management	Low management interest in area	Significant management interest in area	Specific request made by management to internal audit to test this area
Changes in staff compared prior year	No significant change	Changes either management or process flow	Changes in both management and process flow
Impact of implemented projects on objectives	Failure of actions and control have a minor impact on objective achievement	Failure of actions and control have a moderate impact on objective achievement	Failure of actions and control have a significant impact on objective achievement
Materiality of project	0 – 5% of total assets or revenue	5 – 20% of total assets or revenue	20%+of total assets or revenue

As each criteria have different effect in our decisions, we need to assign a weighting figures for all of them to select a final project for audit. In my example, percentage weightings have been given to the each criteria.

It is appropriate to give 35% to the criteria of Impact of implemented projects on objectives, since it this one represents the main superiority of the RBIA. Taking into consideration Interest or concern of management is another difference of the RBIA compared conventional internal audit, thus it is given 30%. Moreover, materiality of project is slightly more important than other remaining two projects, since it is given 15% and 10% is given to Findings of prior audit and Changes in staff compared prior year (Table 6).

Table 6. An example of project ranking, 3 high risk, 2 medium risk, 1 low risk

Audit Projects	**Findings of prior audit**	**Interest or concern of manageme nt**	**Changes in staff compared prior year**	**Impact of implemented projects on objectives**	**Materiality of project**	**Total Rating**
	10%	30%	10%	35%	15%	**100%**

Anti-corruption actions and controls at the company	3	3	3	3	3	**3**
Foreign currency strategy of the company	2	3	2	3	2	**2.65**
Post-modern audit (risk focus, people oriented) of the company	2	2	2	1	1	**1.5**

We need to apply the same procedures to all major objectives of organization to implement the model, and decide on potential audit projects for the considered strategies. Then total rating needs to be calculated for each project in the audit universe, and projects need to be ranked on the list according rates (highest rated on top). This list will provide a road map for internal auditors regarding priority of the next year projects.

3. Assessment. This step covers measuring the inherent risk levels and helps individual engagement planning. Within RBIA application, internal auditors need to shift their “mental gears” from controls focusing to risk focusing, and The IIA Practice Advisory 2210.A1 requires that relevant risks should be identified and assessed by internal auditors to the activity under review to aid the engagement planning. Objectives of the engagement should reflect the risk assessment results. Below mentioned areas need to be considered to help assessment of residual risk level:

- inherent reward (intrinsic motivation to tasks)
- inherent risk
- inherent compliance, risk makes up natural and inseparable regulative characteristics (Washington Bankers Association, 2015)
- taken actions and effectiveness of controls design

This step helps us to prioritize the areas of audit concentration. It also helps to determine whether actions and controls are effective or not. As a result, if it becomes clear that actions and controls are not effective, within the Risk Based Internal Auditing there is no reason to proceed the process to next step (Mefford, 2014), and auditors should provide recommendations to management regarding modification of the actions and controls to boost effectiveness in order to be able to reduce the risk to an acceptable level.

4. Planning. This step include engagement planning. Engagement planning constitutes developing the work program over determination the engagement objectives, deciding the engagement scope, resources planning including staffing & budgeting.

5. Performing. After understanding, identification, assessment and planning of highest audit engagements priorities, it is time to perform the audit projects. Perform components include:

- Analyze & Evaluation
- Documentation

Performance steps are same with conventional internal audit. However, audit work need to be performed with considering the links to the underlying objectives.

We need to test the actions and controls to express reasonable assurance opinions to management. Below mentioned testing procedures can be selected to perform our testing:

- Physical examination,
- Testing documentation,
- Observing,
- Inquiry,
- Corroborative inquiry,
- Computations and analysis
- Comparing

Results of our testing need to be documented in working papers. First of all we are going to use within next step, and secondly it could be used as a criteria to rank audit projects like I did on identification step.

6. Reporting. It is being implemented through verbal and written communications.

Firstly, draft audit report is prepared which are spread out to the appropriate management for comment. After the draft report, the final report is made which includes:

- engagement purpose and scope,
- audit methods for testing,
- the testing results,
- distribute recommendations includes management action plans to the appropriate stakeholders

7. Monitoring. Internal auditor should monitor the progress of recommended action plans. It includes following up designated management action plans related to issues. Actions and controls need to be changed in areas residual risk has not been reduced to an effective level. Internal auditors should monitor:

- Significant changes regarding context, culture and objectives
- Requests of managements

Above mentioned two areas are the main differences and superiorities of the RBIA, hence they need to be monitored separately.

