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## Abbreviations

PM – Project Management

PMI – Project Management Institute

PMP – Project Management Professional

PMBOK – Project Management Book of Knowledge

SME – Small and medium size enterprise

IPMA - International Project Management Association

ROI – Return on investment

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## Abstract

The paper analyzes Project Management as a managerial practice in SMEs in general and in part in supermarket chains from Moldova. It aims to investigate to what extent Project Management tools and techniques are generally used in SMEs and those used within medium size supermarket chains from Moldova. It also provides recommendations that would enhance the project capability and project performance within these companies deriving from their size and organizational complexity. In order to do this, the literature review discusses the findings of secondary to identify the generally accepted Project management level used in SMEs. Secondly, the primary data, which was collected through five interviews conducted with top managers performing the role of Project managers in five supermarket chains from Moldova, was collected and analysed in order to be compared with the findings in the literature review. The obtained results met the expectations and have led to the conclusion that generally the extent of Project management used in supermarket chains from Moldova is moderately less than the extent generally used in SMEs. Specifically, it was identified that Project management tools and techniques used within medium sized supermarket chains from Moldova moderately differ from the general tools and techniques used in SMEs as identified by theorists (who conducted extensive research on the extent of Project Management in SMEs). In order to enhance the Project management practices within the investigated companies several recommendations were made, among which was the improvement of professional Project management skills of Project practitioners through specialized education, that would enhance the use of Project tools and techniques and overall the Project management performance in supermarket chains from Moldova.

## Introduction

### Background

The managerial practice of PM has evolved consistently over the last decades and has confidently infiltrated in the managerial process of companies which recognize its benefits. However, research conducted by theorists specializing in this field has showed that the existing tools and techniques developed by the PMI are not suitable for every company depending on a series of factors. Turner, Ledwith and Kelly (2009, 2010, 2012) argue that the needs for PM of SMEs (Small and Medium sized Enterprises) are different from those in large companies. There are a series of factors that influence the extent of PM used in an SME including size, age and organizational complexity. In this context the researcher aims to investigate the small and medium supermarket chains from Moldova and identify to what extent they use PM for to innovate, improve their internal operations and generally grow. The research of the secondary data will focus on identifying the general extent of Project management as well as the tools and techniques used by SMEs and will compare the results to the suggested results of the secondary data analysis. As a result, the researcher will be able to establish a model for the small and medium supermarket chains from Moldova that would best fit their organizational needs. Additionally, the research will point out which PM tools and techniques bring the most value to project success and identify maybe “new”, unknown to managers in medium size supermarket chains from Moldova, practices that could bring additional value to their companies.

According to Floyd and McManus (2005), small and medium sized enterprises have an important role in the economy in terms of employment, innovation and growth. In 2008 SMEs in the EU accounted for 60% of the GDP and employed 70% of private sector workers (European Commission, 2008). Turner (2009) suggests that projects account approximately for 20% of economic activity and again, according to Turner, Ledwith and Kelly (2012), on a global scale \$10 trillion is spent on projects let alone in SMEs each year. So, for example a 10% improvement in project performance through reduced costs, increased functionality and shorter project duration the world could save \$1 trillion each year (Turner, Ledwith and Kelly, 2012). This research, however, will have a much narrower scale of investigation because it is focused on one country – Moldova, and specifically one industry – Food Retail. According to the National Bureau of Statistics (2013) in 2012 Moldovan SMEs represented

97.5% of the total number of companies and generated 34.5% of the GDP, which means that approximately one third of the GDP is partially dependent on how efficiently SMEs operate. Following the same logic offered by Turner, Ledwith and Kelly (2009), this research will try to identify the pitfalls that SMEs deal with in the process of innovation and growth in an attempt to make the use of Project Management more efficient not only for companies alone but for the food industry as a whole.

Until now no studies have been conducted regarding the extent to which PM is used within SMEs from Moldova, and specifically supermarket chains. This research might be the “ice breaker” that could direct the attention of local researchers and theorists over this issue and eventually lead to the development of theory specially designed for the application of Project management in SMEs. The previous experience of the researcher, accumulated while he was working as a Project Manager in a supermarket chain from Moldova, will strengthen his ability to analyze the topic being discussed.

The results of this research can be used primarily by small and medium size supermarket chains from Moldova but could also be applied within SMEs from other fields where PM is an integrated managerial practice. Additionally, the findings of the research will point out the causes of the low level of PM usage in Moldovan SMEs.



## Research objectives

The aim of the research is to identify the existing gaps in the PM practice within supermarket chains from Moldova and establish a viable model for increased managerial efficiency.

The research objectives are the following:

1. To Identify the extent of Project management in SMEs
2. To identify the extent of Project management used in small and medium sized supermarket chains from Moldova
3. Identify the existing gaps in Project Management in medium sized supermarket chains from Moldova and give recommendations on how these can be improved

## Research questions

The research aims to identify first the nature of Project management generally in SMEs, and secondly the nature of Project management in supermarket chains as well as the extent of Project management practices used within these companies. The proposed research questions are as follows:

1. To what extent are projects and Project management used in SMES?

The aim of this question is to identify if SMEs use projects in their activity as well as the extent of Project management compared to large companies.

2. To what extent do supermarket chains in Moldova use projects in their operations, innovation and growth?

The aim of this question is to identify if supermarket chains in Moldova are generally aware of Project management practices and if that is so, to what extent they apply Project management to manage operations, innovation and growth.

3. What is the nature of Project management generally in SMEs and particularly in medium sized supermarket chains from Moldova?

The first intent of this question is to identify what the nature of Project management is in generally in SMEs compared to large companies. Secondly, it aims to identify if there are differences in the nature of Project management between medium sized supermarket chains from Moldova and SMEs in general.

4. What is the extent of Project Management used in medium sized supermarket chains from Moldova compared to the extent of Project management in SMEs?

There are no studies conducted today that would give insight about the Project management practices used in supermarket chains from Moldova, therefore, this question will point out how knowledgeable managers within these companies are about Project management, the tools and techniques, as well as show to what extent Project management is used today in medium sized supermarket chains from Moldova compared to the generally accepted extent in SMEs.

## Research limitations

In order to access primary data some practical effort will be required. For example it will be necessary to get in touch with the representatives of each of the companies that the researcher plans to interview and try to explain the potential importance of the research to the company and how it could improve the organizational management within their company. However, there are specific limitations associated with the access to these companies. Being an external researcher there is a lack of status recognition of the researcher among these companies which might result in disinterest towards the research and ultimately unwillingness to participate in the interviews.

According to Hughes adopted from Burns (2000) there are several limitations associated with the qualitative research: 1) General validity or reliability of the research provided the high degree of subjectivity implied in the interpretation of the data; 2) Time required for data collection and interpretation is limited; 3) Researcher's personal opinion has a profound impact on the subjects of study; 4) Issues of anonymity and confidentiality present problems when selecting the findings; 5) Viewpoints of both the participants and researcher have to be clearly identified and elucidated because of potential bias issues.

Another issue is the translation of the questions from English to Romanian. Project Management is a relatively new organizational management practice and there is lack of Project management books translated in Romanian. This could lead to a loss of meaning when translating the Project management concepts from English to Romanian.

As top managers are very busy, there is a risk that they will lack time to meet with the researcher. This might cause potential extensions of the primary data collection process which delay the overall research duration.

Accessibility to secondary data is also a limitation. It has been noticed that online resources offered by the DBS website do not provide full access to journals specialized specifically in Project Management. Therefore, it is very probable that the researcher might have additional costs associated with accessing the sources requested for his research. All these limitations could have a consistent impact on the results of the research, and therefore, the researcher will try to do everything that he can in order to predict and minimize the potential risk of appearance of the issues mentioned issues.

## Research ethics

Saunders, Lewis and Thornhill (p. 226, 2012) state that “in the context of research, ethics refer to the standards of behaviour that guide your conduct in relation to the rights of those who become the subject of your work, or are affected by it.” Generally speaking the ethical implications are a matter of common sense which describe how an individual ought to behave towards another individual in a society. As for this research, which implies the use of interviews as a primary data collection technique, Saunders, Lewis and Thornhill (2012) state that there are several ethical implications, these are: 1) Confidentiality of interviewees; 2) Respecting the integrity of the interviewees by not pressing for a response if he/she doesn't wish to answer a specific question, in other words give the option to avoid a question if it's too sensitive or the respondent deems it inappropriate for the topic; 3) Let the interviewee choose the time of the interview; 4) During the interview, when it is apparent that the interviewee has other commitments to attend to, it is imperative not to attempt to prolong the interview. A formal attitude and relation will be established with the respondents in order to keep the collaboration as professional as possible. All these principles will be taken into account by the researcher during the primary data collection process.

All the collected data from the interviews will be stocked for academic purposes and names of respondents will be undisclosed in order to obey the confidentiality clause.

In addition to these generally accepted ethical implications the researcher has to remember that he will be in face-to-face contact with the interviewees, which places additional responsibility on him. For this reason the researcher, being the interviewer, will show rapport and respect to the interviewee in order to create a trustworthy and responsible image of himself.

## Personal biases

One of the concerns related to the reliability of the data within interviews is related to personal bias of the interviewer (Saunders, Lewis, Thornhill, 2012). There are generally four issues that could imply some type of bias during interviews: 1) Tone and non-verbal behaviour – it can create bias in the way that interviewees answer the questions; 2) Wrong interpretation of responses – the interpretation of answers can be biased by the interviewer's personal judgment; and lastly 3) Lack of credibility from the interviewee could raise doubts about the reliability of the answers – depending on the level of trustworthiness of the interviewer, the responses could lack validity and credibility (Saunders, Lewis, Thornhill, p. 381, 2012).