If we sum-up the model offered by Mefford, it is made up by following seven steps:

1. Understanding
2. Identification
3. Assessment
4. Planning
5. Performing
6. Reporting
7. Monitoring

2.3. Assumptions on the RBIA

First of all I would like to review objective reasons behind emerging of the RBIA in order to be able to have a better idea on the issue. Historically accounting and financial controls have been major audit areas focused by the internal auditors. Hence, internal auditors of the companies have accounting and finance backgrounds. Internal auditors have been guarantors of keeping organizations out of trouble. However, corruption scandals in the late 1970s and 1980s made people to question the work of internal controllers. As a result, Treadway Commission was established by the United States Congress, and that commission set up Committee of Sponsoring Organizations (COSO) to address the problem. Internal Control Framework was built by the COSO as a solution. Financial failures in the early 2000s again caused arising of questions regarding need to have a better internal control system and introduction of The Sarbanes-Oxley Act of 2003 was supposed to solve the shortcoming. The crisis in 2008 hit the global economy, drawbacks in risk managements started to be questioned. It became clear that focusing only on the internal control is not enough to keep organizations away from failing. Drawbacks of internal controls were not main causes of the failings, they faced recession because they could not managed to obtain their objectives (Mefford, 2014). The RBIA started to be mentioned as a cure to help companies on avoiding failures. Conventional internal audit might be perceived by the audit committees and managers as a control function. Of course it has a contributor on objective achievement ability of the organization but not a crucial one. By enhancing the bounds to all objectives and providing an opinion over the risk controlling which threatening objectives, internal audit can be seen as a major contributor for the companies by the managers (Griffiths, 2015). Thus the Hypothesis No 1 is offered – The RBIA focuses on objectives of the companies.

A professional internal auditor needs to position his/her work in the context of the risk management framework of organization in order to achieve its mission precisely. It also means that if an organization does not have a strong risk management framework, that company has a poor internal control system and is not ready for the RBIA (Chartered Institute of Internal Auditors, 2014). Hypothesis No 2 – Without a risk management function companies are not ready to implement the RBIA.

It is clear that small and middle sized companies are not able to afford risk management function, managers or owners those kind of businesses controlling risks within their experiences and logic-based approaches. Taking into account this point, I would like to offer the third hypothesis. Hypothesis No 3 –

The RBIA is only applicable in large companies, since SMEs are not able to afford the risk assessment functions.

It is also clear that, role of departments within operation cycles possible and risks factors can be various in different industries. Hence offer Hypothesis No 4 is offered – The audit processes within the risk based approach depend on industries.

The RBIA brought some changes to overall audit process. Below mentioned assumptions need to be stressed regarding risk-based auditing (Griffiths, 2015 and Mefford, 2014):

1. Audit Universe:
    - CIT – focuses on financial areas, evaluates compliance with regulations and operations
    - RBIA – all activities of an organization which effect its objectives
2. Audit objective:
    - CIT – confirm whether or not internal control is operating efficiently and improve its efficiency
    - RBIA – providing an opinion whether or not risk is managed within risk appetite
3. Audit plan:
    - CIT – periodical plan without considering risk levels
    - RBIA – audit focuses on high risks threatening objectives, audit plan can change from year to year, as environment changes
4. Audit types:
    - CIT – Financial, Operating, Compliance Follow-up, IT audits
    - RBIA – as audit universe covers the whole business, there is not any type of audit and audit time can be allot where it makes much more sense (The IIA Australia, 2016)
5. Involvement of the rest of the organization:
    - CIT – minimal level, maybe during approving audit plan and findings
    - RBIA – it involves all parts of organizations since they contain the risks
6. Budgeting:
    - CIT – relies on previous audits
    - RBIA – hard to decide as risk changes from period to period
7. Risk maturity assessment:

- CIT – not required
- RBIA – formal assessment

8. Testing:
   - CIT – confirming operation of control
   - RBIA – similar with CIT, but emphasis depends on risk maturity
9. Reporting:
   - CIT – confirming whether or not internal control is effective. Confirmation that audit plan has been completed
   - RBIA – provides information whether or not risk is being managed within accepted level, providing indication about the covered risk proportion
10. Relationship with management:
    - CIT – limited contact with managers and directors
    - RBIA – possibility of contacting with all managers and directors of organizations
11. Staffing:
    - CIT – internal auditors and accountants
    - RBIA – internal auditors, accountants, experienced employees or specialists who are non-finance-related employees

Hypothesis No 5 can be offered that – Processes and notions related to the internal auditing have been completely changed by the RBIA.

After reviewing above assumptions, we need to update information regarding benefits and disadvantages of the RBIA:

As a benefits, it makes internal audit easily understandable. Within the RBIA, there is no need for a complex description, and as it covers the whole organizational processes, it involves all of them. However, as the RBIA makes internal auditors closer with the rest of the organization like never before, it may affect independence of their functions, integrity and objectivity principles negatively.

Hypothesis No 6 – The RBIA approach decreases independency, integrity and objectivity of internal auditors.

Overall, below mentioned hypotheses have been offered prior to the research:

Hypothesis No 1 (H1) – The RBIA focuses on objectives of the companies.

Hypothesis No 2 (H2) – Without a risk management function companies are not ready to implement the RBIA.

Hypothesis No 3 (H3) – The RBIA is only applicable in large companies.

Hypothesis No 4 (H4) – The audit processes within the risk based approach depend on industries.

Hypothesis No 5 (H5) – Processes and notions related to the internal auditing have been completely changed by the RBIA.

Hypothesis No 6 – The RBIA approach decreases independency, integrity and objectivity of internal auditors.

3. RESEARCH METHODOLOGY

I would like shortly remind the thesis subject and its objectives to make it easier to describe my decision regarding research methodology. The study topic of my thesis is Model of Risk Based Internal Auditing, and main aim of the study is describing superiorities and differences of the RBIA in comparison with traditional internal auditing and providing a practical framework to perform the RBIA.

I preferred to use qualitative research method – individual in-depth interviews to collect required data and to reach a conclusion. I personally believe collecting data with sending bunch of emails which cover multiple choice questions is meaningless to come a reasonable conclude. I am writing below mentioned factors to explain shortages of questionnaires:

1. I believe respondents do not take this kind of survey seriously, and answering the questions during their spare times.
2. Since respondents would not spare their times to write their answers in blank box, this kind of questionnaires are made over short and multiple choice questions, which definitely are not efficient enough to collect proper data.
3. Audit process may depend on a lot of factors, which cannot be mentioned within some multiple choice questions.
4. Options within a question might not cover an answer wants to be given by an expert, especially over the subject like RBIA, which there is no consensus how to implement it.

Thus I have preferred doing individual in-depth interviews with three internal auditing experts who are currently working in the Big 4 audit companies. In-depth interviews allow researcher to ask open-ended questions, and able them to explore the studied issue, while clicking on given options restrict given answer, and prevent the possible answers of respondents which are based on their personal practical experiences or approaches.

Moreover, in-depth interview method allows researcher to observe respondents' reactions to the questions, clarify the questions if there is a need. It is possible that a respondent answers to a question from totally different aspect, and new questions need to be asked. Interviewees are competent and experienced specialist on their fields and they may also offer some details regarding the studied issue which have not been asked by the researcher.

Further, as I mentioned in the beginning of section, one of the objective of the study is providing a practical model to implement the RBIA. I strongly believe in-depth interview method is ideal one to meet this objective, and that objective would be enough factor to prefer in-depth interviews with competent internal auditing experts.

3.1. Interviewee Selection Process

Big 4 companies were contacted and the questions were sent them need to be answered to make the study able to collect the required data to conclude the thesis. Fortunately, three companies accepted the request and interviews were held with three experienced advisory team members.

Any special criteria had not been selected to choose true interviews. Doing interview with Internal Auditors of Big 4 companies was only criteria. I was said by all respondents do not write the position in the study paper. Thus I do not write their positions, but they all are authorized and competent experts.

3.2. Data Collection Process

I had written a group paper regarding how to implement in-depth interview method in the first semester. From that course paper, I am familiar with steps need to be taken to do in-depth interviews which offered by Carolyn Boyce and Palena Neale (2006). Following processes – planning, developing interview instruments, implementation, analyzing collected data are main procedures, authors mention disseminate findings as a last step to conclude the study.

1. Planning
    - Interviewee selection. The information has already been provided regarding it. Three advisory team members of Big 4 companies, who are dealing with internal auditing services within their companies accepted to be my interviewee in my study.
    - Identify required data. Sufficient data need to be collected in order to be able to come to a reasonable conclusion over the objectives of my study. Open-ended questions have been prepared which, I believe, cover the objectives, and make the study able to collect the identified data.

2. Developing interview instruments

Following questions are going to be asked to interviewees during interviews. As I mentioned before, I had sent the questions to the companies 3-4 days in advance, since the studied issue is quite complicated, and respondents might need to review the literature regarding the studied.