As a measure to avoid any potential bias the researcher will consider the earlier mentioned recommendations when developing the interview questions; as well as he will try to be as objective as possible and maintain a neutral position towards the overall interpretation of the primary and secondary research findings in order to develop sound and trustworthy conclusions.

## Chapter outline

Chapter 1 is Literature Review and includes the following subheadings Introduction to Project Management, Nature of Project Management in SMEs and Project Management Tools and Techniques.

“Introduction to Project Management” subheading will explain what are projects, the project phases, the project constraints, the particularities of Project Management as well as the reasons why it has become such an attractive and reputable managerial practice today by describing and analyzing its key benefits and contribution to the performance of companies in the context of a competitive, dynamic and globalized business environment.

The “Nature of Project Management in SMEs” subheading explains the differences between SMEs and large companies in order to show how and why Project Management practices in SMEs differ from those in large companies as well as analyze the factors lying behind these differences.

The last subheading – “Project Management Tools and Techniques”, provides a descriptive analysis of the most commonly used tools and techniques today in large companies as identified in the existing literature, and will also give insight and describe the extent of the tools and techniques that are used by SMEs.

The analysis of the secondary data will be used to create a comparative framework to be compared with the results of the primary data findings.

Chapter 2 – Research Methodology – this chapter explains the selection of the methods of design, data collection and analysis that were used to conduct the research. Each subheading is discussed comprehensively and gives justifies the selected methodology.

Chapter 3 – Data Analysis and Findings – in the first part of this chapter the results of the 5 interviews are presented and similarities and differences between the 5 companies are discussed. This will lead to the identification general patterns regarding the extent of Project Management used in small and medium sized supermarket chains from Moldova as well as identify the most commonly used tools and techniques and the ones which are most important for project success.

Chapter 4 – Conclusion – this chapter includes the conclusion of the research by summarizing the findings and concepts raised in the literature review and the data analysis section. The findings are critically and analytically evaluated after what it is concluded whether the objectives of the research were achieved or not.

Chapter 5 – This chapter includes a series of recommendations to enhance the Project management capabilities of the supermarket chains from Moldova developed on the basis of the most used and important practices in SMEs as described in the literature review.

Chapter 6 – Self reflection and skill development – it includes an overview of how the master programme and the dissertation has added value to the research capabilities of the researcher.

## Literature review

The following chapter will first give a general insight into the importance of Project Management in order to introduce the reader with the particularities of this managerial approach as well as provide for an understanding of Project Management. Afterwards it will discuss and analyze the existing literature on the extent of Project Management used within SMEs to provide for a framework to be compared against the collected primary data from small and medium sized supermarket chains from Moldova.

## Introduction to Project Management

In order to understand what project management is about it is important to understand what a project is in the first place. In our daily lives we are all involved in projects without even realizing it. Buying a home, enrolling on a master's program, paying a credit, preparing for an exam etc. are all projects that we engage in our day-to-day lives. The scientific definition transposed to the business context offers multiple and straightforward explanations about what a project is. The Bible of Project Management - Project Management Book of Knowledge explains that a project is "a temporary endeavour undertaken to create a product, service, or result" (PMBOK, p. 3, 2013). The UK Office of Government Commerce (2005) defines a project as "a temporary organisation that is intended to produce a unique and pre-defined outcome or result at a pre-specified time using pre-determined resources".

These definitions recognize that a project is temporary in nature, with a temporary established project structure intended to achieve clearly defined outcomes. It is given the necessary resources to achieve the objectives that are aligned with the strategic goals of the organization. To be more precise, Kerzner (2013) and Larson and Gray (2011) identify five fundamental characteristics of a project that differentiate it from the other endeavours undertaken by a company:

- Established objective
- Defined timeframe with a beginning and an end
- Specific cost and performance requirements
- Use of financial and human resources like money, equipment and people to achieve objectives



- Involvement of specialized professionals from several departments

Depending on how successful a company is at implementing projects could be a defining element in determining the level of their competitiveness in the marketplace. Ledwith (2004) identified that in Ireland 25% of the turnover of a company is generated by new and improved products which are delivered through the use of Project Management.

The traditional organizational structures developed by Taylor and Ford are very bureaucratic in essence (Daft, 2008) and cannot respond rapidly to the changing business environment. Today the business environment is extremely competitive in the context of increased globalization and technological improvement. To stay afloat and continue to develop companies need to adopt managerial approaches that would allow for flexibility, speed, innovation and continuous improvement. Jarocki (2011) recognizes that the necessity to keep up with the changing business environment causes more and more companies to shift from being operations driven towards project driven.

### **Definition of Project Management**

While understanding what a project is undoubtedly important, understanding the management of projects is of critical value (Kotter, 2011; Lewin, 1997). The Project Management Institute (2000) offers a simplified definition of Project Management as being the “application of knowledge, skills, tools, and techniques to project activities to meet the requirements”. Project Management is achieved through the application of competencies, knowledge areas and integration of managerial processes – where a process consists of a series of actions that generate a defined result (PMI, 2008).

Through time Project Management has developed as a discipline that has constantly improved and allowed for expansion. Crawford (2005) notices that as a discipline project management is “dynamic facing new challenges, as tools, methods and approaches to management that comprise the discipline are applied to different areas, for different ends, and in different cultures”.

Baccarini (1999) recognizes that the emergence of modern Project management owes to 3 three core stimuli:

- Complexity – increasing complexity of tasks and a higher degree of specialization
- Change – dynamic global environment which constantly puts pressure on organizations to implement change
- Time – the need for tasks to be completed as quickly as possible

It has increasingly been recognized during the last 50 years that Project Management is an efficient tool to manage novel and complex activities through the application of clearly defined tools, techniques and practices (Munns, Bjeirmi, 1996). Because Project Management has become so attractive to companies which seek to stay flexible and thus competitive in a dynamic environment and meet the increasing needs of customers, today about 30% of the global economy uses project-based management, which once again emphasizes that projects are increasingly becoming more common in organizations (Parker, Charlton, Ribeiro, Pathak, 2013).

Probably one of the most important challenges that Project Management can deal with is concerned with the control over resources. Today resources are scarce and there is a natural tendency from executive managers to require from line managers to do the same amount of work but with reduced resources (Kerzner, 2013). As mentioned earlier, projects are generally characterized by three main criteria for success – time, budget and scope, therefore, the use of Project Management enhances the ability of executive managers to efficiently control the use of resources.

### **Integration of Project Management**

Project Management has evolved to such an extent as a managerial practice that companies which understand its benefits and identify their business structure with it adopt organizational structures entirely based on Project Management. The activity of so called project driven companies, such as construction, IT and aerospace (Sarfraz, 2011), is focused on achieving strategic objectives through the exclusive implementation of projects. For these companies the most important is to effectively manage the portfolio of projects and select those that are in alignment with the strategic objectives of the company (Larson and Gray, 2011). These companies have a systematic approach to the implementation of projects and, therefore, it allows them to constantly develop their Project management

capabilities. Judgev and Thomas (2002) stated that these “capabilities are combinations of proprietary resources, knowledge and skills that become institutionalised into operating routines and tacit knowledge”. On the other hand there are companies where projects have a supporting role for a product/service or specific functional lines. In these companies Project Management as a managerial practice is used in a project context and addresses only to the process of project implementation. For these companies each project is most of the times a unique endeavour in terms of the nature of project objectives, time and scope.

## Characteristics of a Project

### Project Dimensions

A project is characterized by three dimensions or constraints, which basically are the criteria that serve as a standard for comparison of actual and planned throughout the life of a project (Larson and Gray, 2011). The following describe these constraints (See Figure 1).

**Scope** – is the definition of the mission or the objectives that need to be achieved by the completion of an internal project if the project implies the improvement of internal processes like operations, sales and marketing, or an external project that is intended to satisfy the end customer through the delivery of a new or improved product or service or both. A study conducted by Gobeli and Larson (1990) involving 1400 project management practitioners from Canada and the US identified that approximately 50% of the problems during the planning phase of the project relate to confusing definition of project scope and goals. It is important to understand that the activities that are to be performed in the project directly derive from the scope. Therefore, it is imperative that the scope of any project is clearly defined.

**Time** –after the scope has been defined the adequate time constraints are established. A start and end date is set in accordance with estimates made about the time necessary to finish the project activities. In projects involving deliverables associated with previous experience estimates are made deriving from past projects. When projects imply new unique activities then top-down and down-up communication occurs. In other words the estimates done by senior management are checked with the estimates made by the people who will actually deliver and consensus is achieved (Larson and Gray, 2011).

**Budget** – the budget of a project comprises all the costs associated with the completion of the project activities. These costs usually consist of human, equipment and technological expenses depending on the type of business. Olsen (2004) recognizes that the establishment of unrealistic budgets is one of the main reasons of project failure and therefore, accurate analysis of the costs should be conducted in the planning stage of the project.

Projects are efficient because they allow for flexibility during the execution of the activities. For example a Project Manager might need to finish the project earlier than planned and could decide to allocate additional financial and human resources to complete the deliverables before deadline; or, for example, costs can be reduced by using cheaper and less efficient equipment and/or human resources. Therefore, depending on the performance of a project a project manager can change one of the criteria and trade off for example the execution in time of a project at the expense of full scope achievement. In other words, these trade-offs offer space for manoeuvre to the manager of a project as the scope, time and budget are most of the time interdependent.