1) Necessity of the Risk Based Internal Auditing

2) Advantages and difficulties of the RBIA

3) Please list the changes brought by the RBIA to the mentioned processes (notions):

- Audit Universe
- Audit Objective
- Audit Plan
- Audit Types
- Involvement of the rest of the organizations to the overall Audit process
- Budgeting
- Risk Maturity Assessment
- Testing
- Reporting
- Relationship with management
- Staffing

4) Please describe practical framework of the RBIA (steps or components)

5) Jason Lee Mefford's Table (Table 2)

Which is the highest risks?	
Adequacy & effectiveness of accounting controls	Corporate planning
Capital expenditures	Health & safety
Physical security of assets	Investor relations
Financial systems	IT strategic planning
Systems under development	Human resources
Expense reports	Marketing

Mefford mentioned that the items on the right column contain higher risks, and have much more influences to most companies accomplishing their objectives. The question is needed to ask, if the items on the right column contain much more risks for the organizations, why does the conventional internal auditing spend much more time to audit the items on the left? Hence, Audit Universe is supposed to cover the activities which have much more effects on objectives. Kindly, state an opinion over the mentioned idea by Mefford with regards the RBIA.

3. Implementation

   All interviews were conducted individually, and each interview lasted around 25-30 minutes.

4. Analyzing collected data

   I noted the result of the interviews on the interview days, since summarizing the answers right after interviews would provide me more effective data. I have listened and analyzed the all interviews a number of times to be sure that all details have been take into account during the processing of collected data.

Beside of above mentioned questions, I have asked complementary questions within the interviews, which I am going to mention within the next section.

Regarding the way used to take the notes, I informed the interviews that I need to record their voices not to miss any crucial data, since I could not write down all details said by respondents. Moreover, I might miss some important factors during the interview, which I can catch up on while listening the voice records. The interviews lasted around 15, 20 and 35 minutes, respectively.

4. RESEARCH FINDINGS OF THE STUDY

To be honest, I did not find any comprehensive study done by a student or student group regarding the RBIA. Big companies have published some papers on the RBIA, but mostly they speak about advantages, and do not offer a practical framework. Thus I think my study is unique, will be helpful to learn the RBIA, and pave the way for further and better studies.

As I mentioned before, interviews took about 15, 20 and 35 minutes. As there are huge differences among interview durations, the third interviewee has much more influence on the findings and conclusion of the thesis study.

I decided to draw Table 7 to provide comparative view of the approaches by three interviewees.

Table 7. Comparative View of the Given Answers

Questions	Interviewee A	Interviewee B	Interviewee C
1. Necessity of the Risk Based Internal Auditing	Conventional internal auditing was structure based, and being controlled by audit committee. However, in the RBIA internal auditors are communicating with all sections within the company to reveal and mitigate the risks. Scope of the RBIA depends on risks within a company. The RBIA approach makes companies much more able to obtain their goals.	The RBIA covers the areas within the company which contain risk and prevent companies to meet their objectives. The RBIA is flexible and react any possible changes. However, conventional internal auditors were following annual audit plan decided by audit committee.	Internal audit within risk based approach adds value to the companies. Risk is the key component, and it needs to be monitored. There are always risks in environment companies are operating, and they influence business objectives. Thus internal audit plan needs to be risk based, however traditional internal audit approach is more finance-based.
2. Advantages and difficulties of the RBIA	2.1. It directs the internal audit processes to the	2.1. It takes into account the risks contain danger to	2.1. It makes companies able to manage the risk

2.1. Advantages **2.2. Difficulties**	risks, and help companies to implement their strategy, while traditional internal auditing is just following predetermined audit plan. The RBIA also reacts the changes during the implementation of the audit processes. 2.2. It is difficult to implement, complex and costly.	the objectives during the audit plan. It build solid communication links between management and internal auditors. 2.2. It costs higher to the companies, and requires comprehensive knowledge over the industries.	and anticipating damages before they happen. 2.2. It is quite complex. As it is risk based internal auditing, first of all risk register needs to be built. Internal auditors cannot be responsible to identify the policy and procedures of risk management and they should not assess risk within a company. Internal auditors might not be able to determine the certain critical risks. Companies need to have risk management function to monitor risks.
3. Please list the changes brought by the RBIA to the mentioned processes (notions): **3.1. Audit Universe**	In traditional internal auditing the audit universe was structured and finance based. However, in the RBIA it depends on the risks.	Audit universe covers the risky areas in the RBIA.	Within the RBIA the audit universe is broader.
3.2. Audit Objective	Audit object was inspecting efficiency of operation and internal control to produce recommendations to enhance efficiency. The risk based switched audit objective from examination to prevention.	Auditors used to be conceived as fraud inspectors, and audit objective was inspecting financial and operating data, revealing fraud actions, and writing recommendation to increase efficiency. However, the audit	It has stayed same in certain extent. The audit objective has always been mitigating the emerging risks.

		objective is risk based as well within the RBIA.	
3.3. Audit Plan	It was structured and predetermined. In the RBIA audit plan is based on risk assessment and it can be changed due to changes in risk environment.	It was planned by the audit committees periodically, and generally the same processes were redoing during years. In risk based approach risk plan can be determined after the ranking risk factors in the company.	It was depended on the audit committees, and they used to decide which areas needed to be audited. However, the audit plan within the RBIA depends on the risk assessment.
3.4. Audit Types	It was offered and decided by audit committee, managers and etc. In the RBIA it is risk based.	Within the risk based approach it is linked to the results of risk assessment function, and all risky areas within a company can be audited, while it depended on the boards.	Now audit types are also risk based, since the audit types come from the audit register. However, it was decided by the managements.
3.5. Involvement of the rest of the organizations to the overall Audit process	It can include all departments and their members, if they contain risk over the objectives.	As in the RBIA all areas can be audited in the companies, it may require involvement of any section of an organization.	It has completely changed, within the RBIA process can include all managements and employees.
3.6. Budgeting	The RBIA is more costly and requires higher budgeting than conventional internal audit.	Traditional internal audit can run its function without risk management. However, the risk based approach requires risk management function, since it requires longer time and higher cost.	The RBIA would not be more costly despite of fact that it is broader and may require involvement of all organizations, since the company would not pay them extra payments due to their participation. However, if it is a special industry and an external

			expert needs to be outsourced to the audit process, it would require much higher budgeting.
3.7. Risk Maturity Assessment	This process was determined by logical and experience-based interpretation of the management. In the RBIA it is an important and ongoing step.	As traditional internal audit could function without risk management, there was need for risk maturity assessment. In the RBIA it is the key step.	It was more strict and structured by the boards. In the RBIA, the risk maturity assessment is continuous process and may change during an ongoing audit processes.
3.8. Testing	The procedures have not been changed, but testing depends on audit types and it depends on risk assessment.	Testing stages are similar. However, in traditional approach it was structured and periodically repetitive, in the RBIA it depends on risk assessment.	It has not been changed considerably. Structuring the testing is a part of audit plan, since audit plan depends on risk register, changes in the testing depend on the audit areas.
3.9. Reporting	It was based on efficiency of internal control and recommendations to improve it. In the RBIA reporting is risk based, as well.	As internal auditors were doing inspector functions over financial and operating data, reporting was based on recommendation to increase efficiency. In risk based approach the reporting recommendations are risk based as well.	An internal auditor need to recommend actions to mitigate the risks. As scope of the RBIA depends on risk register, changes in reporting follow the risk assessment.
3.10. Relationship with management	Communication between internal auditors and the managers is one of the key side of the RBIA.	In the RBIA internal auditors are free to communicate with the managers. However, it	Function of internal auditors used to be perceived as policing procedures. In the RBIA

		was restricted in the traditional approach.	internal auditors are communicating with the management to add value to the company, and within the RBIA process has started to be accepted as a crucial part of value creating.
3.11. Staffing	The RBIA approach is quite complex and require more employees than conventional internal audit.	Internal audit within risk based approach requires more employees in case an audited company does not have risk management function.	There are two possible scenarios: 1. Risk management is in-house – in that case a company needs to appoint risk committee to run risk assessment in the departments. 2. Risk management function is outsourced – in that case it is more costly than traditional internal audit, but do not require additional staffing.
4. Please describe practical framework of the RBIA (steps or components)	1. Understanding the business and its objectives. 2. Risk assessment – if it is already done needs to be updated and confirmed prior to planning. 3. Audit planning 4. Reporting	1. Auditors should understand strategy of the audited company. 2. Risk assessment is implemented and risk ranking is drawn. 3. Audit planning	First off all, it should be mentioned again that the RBIA cannot be implemented without the risk management function, because without the risk management companies cannot have a proper risk assessment, without it companies cannot have a proper risk register, and without it you cannot have

			a risk based internal audit plan. Thus there is no applicable practical framework for the RBIA without risk management. If a company using risk management functions, there two possible practical frameworks for the RBIA. a) A company has contracted with an outsourced company to implement the RBIA. 1) The outsourced auditors need to understand the industry, business, operations, organizational flows, reporting lines and objectives of the company. 2) Risk assessment. Internal auditors can assist the risk management to set up the risk functions. If it is the first risk assessment, risk policy and procedures also need to be built, before the risk assessment. 3) To make a risk based internal audit plan over the risk register. b) A company has internal audit department and it