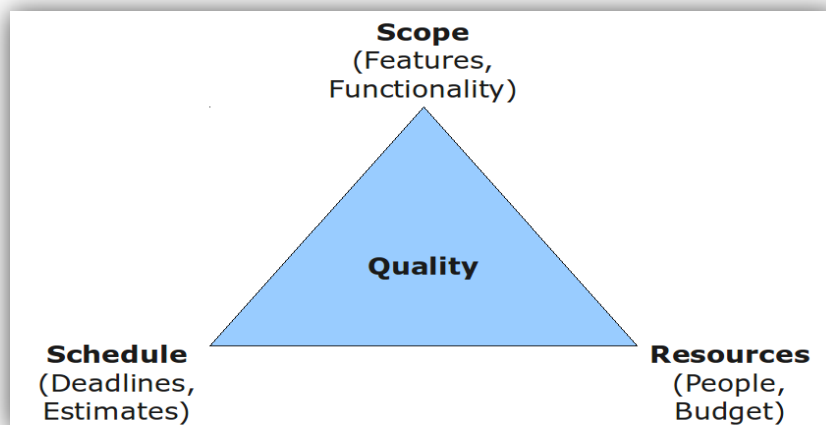


Figure 1 Project Dimensions

### Project Phases

Deriving from the concept that a project is a *temporary* endeavour to accomplish specific objectives and tasks (PMBOK, 2013) a project has a lifecycle. The PMBOK Guide

(2013) identifies five phases of a project each having its own significance and role in the completion of project (See Figure 2).

**Project Initiation** – is the initial phase of a project that implies selecting the most attractive project in terms of strategic business contribution to the company. The benefits of the project are identified and discussed, the objectives are established, a Project Manager is assigned, teams are formed and responsibilities are assigned.

**Project Planning** – this stage is probably the most important because according to Besner and Hobbs (2006) at this stage all project participants: team members, project managers and the program director, are gathered together to make decisions regarding the most important things in a project: establish the schedules, establish budgets, identify the resources, and evaluate the risks associated and the establishment of contingency plans (Larson and Gray, 2011).

**Project Execution** – at this stage team members are engaged in delivering the tasks they were assigned while the project manager needs to make sure that the direction of the overall project activities is directed towards achieving the objectives within set budget, time and scope and quality standards. This stage implies lots of corrections and adjustments of the ongoing project processes that are meant to get the project back on track in terms of budget, time or/and client requirements.

**Project Controlling and monitoring** – during this stage the performance of the project is monitored and evaluated against the Project criteria. By using different evaluation tools like EVM (Earned Value Management) and KPIs (Key Performance Indicator) the project manager is able to analyze the project performance to identify if it is on track with schedule and budget.

**Project Closure** – the closing stage incorporates several activities like the delivery of the project product to the customer, redeployment of resources, and review of project activities. One of the most important activities at this stage is the lessons learned database. Besner and Hobbs (2006) revealed that registering and analyzing the mistakes during a project are among the activities of a project that have the greatest potential to improve project success but are not always appreciated by companies as important.

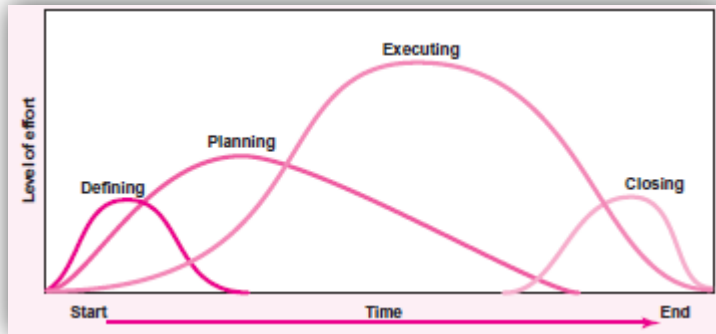


Figure 2 Project Lifecycle vs. Level of Effort

(Source: Larson and Gray (2011). Project Management. The Managerial Process 5<sup>th</sup> Edition)

Having defined what a project is, the dimensions of a project and its phases, it is possible to start to distinguish between project success and failure.

### Project managers

The Project manager is the central figure in a project that has the main responsibility to coordinate the work of the Project team. Therefore, employing the right person for this job is a one of the keys to successful Project implementation. As identified by the PMBOK (2013) for a Project manager to be effective it is important to have the following competencies:

- **Knowledge** – is referred to the extent of Project management knowledge possessed
- **Performance** – consists the ability to accomplish through the application of his/her Project management knowledge
- **Personal** – is referred to the ability to manage people by using interpersonal skills to motivate and encourage team members, as well as referred to the extent of the technical capabilities of individuals to apply Project management practices

The Project manager is involved in all the project phases to assure efficient planning of activities; monitor the performance of the Project activities delivery in terms of cost and time; assist team members in the problems that occur during the Project; use tools and techniques like CPM, EVM and KPIs to measure Project performance etc. The importance of the role of the Project manager is reinforced by Besner and Hobbs (2006) who identified

that the involvement of the Project manager in each of the Project phases is higher than that of other Project participants (See Figure 4).

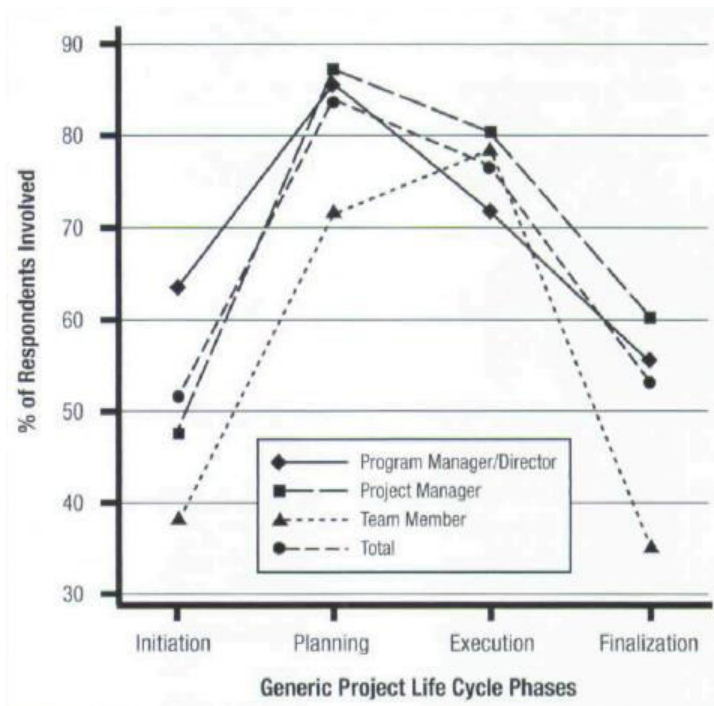


Figure 3 Involvement of different project management roles in different project phases

(Source: Besner, C. and Hobbs, J.B. (2006), “The perceived value and potential contribution of project management practices to project success”).

Larson and Gray (2011) stress the importance of the Project manager personal skills for efficient Project implementation. They identify 8 core traits that describe an effective Project manager:

- **System thinker** – Project managers are expected to think in terms of systems, meaning that instead of having a focused approach on a specific piece of a project they need to have a holistic understanding of the project pieces in order to be able to manage the interaction between the different parts but not the parts themselves.
- **Personal integrity** – refers to the ability to create an image of a credible person who is perceived by the project client and the team members as a trustworthy person capable to achieve the objectives of the Project.
- **Proactive** – managers tend to take action regarding encountered problems before they become too complex and expensive to handle.

- **High emotional intelligence** – Project managers have to be emotionally balanced when things get out of control and act constructively.
- **General business perspective** – it is important for a Project manager to have an understanding of the basics of business management and how the discipline of Project management contributes to successful business.
- **Effective time management** – time is scarce and managers need to plan the time within Projects wisely and adjust their priorities along the project as project dictates.
- **Skilful politician** – Project managers need to win support and acceptance of the Project by selling the virtues of the project.
- **Optimist** – like any other manager it is important for Project managers as well to be able to emit optimism in order to inspire and keep people positive.

### Project success or failure

Defining whether a project is successful or not is a relative matter because despite the fact that there are three main project success criteria established in academic literature – scope, time and budget (Kerzner, 2009; Larson 2011) literature suggests that these are not enough to categorize a project as successful and that success criteria are complex and multifaceted (Besner and Hobbs, 2006). Cooke and Davis (2004) proposed a distinction between three levels of project success factors that speak for themselves:

1. Doing projects right
2. Doing the right projects
3. Doing the right projects right time after time

Clearly these are some general characteristics that give a simple idealistic explanation of project success. In essence these criteria hide concrete variables and factors that eventually are used to measure the success of a project. The analysis of literature suggests that there are different variables and factors affecting the ability to achieve project success. The following list was derived from the analysis of Cash and Fox (1992), Baker (1974), Kerzner (2009), Wit (1998) and Kumar (1989).

- Objectives
- Project administration
- Third parties (contractors)



- Client relations
- Contracting
- Human interaction
- Legal agreements
- Politics
- Conflicts
- Efficiency
- Profit

Morris and Hugh (1986) provide the same factors but adapted to the business context.

1. Have a realistic goal
2. Clearly defined goal
3. Competition
4. Level of client satisfaction
5. Profitability of the product/service developed by the project (ROI – return on investment)
6. Third parties – contractors, legal entities etc.
7. Market availability
8. Efficient project implementation process
9. Perceived value of the project

From analyzing these variables it is noticeable that to categorize a project as a success is not solely dependent on how efficiently Project Management and its techniques are applied. This indicates that project management is only a subset of the wider context of a project (Munns and Bjeirmi, 1996). Therefore, Project Management plays a role in the success of a project; however, this role is influenced by other factors outside the control range of a company and the direct control of a project manager. This clearly explains why some projects succeed and others fail independently of how efficiently Project Management processes are conducted.