			runs the RBIA. In that scenario internal auditors are in-house and they already know the objectives of the company. Hence it starts from the second step mentioned within the outsourced RBIA function.
5. State an opinion over the mentioned idea by Mefford with regards the RBIA (Table 2)	Those factors definitely depend on audited industries. It is not appropriate to draw a table and mention some factors more valuable than other within the RBIA.	Such kind of tables can be drawn separately for each companies. As risk factors are not same in all companies and can be assessed only after risk assessment, we cannot show a risk table which is applicable in all cases.	Conventional internal auditing is concentrating on financial-oriented functions of the company, four out of six elements on the left column are finance related. However, within the risk based approach internal auditing cover all sections of a company which may include risk and prevent obtaining objectives.

The answers given by all interviewees during the first questions verified the H1. They all mentioned that the risk based approach in internal auditing help companies to achieve their objectives. Respondent C especially underlined this fact at the end of the interview that risk based approach adds value to the companies, while traditional internal auditing is financial-based and follows the predetermined audit plans. Respondent A said that the risk based approach assists companies to implement their strategies while answering the question regarding advantages of the RBIA.

I asked interviewees to name the difficulties and disadvantages of the RBIA, none of them mentioned negative effects of the risk based approach over independency, integrity and objectivity of the internal audit work. They only mentioned complexity and cost factors as the disadvantages. Thus the H6 is denied. The reason behind this hypothesis was strong communication tools with managers which may have negative effects on integrity of internal auditors. However, respondents showed strong communication links as an advantage of the RBIA while answering the questions. Interviewee A mentioned this factor during the first question as a necessity of the RBIA.

Furthermore, respondent C mentioned necessity of the risk management work within the RBIA as a difficulty of the risk based approach. He/she especially mentioned that internal auditors should not assess the risk within the RBIA. I asked a question regarding this issue especially to verify his/her answer, and the same answer said again. He/she compared this factor with accounting function, he/she said doing risk assessment and then planning audit work over that assessment is similar with doing an accounting work and then implementing external auditing work over that data. The same answers mentioned by other respondents as well during the interviews. They answered internal auditors can assist or facilitate risk management work to implement the risk assessment, but risk management function is crucial prior to risk based internal audit planning and the RBIA cannot be implemented without risk management function. It verifies the H2.

After this answers, I asked this question to all respondents – Since it is impossible to implement the RBIA without risk management and SME's are not able to afford risk management function, can we state that the RBIA is only applicable for the large companies? Respondent B answered that the RBIA is quite costly and complex process and there is no need to apply it to the SMEs. He/she said generally owners or managers are implementing overall control on their business in SMEs, and since their organizations are quite small and they are well aware their businesses, they can detect risks affect their businesses, and implementing efficient internal control and traditional internal auditing is enough. However respondents A and C said they disagree with this idea, they said there is risk in every environment and it affects all companies, thus the RBIA is applicable in all cases. Respondent C gave a broad answer to that question, he/she said there is no need to apply all risk based audit processes to the SMEs, it needs to be implemented in certain extent according their needs, SMEs would not need an in-house risk management function, but they can outsource this function prior to the internal audit. I can state that H3 partially denied after analyzing the answers.

Interviewee A and B mentioned effects influences of industry while answering the last question. Respondent A said factors within the RBIA depend on the industries, B answered that risk factors are not same in all companies since there can be different risk factors in different companies. I asked him/her is that means that the RBIA processes depend on the industries. He/she agreed this with this point. I asked this question to the respondent C after the question about budgeting. He/she said processes can be different in different industries due to risk factors. Some industries may include special type of risks which determination of this risk needs to be assisted by an external expert over that industry, from this it can be stated that processes can be different in different industries within the RBIA. H4 is verified.

As regards the H5, if I sum up the answers following factors have been completely changed within the risk based approach:

- Audit universe – A said it depends on the risk, however it was finance based and structured. B answered within the RBIA it covers the risky areas. C said it is broader compared the traditional internal auditing.
- Audit plan – All interviewees answered that it was dependent on audit committee, it was predetermined prior to period and implementing regarding the changes in risk environment. However, within the RBIA, audit plan react any important changes within the audit implementation.
- Audit types – It was mentioned by all respondents that type of audit is matter of risk in the RBIA, however it was decided by the authorized people in the companies according their knowledge, experience or logical prognoses.
- Involvement of the rest of the organizations to the overall Audit process – It was showed an area completely changed within the RBIA. Internal audit can run its function in any section of the company, and attendance of employees or authorized managers is required within risk based approach.
- Risk maturity assessment – All respondent mentioned that it is a key step of the RBIA and one of the factor make difference compared the traditional internal auditing.
- Reporting – It was mentioned by all respondents that in the RBIA reporting is risk based and auditors write recommendations to mitigate risks within the companies.
- Relationship with management – As communication with managers is a specific part of the RBIA, it has completely changed and all answers agreed on that. Interviewee C gave a clearer answer to that question, he/she stated that this is the key step in the RBIA adds value to the companies. Internal auditors are communicating with the managers, it makes them able to be more aware about the strategy, objectives and goals of the organizations and building an audit

plan over the risks factors which affect the objectives makes difference and adds value to the companies.

Following factors have been partially changed:

- Audit objective – C mentioned that it has stayed the same, it has always been mitigating the emerging risks. However, A and B answered it has been changed from examination to prevention. B especially mentioned that objective of the internal auditing was inspecting financial and operating data and revealing fraud actions in the companies and writing recommendation to increase efficiency of internal control.
- Budgeting – C answered it has not changed by the RBIA and described his/her answer precisely. He/she said the RBIA is not costly because complexity of the work or involvement of the rest of the organization do not require additional payment to the employees. He/she said there is only one scenario that the RBIA is more costly – if it is a special industry and an outsourced expert needs to be attended during the risk assessment function to assist the risk managers. B said it requires higher cost than traditional auditing since risk management function is a crucial part of the RBIA. He/she explained the answer that traditional internal audit can be done without risk management functions, since the RBIA requires higher budgeting. A stated that it is much more complex, time consuming and costly compared conventional internal audit function.
- Testing – Actually it can be mentioned as a factor has not been changed, as well. And all respondents answered it has not been changed. But they all used another sentences after this answers starting with “but” and “however”. A and C said it has not been changed, but it depends on audit types, audit plan, audit areas and etc. B answered that testing procedures are similar in the both traditional and risk based approaches, however in the RBIA it can also depend on the risk assessment process.
- Staffing – A and B gave answers that in the RBIA more staffing is required. A described it with the complexity of the RBIA, B stressed the risk management function and said it was not a must in the traditional approach. However, C gave a broader answer to the question and mentioned difference between being costly and requiring more staffing. He/she said there two possible cases. If risk management is in-house in that case we can state that the company has employed more staff due to the RBIA, while if the company is outsourcing its risk

management function, it is requires higher budget but does not require employing additional staff, since there are no differences on staffing.

It needs to be stated that H5 is denied, since all processes have not been completely changed by the risk based approach. Some of them partially changed. Moreover, Testing can also be stated as a process has not be changed.

After analyzing data related to the offered hypotheses:

Hypothesis No 1 is verified – The RBIA focuses on objectives of the companies. It was shown by the study that objectives of the companies are main focuses of the RBIA, and internal audit works is built over that idea that adding value to the companies and helping them to meet their objectives.

Hypothesis No 2 is verified – Without a risk management function companies are not ready to implement the RBIA. Prior to the internal audit work risk assessment and risk register are required, only after that internal audit can be planned to mitigate the emerging risks and help companies to meet their objectives.

Hypothesis No 3 is partially denied – The RBIA is only applicable in large companies. While one respondent verified this hypothesis, two others stressed that risk affects all companies regardless their sizes, C especially mentioned that sizes of the companies affect their risk management needs, SMEs have less risk management needs than large companies, but it does not mean that the RBIA is not applicable in the SMEs. The RBIA can add value and be implemented in all companies.

Hypothesis No 4 is verified – The audit processes within the risk based approach depend on industries. Different industries can be influenced by different kind of risks, since processes can be different in different industries.

Hypothesis No 5 is denied – Processes and notions related to the internal auditing have been completely changed by the RBIA. Some processes are similar which have been changed partially or slightly by the RBIA. In fact, the study showed that seven processes out of eleven have been completely, four out of eleven partially or slightly changed by the RBIA.

Hypothesis No 6 is denied – The RBIA approach decreases independency, integrity and objectivity of internal auditors. This factor is mentioned by the researcher due to relationship with management within the RBIA which is not a case and do not considered appropriate in traditional approach. However, the study showed that communication with the managers and employees within the all sections of the companies make internal auditors understand the processes and objectives of the companies much more precisely and as it makes difference, adds value to the companies and make them closer to the objectives.

Offering a practical framework for the RBIA is another objective of my thesis, special question has been asked regarding this.