### **Project Management Success or failure**

In contrast to the factors influencing project success, which are more global and out of the control range of a company, Project Management success or failure is easier to

measure because of the more specific context and fewer identified success factors. They obviously include completion to budget, completion on schedule, meeting quality standards and achievement of project goals. However, in order to minimize the risks involved regarding the successful completion of a project Avots (1969) suggest that it is important to understand the potential factors that contribute to project management failure:

- Inadequate ground for project
- Unprofessional or/and inexperienced project manager
- Unsupportive top management
- Unclear tasks
- Low use of Project Management tools and techniques
- Incorrect use of tools and techniques
- Project activities poorly planned
- Lack of commitment from team and project manager to project

The analysis of these factors would suggest that successful Project Management requires accurate planning, careful selection of a skilled and experienced project manager, spending enough time in order to clearly define the project scope, ensuring efficient top-down and down-up information flows, correctly planning project activities, changing or/and adjusting activities to allow for dynamic correction and assuring employees' personal goals are aligned with project performance and rewards.

In addition to the earlier mentioned factors that contribute to project management success the literature stresses the high importance of the tools and techniques that are used to achieve success (Kerzner, 2009, Duncan and Gorsha, 1983, Benser and Hobbs, 2009). First of all it is important to select the "right" tools and techniques, and secondly the need to correctly use these tools in order for them to bring value to the project. There are projects of various sizes and complexities and according to these factors tools and techniques are tailored to meet the technical needs of a project. According to Lackman (1987) the most popular tools to achieve success include the WBS (Work Breakdown Structure), client information sheets and project plans among all the others (Note: Project Management tools and techniques will be discussed in more details in the next sub-paragraph).

Kumar (1989) considers that project success is mainly influenced by philosophies, strategies and methodologies that are employed in the project implementation process. He believes that only by developing a clear strategy before project initiation tailored to a specific context can a project successfully achieve its objectives. These strategies are obviously influenced by the general organizational culture of a company. Therefore, each entity may decide to implement a project in its own way but one thing to keep in mind as mentioned by Kumar is to tailor those strategies to the context of the project.

### **Project Management Tools and Techniques**

The phases of a project mentioned in the beginning of this chapter incorporate a multitude of processes implemented by the project team that encompass different areas of management like risk management, quality management, scheduling, customer requirements, cost management, scope management, human resource management and communications management (Adnan Aquil, 2013). The processes within these management areas are performed through the use of a list of Tools and Techniques that along the years has grown in numbers and complexity. Discussing all the existing Project management tools and techniques is out of the scope and mission of this paper but the following will give an understanding of some generally accepted and used practices.

The importance of Project management tools and techniques has been identified from the early beginning of the development of Project management as a managerial discipline. Avots (1969) stresses the crucial importance of techniques in achieving project objectives. Turner (2009) stresses the importance of selecting the “right” tools and techniques to perform project management processes. He identified that the selection of tools and techniques is directly dependent on several factors like: size of the company, organizational complexity, size of projects (Turner, 2009; Turner, 2008; Turner, Ledwith Kelly, 2012). However, selecting the right tools to match the needs of companies does not alone guarantee successful project implementation. Duncan and Gorsha (1983) recognize that specifically *successful* implementation of Project tools and techniques is crucial for project success.

Extensive research to identify the extent of project practices used today in companies was conducted by Besner and Hobbs (2006). As Project management initially was

institutionalised in large companies, Besner and Hobbs (2006) researched 753 large companies. They interviewed 753 project management practitioners, most of whom were certified PMPs (Project Management Professional) to identify the extent to which the existing practices are used (See Table 1 for the results of the study). The column on the left hand enlists 23 Project management tools used extensively, the middle column includes 33 tools and techniques with limited use, and the last column includes 14 practices with very limited use. In conclusion their research has identified a set of so called “Super tools”, or the so called “must haves” that have the highest use rate and contribution to successful project completion. These are:

- Software for task scheduling
- Scope statement
- Requirements analysis
- Lessons learned/post-mortem
- Progress report
- Kick-off meeting
- Gantt chart
- Change request

The results of this study identified that despite the great number of available tools and techniques there are clear preferences for some practices over the others. The reason behind this fact is explained by the perception of the contribution of those tools and techniques by the managers to the successful implementation of the managerial processes in a project (Besner, Hobbs, 2006). (Further in the literature review these tools will be analyzed against the tools and techniques that are used in SMEs to identify if both large companies and SMEs have similar preferences).

By this moment the reader must have gained a basic understanding about what a project is, what the general characteristics of project management are, and its importance for companies. However, the main subject analyzed by this paper is around the extent of Project management practices used in SMEs that follows next.

<b>Extensive use</b>	<b>Limited use</b>	<b>Very Limited use</b>
Progress report	Contingency plans	Life cycle cost (LCC)
Kick-off meeting	Re-baselining	Database of contractual commitment data
PM software for task scheduling	Cost-benefit analysis	Probabilistic duration estimate (PERT)
Gantt chart	Critical path method analysis	Quality function deployment
Scope management	Bottom-up estimating	Value analysis
Milestone planning	Team member performance appraisal	Database of risks
Change request	Team-building event	Trend chart or S-curve
Requirements analysis	Work authorization	Control charts
Work breakdown structure	Self-directed work teams	Decision tree
Statement of work	Ranking of risks	Cause and effect diagram
PM software for monitoring of schedule	Financial measurement tools	Critical chain method analysis
Lesson learned/post-mortem	Quality plan	Pareto diagram
Baseline plan	Bid documents	PM software for simulation
Client acceptance form	Feasibility study	Monte-Carlo analysis
Quality inspection	Configuration review	
PM software for resources scheduling	Stakeholders analysis	
Project charter	PM software for resources levelling	
Responsibility assignment matrix	PM software for monitoring of cost	
Customer satisfaction surveys	Network diagram	
Communication plan	Project communication room (war room)	
Top-down estimating	Project Web site	
Risk management documents	Bid/seller evaluation	
	Database of historical data	
	PM software multiproject scheduling/levelling	
	Earned value	
	PM software for cost estimating	
	Database for cost estimating	
	Database of lessons learned	
	Product breakdown structure	
	Bidders conferences	
	Learning curve	
	Parametric estimating	
	Graphic presentation of risk information	

Table 1 The 70 tools in decreasing order of average use

(Source: Besner, C. Hobbs, J. (2006), “The perceived value and potential contribution of project management practices to project success”)

## **Nature of Project Management in SMEs**

### **Importance of SMEs**

According to Floyd and McManus (2005), small and medium sized enterprises have an important role in the economy in terms of employment, innovation and growth. In 2008 SMEs in the EU accounted for 60% of the GDP and employed 70% of private sector workers (European Commission, 2008). Moreover, the European Commission Report of (2003) suggests that SMEs accounted for 99% of activity in the EU. Turner (2009) suggests that projects account approximately for 20% of economic activity and again, according to Turner, Ledwith and Kelly (2012), on a global scale \$10 trillion is spent on projects let alone in SMEs each year. So, for example a 10% improvement in project performance in SMEs through reduced costs, increased functionality and shorter project duration the world could save \$1 trillion each year (Turner, Ledwith and Kelly, 2012).

This research, however, will have a much narrower scale of investigation because it is focused on one country – Moldova, and specifically one industry – Food Retail. According to the National Bureau of Statistics (2013) in 2012 Moldovan SMEs represented 97.5% of the total number of companies and generated 34.5% of the GDP, which means that approximately one third of the GDP is partially dependent on how efficiently SMEs operate. Following the same logic offered by Turner, Ledwith and Kelly (2012), this research will try to identify the pitfalls that SMEs deal with in the process of innovation and growth in an attempt to make the use of Project Management more efficient not only in SMEs from the food industry alone but also in SMEs from other industries.

### **SMEs vs. Large companies**

While there are general guidelines and processes that are used for every project and by every company, there are differences in the application of Project Management in large companies compared to small and medium sized companies. Welsh and White (1981) stated that “a small business is not a “little” large business; differences exist in structure, policy making procedures, utilizations of resources to the extent that application of large business

concepts directly to small businesses may border on the ridiculous”. Therefore, the size of the organization has a crucial influence on the way things are managed in an organization.

In order to analyze the extent of Project management used in SMEs first it is important to understand when a company is considered “Large” and when it falls under the category of small or medium sized enterprise. There has been lack of consensus regarding the definition of an SME over time (McAdam, 2005). However, the European Commission was able to develop standards of categorization through the use of two variables: annual turnover and number of employees. According to the European Commission (2005, 2008) a small enterprise is the company that employs a number not exceeding 50 people and generates turnover of no more than €10 million/year, whereas medium enterprises employ no more than 250 people and have an annual turnover of less than €250 million/year. If any of these two criteria are exceeded than the enterprise transitions to become part of the category of large organizations where people begin to specialize and formal processes are adopted to manage large numbers of staff and coordinate the work between them.

Ghobadian and Gallear (1997) describe the differences between SMEs and large companies in 6 compartments: Processes, Procedures, People, Structure Behaviour and Contact (Table 2). This table shows the main differences between SMES and large organizations in areas that are relevant to the design of Project Management application.

<b>Large organizations</b>	<b>Small and medium-sized organizations</b>
<b><u>Structure</u></b>	
Hierarchical with several layers of management	Flat with very few layers of management
Clear and extensive functional division of activities. High degree of specialization	Division of activities limited and unclear. Low degree of specialization
Rigid structure and information flows	Flexible structure and information flows
Top management a long distance away from the point of delivery	Top management close to the point of delivery
Top management's visibility limited	Top management highly visible
Multi-sited and possibly multinational	Single-sited
Many interest groups	Very few interest groups

Normally slow response to environmental changes	Normally rapid response to environmental changes
Low incidence of innovativeness	High incidence of innovativeness
Cultural diversity	Undefined culture
<b><u>Procedures</u></b>	
Activities and operations governed by formal rules and procedures. High degree of standardization and formalization	Activities and operations not governed by formal rules and procedures. Low degree of standardization
System-dominated	People-dominated
Rigid and inadaptible processes	Flexible and adaptable processes
Incidence of fact-based decision making more prevalent	Incidence of "gut feeling" decisions more prevalent
Fragmented decision makers	Few decision makers
<b><u>Behaviour</u></b>	
Mostly bureaucratic	Mostly organic
Strong departmental/functional mind-set	Absence of departmental/functional mind-set. Corporate mind-set
Cultural Inertia	Fluid culture
Meritocratic	Patronage
Rigid corporate culture dominating operations and behaviours	Operations and behaviour of employees influenced by owners'/managers' ethos and outlook
<b><u>Processes</u></b>	
Extended decision-making chain	Short decision-making chain
Complex planning and control system	Simple planning and control system
Strategic process generally deliberate and formal	Strategic process incremental and heuristic
Formal evaluation, control and reporting procedures	Informal evaluation, control and reporting procedures
Control-oriented	Result-oriented
<b><u>People</u></b>	
Personal authority mainly low	Personal authority mainly high
Individual creativity stifled	Individual creativity encouraged



Dominated by professionals and technocrats	Dominated by pioneers and entrepreneurs
Range of management styles: directive, participative, paternal, etc.	Range of management styles: directive, paternal
Individuals normally cannot see the results of their endeavours	Individuals normally can see the results of their endeavours
Ample human capital, financial resources and know-how	Modest human capital, financial resources and know-how
Training and staff development is more likely to be planned and large scale	Training and staff development is more likely to be ad-hoc and small scale
Specified training budget	No specified training budget
High incidence of unionization	Low incidence of unionization
High degree of resistance to change	Negligible resistance to change
Potentially many internal change catalysts	Very few internal change catalysts
<b><u>Contact</u></b>	
Wide span of activities	Span of activities narrow
Extensive external contacts	Limited external contacts
Greater scope for extended customer base	Normally dependent on a small customer base
Large customer base	Limited customer base

Table 2 Characteristics of Large companies vs. Small and medium sized enterprises

(Source: Ghobadian, Gallear (1997), "TQM and organisation size")

From the characteristics mentioned in Table 2 we identify 4 key parameters that directly influence the nature of management in SMEs.

- *Processes:* SMEs require simplistic forms of planning and control systems and informal reporting
- *Procedures:* SMEs have a low degree of standardization and formalization, with idealistic decision making
- *Structure:* SMEs have few layers of management; have a low degree of specialization, with multitasking and a high degree of innovativeness
- *People:* Because of the lack of financial resources the consequences of failure are high, and people tend to use tested techniques

The first two parameters suggest that SMEs require less structured methods of management with greater flexibility. Therefore, the organizational management has to maintain reasonable levels of bureaucracy for more efficient top-down and down-up communication and decision making. The other two suggest a strong focus on people which underlines the necessity of a simplified people-oriented model of Project Management. On the other side, large companies require a highly systematic approach to management:

- Processes: Formal, bureaucratic and control-oriented processes
- Procedures: System-dominated procedures, high degree of specialization
- Structure: Hierarchical with several layers of management, slow response to environmental changes
- People: high resistance to change and low levels of innovativeness

By analyzing the parameters above we identify that both the SMEs and large companies have their own benefits and disadvantages. Audretsch (1998) stresses that SMEs have the potential to be more flexible and closer to the customer which is an attractive ground for continuous innovation and product customisation. They penetrate markets and sub markets where they can harness their advantages and where they are not in direct competition with large companies. SMEs have the ability to respond quickly to opportunities and external threats as well as they have more efficient internal communications and interactive management cycles (Edwards, 2001). However, despite these advantages SMEs “lack economies of scale, scope and learning” (Murphy and Ledwith, 2007). Moreover, Rothwell (1992) states that the ability of SMEs to innovate is over-estimated as they “lack the material and technological resources that enable large firms to spread risk over a portfolio of new products and fund longer-term R&D”, and as a consequence the willingness to innovate is hindered. By contrast, large companies have a high degree of knowledge and expertise in managerial practice; they have economies of scale, higher learning capabilities, increased resource availability, increased manufacturing capabilities and qualified specialized human resources.

### **Project Management in SMEs**

Baccarini (1999) recognizes that Project Management was initially developed as a managerial approach intended for application in large companies which inherently have

complex managerial systems. The same conclusion was made by Andersen (2009) who showed that the level of formality of project management processes applied will reflect the formality of the organization. Additionally, Thomas and Mullaly (2008) discovered that in order for companies to obtain value from Project Management there needs to exist a fit between the project management practices adopted and both the nature of the company (depending on size and organizational culture) and the nature of the undertaken projects.

And so, if, as showed by Ghobadian and Gallear (1997) earlier SMEs use less formal and more people-oriented approaches, then we can assume that the same approach is reflected in the application of Project Management. Murphy and Ledwith (2007) recognize that traditional Project Management “can be adapted and altered to suit the needs of smaller organisations”. While no one underestimates the importance of Project management not only at the organizational level but also on a global scale, having a contribution of \$10 trillion on the worldwide economy (Turner, Ledwith and Kelly, 2012), there is no methodology today adapted for SMEs, like the PMBOK and PRINCE2 (two of the most appreciated project management methodologies up to date) (Parker, Charlton, Ribeiro, Pathak, 2013) which address the Project management needs of specifically SMES. Furthermore, Anthony, Kumar and Labib (2008) concluded in his investigations of the use of Six-sigma in SMEs that SMEs compared to large companies are predisposed not to use formal processes to the extent that large companies use first because they lack the necessary resources, and secondly, because they are not aware of them. The second reason again stresses the importance of specialised theory development with a focus on the managerial needs of SMEs.

Despite the commonality of the findings of the multiple studies mentioned earlier identifying basically the same concept: that SMEs require more simplistic and people-oriented approaches, Murphy and Ledwith (2007) conducted research to investigate Project Management in 36 electronics SMEs from Ireland to identify that while the nature of Project management in SMEs is indeed less informal and more people-oriented rather than systems oriented, SMEs still need to follow some kind of formal structure with clear responsibilities assigned to each project participant.

Through the analysis of the differences in the nature of managerial processes taking place in SMEs and large companies we were able to identify that SMEs require more simplistic and people oriented managerial approaches (Ghobadian and Gallear, 1997). Therefore, it is expected that the nature of Project Management in SMEs is different from the traditional Project Management used in larger companies (International Project Management Association, 2006; Project Management Institute, 2008; Turner, 2007). Extensive research has been conducted in recent years by Turner (2009) and Turner, Ledwith and Kelly (2009, 2012). Existing literature does not provide investigations on the extent of Project management specifically in small and medium sized supermarket chains neither in Europe or USA nor in Moldova; however, Turner, Ledwith and Kelly (2012) conducted research on a large scale (including 123 SMES that activate in industries like food, pharmaceuticals, electronics, engineering, construction etc. from Australia, the far East, Britain, Ireland and the rest of Europe) to investigate the nature or Project Management in SMEs as well as the extent of Project Management practices used. Turner, Ledwith and Kelly (2009) identified that the extent of Project Management in SMEs depends on the size of the company rather than the nature of the industry. Therefore, it is assumed that the findings of these researchers are a relevant base for comparison with the results of the secondary data collected from small and medium sized supermarket chains from Moldova to achieve the research objectives proposed by the research paper. The summarized findings of the three investigations conducted by Turner, Ledwith and Kelly (2009, 2010, 2012) are summarized below.

### *Use of Projects in SME s*

As identified earlier through the analysis of Ghobadian and Gallear's (1997) differences in the general characteristics of SMEs vs. large companies, SMEs require simple planning and control systems with informal reporting, idealistic decision making, multi-tasking and generally people-oriented managerial approaches. Despite the fact that, Ghobadian and Gallear (1997) acknowledged the importance to tailor the managerial approach to the size of the company, they did not provide an analysis of the impact of the differences identified by them on the application of Project management specifically. Turner (2009), Turner, Ledwith and Kelly (2009, 2012) were able to demonstrate that SMEs substantially use projects as a managerial tool to implement innovation through the delivery

of tailored or bespoke products, to improve internal processes like operations, and generally grow. SMEs use both (internal processes development) and external projects (projects intended to deliver tailored or bespoke products to customers). However, researchers recognize that SMEs do not always view internal development work as projects and, therefore, do not always see the necessity to use projects in order to innovate (Turner, Ledwith, Kelly, 2010).

### *Use of Project Management in SMEs*

As identified earlier in the literature review small companies employ up to 50 persons and medium sized organizations employ 250 persons. Literature suggests that there is a moderate difference between the extent of Project management used in small companies and the extent used in medium sized companies (Turner, Ledwith, Kelly, 2009, 2010, 2012). In small organizations the same authors suggest that a “micro-lite” version of Project management is required to assure low levels of bureaucracy and thus functionality of the project organizational structure. On the other hand, at the transitional level from 50 and up to 250 employees, when companies are categorized as medium sized, a “lite” version of Project management is required. Literature suggests that at this size level companies require a larger extent of Project Management use because the work of employees becomes more specialized and more layers of management are developed; therefore, there is a need for more formal Project management to coordinate the work among specialists (See Table 3); however, medium companies still require a simplified version from the traditional Project Management (Turner, 2012; Thomas and Mullaly, 2008).