As I mentioned earlier there are huge differences among interview durations. A and B gave a short answer to that question. A mentioned below mentioned steps in the RBIA:

1. Understanding the business and its objectives.
2. Risk assessment – if it is already done needs to be updated and confirmed prior to planning.
3. Audit planning
4. Reporting

Interview B mentioned those steps:

1. Auditors should understand strategy of the audited company.
2. Risk assessment is implemented and risk ranking is drawn.
3. Audit planning

Respondent C gave an extensive answer to the question:

Before answering this question he mentioned the role of the risk management in the RBIA and again said that there cannot be any practical framework without the risk management functions. If a company using risk management functions, there two possible practical frameworks for the RBIA.

a) A company has contracted with an outsourced company to implement the RBIA.

1) The outsourced auditors need to understand the industry, business, operations, organizational flows, reporting lines and objectives of the company.

2) Risk assessment. Internal auditors can assist the risk management to set up the risk functions. If it is the first risk assessment, risk policy and procedures also need to be built, before the risk assessment.

3) To make a risk based internal audit plan over the risk register.

b) A company has internal audit department and it runs the RBIA. In that scenario the first step can be skipped since internal auditors are part of the organizations and they are communicating with the managers and employees and they are supposed to have sufficient information about the strategy, objectives and goals of their organizations.

Regarding the Mefford's table, C approached it as another factor shows superiority of the RBIA over the traditional internal auditing. He said the RBIA encompasses the all processes may affect the objectives within an organization. A and B disagreed with Mefford's idea. They mentioned industry factor and said that it is not appropriate to draw a table and claim that it covers all industries. They said each industry have its own characteristics, and such kind of table can be drawn for each separate industries.

I strongly believe, I have made a decent work in this study. The research part of the study is based on interviews with authorized Big 4 members, and the asked questions cover the subject precisely. Hence the findings of the study is practically applicable, and have been defined clearly during analyzing part. The study can contribute to the following studies over the risk based internal auditing.

There were some limitations to make the study better. Only three expert accepted my query, and they were member of outsourcing advisory team members. Participation of in-house internal auditors from baking, insurance, tourism, energy and manufacturing industries would make me able to conclude a better result. Moreover, I had been doing an intern program while studying the thesis, and I had limited time to conclude my work.

5. CONCLUSION AND RECOMMENDATIONS

The aims of the study are defining the risk based internal auditing, showing its advantages over the traditional internal auditing, and determining disadvantages or difficulties, explaining the elements of the RBIA and offering a practical model. After reviewing the readily available literature regarding the RBIA, six hypothesis were offered by the thesis study and the research methodology was designed over it.

The study confirms that the main focus of the RBIA, and it verified that objectives of the companies are the focal points, and it is the main advantage brought by the RBIA.

The study also showed that the RBIA cannot be implemented without risk management function. Within the risk based approach, the audit plan is built over the assessed risk, hence first of all companies need to have strong risk management function to make the internal auditors able to provide appropriate results.

It was revealed that the RBIA is feasible in SMEs, as well. There risks in all industries and it affect all companies regardless their sizes.

The industry factor have been specially mentioned during the study, and I would recommend to do further research over the RBIA in certain industries. The changes have been brought by the RBIA to the banking industry is quite interesting topic, since as it is mentioned by the Mefford (2014) the RBIA started to be emphasized after the global banking crisis in 2007.

It has been stated in the study that not all processes and notions regarding the internal auditing have been completely changed by the RBIA. Some processes changed partially and some of them are almost same, the thing has been completely changed is approach. The approach to the internal auditing work changed from “fraud digging” to “risk mitigating” and “value adding”.

The study revealed that integrity of the internal auditors is not damaged by the strong communication links with managers. Nowadays, it can be only a formal statement to completely block communicating links between managers and internal auditors. In fact integrity is a matter of being responsible and respectful. Hence communications with the managers in professional environment improves quality and effectiveness of internal audit work, and it is another valuable change brought by the RBIA to the internal audit work.

Regarding to the offered practical framework, it starts from understanding the industry, objectives of an audited organization and possible risks toward those objectives in specific industrial environments. Risks need to be assessed and registered by the risk management, internal auditors can assist or facilitate this process, but this step should not be processed by the internal auditors. Then risk audit plan needs to be made within the risk based approach. Written audit reports cover results and recommendations to mitigate the risks and improve operations to make companies much more able to move towards the strategy and achieve the objectives.

As regards the recommendations, as I mentioned before I would recommend to study the issue from different industrial aspects, since risk factor is the key element if the RBIA and each industry has their own risk environment.

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