Size of company	Number of employees	Number of business units	Levels of management	Nature of work	Nature of procedures
Micro	Less than 15 to 20	One	One -Entrepreneur	Multi-tasking	People focused
Small	Less than 50	Several	Two -Board -Team leaders	Multi-tasking	People focused
Medium	More than 50	Several	Three -Board -Managers -Team leaders	Specialists	Formal

Table 3 Features of different size of companies

(Source: Turner, J.R., Ledwith, A. and Kelly, J.F. (2010), "Project management in small to medium-sized enterprises: matching processes to the nature of the firm")

Initial investigations on Project management in conducted by Ledwith (2004) and Murphy (2007) in 118 high-tech SMEs suggested that SMEs ought to adopt a process for selecting the level of project management that would best fit their needs. The following are the stages of the selection process:

- Strategic objectives
- Appropriate success criteria and key performance indicators for the company's projects
- And therefore appropriate success factors
- And therefore appropriate Project management tools and techniques which meet the criteria outlined above

While this selection process seems plausible it is highly doubtful how a manager whose primary role is not Project management will be able to select the "right" extent of Project

practices without having Project management knowledge and expertise that would help him/her understand the functionality of the tools and techniques in the first place.

### ***Project Managers in SMEs***

The role of a project manager as identified in previous literature is one of the most important factors for successful Project management application (Avots, 1969). While SMEs understand the importance to have moderately qualified managers to run projects they are constrained by the availability of resources (Ghobadian and Gallear, 1997). As a consequence in small and micro companies the CEO or the founder of the company is usually the one who performs the role of a Project manager (Turner, Ledwith, Kelly, 2010, 2009). Therefore, in these companies projects are usually ran by people who have other primary roles suggesting that people have to multi-task (Ghobadian and Gallear, 1997). On the other hand, in medium sized companies the need for a Project manager to coordinate the project work is increasing, and as identified by Turner, Ledwith and Kelly (2012) medium sized companies are more likely to employ professional project managers either from inside or from outside. At this stage the need for expertise in Project management by project managers is needed in order to translate it into effective use of Project management tools and techniques.

### ***Project Success factors***

Turner, Ledwith and Kelly (2009) questioned 118 high tech SMEs to identify common success factors that SMEs associate with project success (See Table 4). It was identified that generally SMEs have three main success factors: clear goals and objectives; planning, monitoring and control of projects; and resource allocation. However, it is noticeable that medium-sized companies additionally identify Risk management as a success factor. This clearly suggests that as companies get bigger in size (with several management layers, See Table 3) they prefer a more competent and formal approach to Project management in order to assure that resources are utilized efficiently.

Company size	Success factors correlated with project success
All	Clear goals and objectives
	Planning, monitoring and control
	Resource allocation
Micro	Clear goals and objectives
	Resource allocation
Small	Resource allocation
	Client consultation
Medium	Clear goals and objectives
	Planning, monitoring and control
	Resource allocation
	Risk management

Table 4 Importance given to success factors correlated with project success

(Source: Turner, J.R, Ledwith, A. and Kelly, J.F., 2009, “Project Management in Small to Medium-sized Enterprises: a comparison between firms by size and industry”).

### Project Management Tools & Techniques used in SMEs

Besner and Hobbs (2006) identified earlier in the literature review the extent of the practices used in large companies by professional PMPs with high Project management experience. Those results suggested that companies have clear preferences for some techniques over others and consequently some are used more and other less. The extent of tools and techniques used in SMEs, however, as demonstrated by Turner, Ledwith and Kelly differs from the extent in large companies (See table X).



	Micro (%)	Small (%)	Medium (%)	Large (%)
Requirements definition	90	81	88	86
Work or milestone schedule	74	79	68	74
Risk management	74	43	52	67
Milestones	73	64	73	71
Status reports - Time	70	36	57	82
Work breakdown	70	64	48	56
Issue management	63	36	48	69
Status reports - Cost	59	43	50	77
Resource schedules	52	21	40	52
Project roadmap, level 1 plan	50	43	38	67
Team building	44	29	46	37
Responsibility assignment matrix	44	57	40	52
Status reports - resource usage	30	29	32	52
Project book	7	19	22	24
Agile methods	0	0	11	11
Project office	0	7	14	22

Note: These are sorted based on the extent of use (categorised as essential)

Table 5 Project Management practices considered essential

(Source: Turner, R. Ledwith, A. Kelly, J. (2012) "Project management in small to medium-sized enterprises: Tailoring the practices to the size of the company")

It is noticeable that both this list and the list in Table 1 comprising the tools used extensively in large companies have the same three top practices: requirements definition, milestones and work or milestone schedule. The fact that Requirements definition/analysis is in the top of both lists suggests that it is imperative for both SMEs and large to clearly define the objectives of a project which earlier was mentioned as being a success factor. Work or milestone schedule is highly used in both SMEs and large companies suggesting that time management is very important. Status reports on time and cost also score high in medium sized to again stress the importance of time management and resource utilization (Kerzner, 2011; Ghobadian and Gallear, 1997). We notice a difference between small and medium sized companies in the extent of Risk management techniques used – 43% and 52% respectively. Medium sized companies are inclined to use Risk management practices more compared to small companies, which was also identified earlier by Turner, Ledwith, and Kelly (2009) as being a success factor for medium sized companies; however, less than large companies who scored 67%. Contingency plans was not among the techniques use in SMEs, however, it is moderately used in large companies (Besner and Hobbs, 2006). Team building,

which also derives from the difference between SMEs and large companies identified by Ghobadian and Gallear (1997), scored relatively high in SMEs – 46%, compared to large companies – 37%, to once again show that SMEs require people-oriented management approaches. Project office, as identified in the table is used in small and medium sized companies but at a lower extent than in large companies. However, medium sized companies show a higher score compared to small companies: 14% and 7% respectively.

The literature review explained the general concepts in Project management and analyzed its advantages as a managerial discipline. The differences between SMEs and large companies were identified and their impact on the extent of Project management on SMEs. Finally, the extent of Project management was identified as being lower in SMEs compared to large companies. The extent established list of tools and techniques developed by Turner, Ledwith and Kelly (2012) identified that first the list of tools and techniques used in SMEs does not comprise complex practices, and secondly, that the list of practices used is comparatively shorter. These findings will be compared with the primary data to identify the existing differences and similarities between the extent of Project management generally used in SMEs and Project management used in medium sized supermarket chains from Moldova.

## Methodology and methods

The scope of this research is to first identify to what extent SMEs (small and medium size supermarket) generally use Project management, and secondly, to identify the extent of Project management in small and medium sized supermarket chains from Moldova. The following chapter will describe and explain the methods of design, sample selection technique, data collection and analysis that were used to obtain the results for this research.

## Proposed methodology

The research methodology incorporates the guidelines to conduct a research and achieve its objectives. The research methodology used for this research is presented against the research onion in Figure 4 below.

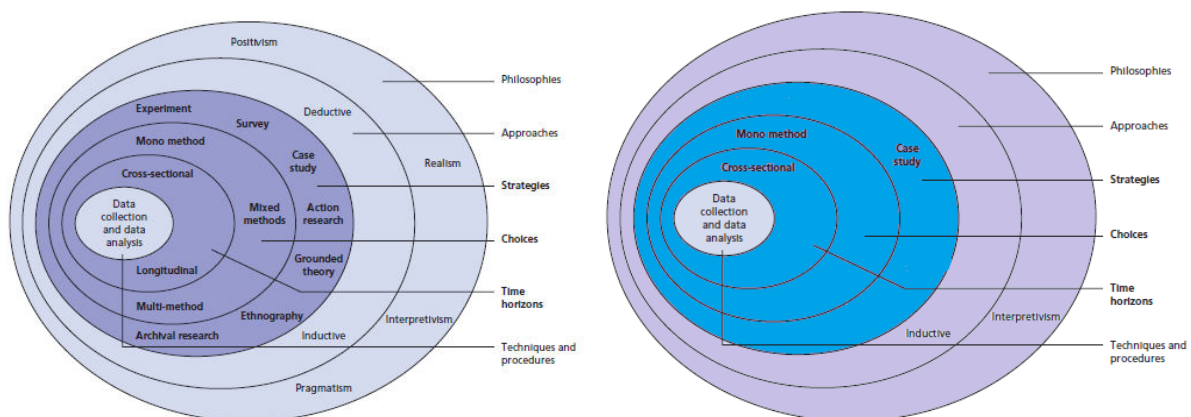


Figure 4 Research "Onion" and Research Methodology Structure

(Source: Saunders, Lewis and Thornhill (2012))

Further the chapter will describe each of the "onion" layers to explain and justify the philosophy, the strategies and the approach that were used for this research.

## Research philosophy

According to Saunders, Lewis and Thornhill (2012), the research philosophy can be considered as being the multitude of the assumptions that the researcher has made about the way in which he/she views the world. Deriving from the philosophy adopted, the

researcher will ultimately shape the research questions, the research methods to be used and how he/she interprets his/her findings (Crotty, 1998).

This research is guided by the philosophy of *interpretivism*, which views the social reality as a dynamic system that cannot be analyzed using quantitative methods and suggests that different interpretations can be given to the reality. This philosophy is contrasted with *positivism*, for example, which suggests that logic, deduction and statistical analysis are the sources of knowledge that ultimately create “law” like generalisations (Saunders, Lewis and Thornhill, 2012). This research is focused on investigating how Project Management is used within small and medium supermarket chains from Moldova, and therefore implies the analysis of the perception by social actors, which in this case are the project managers, of how Project Management should be used. So, *interpretivism* was chosen because it reflects a reality where there might be differences in how managers in supermarket chains from Moldova perceive the necessity and efficiency to apply specific Project management tools and techniques.

## Research approach

The approach that is used in a research defines the design of the research process. Business management researches are characterized by two approaches: *deduction* and *induction*. Deduction implies testing existing theory (in the form of hypotheses) through the analysis of the data collected, while induction suggests first the analysis of the collected data and the development of new theory (Gill and Johnson, 2002). Therefore, the approach is selected depending on what the research scope is. In this research the scope is to identify to what extent are Project management practices used within small and medium sized supermarket chains from Moldova, and, therefore, the inductive approach needs to be used because new theory will be developed. Additionally, compared to the deductive approach, the inductive doesn't follow a highly structured research design, which leaves room for revealing new insights about the topic. In regards to this research, the induction approach will allow for the identification of, unknown at the moment, factors that influence the selection of Project management tools and techniques within the companies that are investigated to surprising facts related to the subject.

## Research strategy

The third layer of the “research onion” is the research strategy that will be used to achieve the objectives of the research. For this research the *Case Study* strategy will be used. According to Yin (2009), “a case study explores a research topic or phenomenon within the context or within a number of real-life contexts”. Because this research aims to explain a set of patterns and themes in organizations within a specific industry (supermarket industry) and a specific country (Moldova), the Case Study strategy seems to be the most appropriate for this exploratory type of research.

## Research choice

For this research the Mono-method Qualitative has been selected. Saunders, Lewis and Thornhill (p. 163, 2012) state that “qualitative research studies participants’ meanings and the relationships between them...to develop a conceptual framework”. In this research the perception of the importance of Project management and the extent of Project management practices that are used by the companies in the sample are interpreted by the top managers who are directly responsible for the implementation of projects within their companies. Therefore, depending on their personal interpretation of how useful they consider Project management as a tool to innovate and grow is a matter of the perception of each manager individually. The use of the qualitative method therefore will allow for in-depth data selection and will generate useful information that will be synthesized in order to make relevant conclusions.

## Time horizon

Cross-sectional time horizon will be used for this research deriving from the time constraints imposed by Dublin Business School (approx. 2-3 months). According to Saunders, Lewis and Thornhill (2012) this means that the conducted research will represent a “snapshot” of a phenomenon at a particular moment in time.

## Data collection and analysis

This research carries an exploratory character which, according to Robson (2002), means that the research intends to identify “what is happening”, and in doing so it explores new insights that could bring additional value to research through new findings. Thus, it will allow for a deeper understanding of the phenomenon and the factors that are influencing it.

In order to answer the research questions, primary and secondary data was analyzed. Primary data was gathered through the use of semi-structured interviews. Semi-structured interviews are efficient in collecting the data that is necessary to answer specific research questions and at the same time it allows for flexibility during the interview as the interviewer can ask additional questions, in the context of each interview, which he/she deems to bring additional insight (Saunders, Lewis and Thornhill (2012). In addition to the regular questions administered, the interviewees were asked to select from a list of tools and techniques the ones that they used, and the practices that they considered essential for project success. The researcher believes that using this type of primary collection data is the most appropriate to collect information for this research because up until now no research regarding the extent of Project Management within supermarket chains from Moldova has not been conducted; and, therefore, as interviews offer the advantage of personal interaction with the sample, it is suggested that it will provide for considerable amounts of new insight. However, secondary data has also been collected, like for example research papers, articles and reports which will be analyzed to provide for relevant findings that eventually will be compared with the primary data findings for a more in-depth analysis of the topic. Ultimately, the data collected from the five interviews is synthesized and structured accordingly to answer the research questions and formulate conclusions as well as give the according recommendations.

## **Sampling**

The sampling method that is used for a study is dependent on the scope of the study and derives from the research questions (Saunders, Lewis and Thornhill, (2012). Therefore, it was decided by the researcher that the most appropriate sampling method would be non-probability sampling which means that the samples are selected according to certain parameters. In doing so, the researcher followed the homogenous purposive sampling that implies the selection of samples with similar characteristics (Patton, 2002). For this study it was five project management practitioners from small and/or medium sized supermarket chains from Moldova and who are regularly involved in the implementation of projects as project managers or project participators. See personal details regarding the participants in Table 6.

## Data analysis and findings

The interviews were conducted face to face during a period of three weeks. The aim of the interviews was to collect information from five project management practitioners who are employed within a small or/and medium sized supermarket chain from Moldova. Respondents were initially informed about the subject that will be researched in this study, the interview objectives and the confidentiality clauses. In addition each respondent was informed about the benefits that this research could bring for their companies in terms of enhancing Project Management capability. Before starting the interview respondents were informed that the information regarding their names will be undisclosed and the names of the companies as well. The rate of participation at the interviews was 100% as all five interviews had been conducted. All respondents had to answer a set of fourteen questions regarding the extent of Project management use, its efficiency, the tools and techniques that are mostly used, and the ones that are essential for successful project implementation, as well as their personal opinion about the level of Project management practices that is required in their company. In order to prevent any misunderstandings regarding language barriers the interview questions were asked in Romanian and afterwards translated in English. Before the start of each interview the respondents were informed that the information gathered will be used solely for academic purposes. All respondents besides one have required not to be recorded. The interviewees have unanimously required that their names stay undisclosed, therefore, no names will be provided; however, in order to differentiate between companies they will be given abstract names. An overview of the interview questions is included in the Appendix. Table 6 includes information regarding the age, position held in company, academic degree and specialization. Table 7 includes information regarding the number of employees, the approximate annual turnover and the age of the company.

	Age	Position held	Academic Degree	Specialization
Practitioner 1	26	Marketing Director	Bachelor	Economics
Practitioner 2	30	Operations Director	Bachelor	Business Management
Practitioner 3	34	Sales Director	Master	Business Management
Practitioner 4	27	Marketing Director	Master	Marketing
Practitioner 5	41	General manager	Bachelor	Law

Table 6 Personal Information regarding about the interview respondents

Name of respondents	Name of Company	Age (years)	Nr. of employees	Approximate Annual Turnover
Practitioner 1	IM	11	169	€ 11,000,000
Practitioner 2	GM	15	274	€ 31,500,000
Practitioner 3	FM	12	183	€ 19,000,000
Practitioner 4	LM	7	220	€ 20,000,000
Practitioner 5	NM	10	294	€ 29,000,000

**Table 7 Information about the companies interviewed**

In order to understand whether the companies fall in the category of SMEs as defined by the European Commission (2008) we explore Table 7. It is noticeable that according to the annual turnover all companies are SMEs having revenues of far behind the limit established by the European Commission (2008) limit of €250 million/year. On the other hand, we notice that the number of employees for companies GM and NM are over the limit of 250 individuals with 274 and 294 respectively, indicating that these companies fall in the category of large companies. Despite this fact, in the course of the following analysis we will identify these companies as falling in the category of SMEs, and specifically medium sized companies, first because the criteria defining the company size established by the European Commission (2008) are not consistently crossed to consider these organizations large companies, and secondly because the annual turnover of all the companies is in compliance with EC standards.

The analysis of the interviews identified certain commonalities and differences regarding the extent of Project management use within the five companies that were investigated. The following paragraphs will summarize and analyze these findings to provide for and understanding about the level of Project Management used in supermarket chains from Moldova.

### **Use of Projects**

All five companies stated that they used projects in their companies on a regular basis. The project types vary from product advertising campaigns, image advertising campaigns, to the development of new products and improvement of existing products



(referring to own pastry, fast food products etc.). Additionally, occasionally companies are implicated in projects implying the improvement or/adjustment of specific sites within supermarkets to enhance the experience of customers while shopping. These projects had a period of implementation between 1-3 months. More complex projects are undertaken as well, like the opening of a new supermarket, which in this type of business is considered a massive project that could reach up to 1 year. The establishment of new supermarkets is also delivered through the use of Project management in order to assure that the stores are delivered within set timeframes, allocated budget and the legal requirements imposed by authorities as well as requirements imposed by the company standards. Therefore, we identify that supermarket chains from Moldova use projects to satisfy the external customers. As far as it concerns internal projects companies IM, FM, and NM suggested that despite them using projects to improve internally they constantly face poor project performance specifically in terms of time. This suggests that external projects are prioritized because they have an impact that is directly felt by the end customer. Here's what Practitioner 1 from company IM stated regarding this matter:

“...the managers in our companies are involved in 2-3 projects at the same time and apart from the responsibilities that they are assigned in projects they are also busy in performing their daily administrative functions; so, the work on internal projects is sometimes delayed...”

This clearly shows a tendency in these companies to delegate more responsibilities to those who deliver project activities than they can physically perform, which confirms the findings in the literature review that SMEs have limited in resources (Ghobadian and Gallear, 1997; Turner, Ledwith and Kelly, 2012) and as a consequence managers tend to optimize the use of human resources by delegating additional responsibilities.

### **General use of Project Management**

It was identified that companies use both internal and external projects. All companies agreed that they used moderately formal Project management to support their project activities. They recognize that formalities are required by the board of directors.

Companies NM, LM, GM and FM reported that for example all the report meetings implying the Project manager and the board of directors (who basically are the project clients) are all documented and resolutions regarding the next major activities of a project to be accomplished are made by the secretary of the board. However, companies IM, GM and LM stated that the formality level decreases considerably at the level of Project manager and Project team. The companies explain that between themselves they like to keep it simple and a lot of the work is done in a friendly and informal atmosphere. However, the respondents, who most of the time are employed as Project managers, recognize that deadlines the informal atmosphere must not be a barrier to accomplishing the tasks of the project. Practitioner 4 from LM in particular stated the following:

“...when I am the manager of a project I tend to develop a friendly atmosphere among the project team because while studying abroad in Germany I had the opportunity to work in groups on several university projects and there I realized the importance of maintaining a friendly atmosphere inside the team.; furthermore, we are about 40 people working in the heading office and through time have developed some interpersonal relationships that generally decreases the level of formality in the company. However, when I was first appointed as a Project manager I was constantly experiencing problems with task delivery times. I guess some people become lazy or are irresponsible, and I agree that sometimes with particular individuals I might behave in a formal manner to stimulate efficient delivery of activities.”

On the other side the other two companies FM and NM are more inclined to strict subordination and formal practices. This might be explained by the age of the practitioners who are 41 and 45 respectively, compared to the other respondents who are 26, 30 and 27 years old. We suppose that the level of increased formality in companies FM and NM are correlated with the education that they received in universities within the USSR (Union of Soviet Social Republics) where strict subordination and formal relationships were promoted.

Generally these findings denote that there is a moderate degree of formality within the companies which confirms the findings in the literature for medium sized companies requiring more formal Project management than in small companies but still less formal than in large companies (Ghobadian and Gallear, (1997); Turner, Ledwith and Kelly (2012); Anthony (2008); Thomas and Mullaly, 2008; Turner (2010). The statement above is additionally reinforced by the results of Table 9 (See below) which shows that 4 of the companies recognize team building as an essential practice in their Projects.

## **Project Manager**

As we can notice from Table 6 none of the Project practitioners in the companies have specialized education in Project management, while only two of them have business management education. However, practitioners from company IM, GM, LM and NM all stated that they have introduced themselves to Project management discipline by reading Project Management books. However, none of these respondents could identify specific names of authors or names of books. One important matter has to be mentioned, the respondents were knowledgeable about the general concepts within project management like project phases, organisational structure and project performance criteria, but when they were asked to mention some other practices rather than those that were given during the interview to be selected (See table 8) as the most used techniques, the respondents were experiencing difficulties in answering and were trying to avoid the question. These two factors clearly explain that the interviewed Project practitioners have only a basic understanding of Project Management and are not aware of project practices like the CPM (Critical Path Method) and EVM (Earned Value Management) that are extensively used in large companies. Moreover, they were asked if they were familiar with CPM and EVM and none of the respondents was familiar to any of these two practices, and therefore, could not give an appreciation to these tools as being too complex or bureaucratic for their needs like was showed by the findings of Turner (2008). It is not excluded that the use of Project management in these companies could have been relatively higher if the Project practitioners were more informed and knowledgeable about the practices developed in the traditional Project management methodology like the PMBOK (Project Management Book of Knowledge). Despite this, all managers confidently affirmed that they are OK with the level of Project management used within their companies, which confirms the findings of

Turner, Ledwith and Kelly (2009, 2010, 2012) that SMEs (including medium sized companies) prefer to use simple Project management.

## **Project Tools and Techniques**

Before the analysis of the primary data there was an assumption that small and medium sized supermarket chains from Moldova have a low use rate of Project management practices. The respondents were handed a list tools and techniques adopted by Turner, Ledwith and Kelly (2012) that incorporated 16 of the practices used by SMEs, according to their research, to select the practices that used to implement Projects (Table 8). We notice that there are 8 leading tools and techniques that are used by at least 4 of the interviewed companies. Among these are: Requirement Definition, Work breakdown, Responsibility matrix, Work schedule, Team building, Risk management and Status reports on time and cost. The fact that only 8 of the tools are among the tools used by all of the companies suggests that despite the fact that these companies claim to use Project management they do not extensively make use of existing practices that can contribute to efficient project performance in SMEs. This might be caused by two potential reasons: 1) they simply do not find these tools effective for their project purposes or 2) they are unfamiliar with these tools. Both reasons seem plausible. The first is enforced by the findings in Table 9, which identifies the most important tools for successful project performance. From analysing Table 8 and Table 9 we conclude that the practices used by most of the companies coincide with the ones that were selected as being essential for Project success; the other practices were considered unessential to project success. The second reason is supported by the earlier findings that suggest a low level of knowledge and expertise in Project management which ultimately impacts the usage level of Project management practices. Three of the companies stated that they used some kind of Project software that was part of a centralized information system in order to coordinate the work among the Project team and Project manager; the development of a road map was also identified as a used tool used by three companies. We conclude that there is a considerable difference in the level of Project practices used in medium sized supermarket chains from Moldova compared to the general level of Project practices identified by the research results of Turner, Ledwith and Kelly (2012) developed on the analysis of 123 companies from Australia, the Far East, Britain, Ireland and the rest of Europe.

Name of Company	Req. Def.	Proj. book	Road map	Mile-stone	Work bd'n	Agile scrum	Respons. Matrix	Work sched.	Res. Sched.	Team bldg	Risk mgt	Issue mgt	Project office	Status rep. Cost	Status rep. Time	Status rep. res. Usage
	IM		IM	IM	IM		IM	IM		IM	IM	IM	IM	IM	IM	IM
	GM	GM	GM	GM	GM		GM	GM	GM	GM	GM	GM	GM	GM	GM	GM
FM	FM	FM				FM	FM			FM	FM	FM			FM	FM
LM					LM		LM	LM		LM	LM	LM		LM	LM	
NM					LM		NM	NM		NM		NM	NM			

Table 8 Tools and techniques used by the companies

## Essential tools and techniques

Table 9 identifies which tools and techniques are considered essential for successful Project implementation. Unanimously all 5 respondents identified Requirements definition as essential for successful Project implementation, thus confirming the findings of Turner (2010) and Turner, Ledwith and Kelly (2012) in the literature review. As a matter of fact Requirements definition is also in the list of “super tools” as identified by Besner and Hobbs (2006), as being a tool used extensively in large companies and which has a high contribution to project success. It also confirms the findings of Ledwith and Mullaly (2008) who identified the establishment of clear goals and objectives (which is performed by the Requirements definition) among the project success factors for medium sized companies (See Table 4).

The function of control and monitoring in Projects is very important as 4 out of 5 companies identified Status reports on cost as essential, stressing the need for increased control over the utilization of resources. Here’s what respondent from company NM (who is the General manager of the company) when asked if Project management enhances the control over the company’s resources:

“...having worked previously in the same industry for 5 years, and having worked here as a General manager for 3 years I realized that it is imperative for a company to maintain control over its financial resources and always ask if they are used efficiently. For us, constant “Status reports on costs” is a tool that helps me

as a Project manager and leader as well as the board of directors to maintain efficient control of resources...after all it's their personal money and they have the right to know how it's being spent..."

This clearly shows that companies are scarce of financial resources (Ghobadian and Ghalear, 1997; Welsh and White, 1981; Turner, Ledwith and Kelly, 2012) and thus the tendency for increased monitoring. The function of control is also performed through Risk management as three of the companies identified it as an essential practice, again stressing the importance to identify and overcome potential threats in order to decrease the possibility of additional unplanned costs (Turner, Ledwith and Kelly, 2012). Surprisingly only one company stated that they used Resource schedule which contradicts the logic that these companies tend to employ high control over resources. This might be explained again by the lack of knowledge regarding this tool. Time status reports were registered in three companies as important practice which shows the need for these companies to control the efficiency of Project activities delivery. The planning function is also performed through the use of Work scheduling. Three companies gave this practice a high degree of importance stressing the need for efficient distribution of the work packages to be performed.

One of the practices that received credit from 4 companies was the responsibility matrix. The high use rate of this practice, as explained earlier, derives from the need of Project managers to increase the accountability of the Project team in an attempt to control the individuals who are irresponsible. Team building as was expected was also mentioned among the important practices being selected by 4 companies. This reconfirms that small and medium sized companies use more people focused managerial approaches rather systems oriented management styles.

Despite identifying that the investigated companies use Project management, the extent of tools that they use unfortunately points out to a low level of tools and techniques usage. Compared to the results identified by Turner, Ledwith and Kelly, (2012) regarding the practices used in 123 SMEs Australia, Britain, Ireland and the rest of Europe from (See Table 5), medium sized supermarkets from Moldova still have a lot of practices that they could apply to improve their Project performance.

	IM	GM	FM	LM	NM
Requirements definition	x	x	x	x	x
Work or milestone schedule	x	x	x		
Risk management		x	x	x	
Milestones	x				
Status reports – Time	x			x	x
Work breakdown			x		x
Issue management				x	x
Status reports – Cost	x	x		x	x
Resource schedules					
Project roadmap, level 1 plan			x		
Team building	x	x		x	x
Responsibility assignment matrix	x	x		x	x
Status reports - resource usage					
Project book		x	x		
Agile methods					
Project office					

Table 9 Essential tools and techniques

## Conclusion

In order to identify the extent of the Project management used in small and medium sized supermarket from Moldova it was needed to create a comparative framework that would give an understanding of what is a low or high degree of Project management use. In order to this the literature review identified the extent of Project management that is used in the majority of SMEs from the western world as well as large companies.

The analysis of the secondary data provided in the literature review identified that SMEs use Projects in their activity to implement innovation and improve internal processes like operations. The findings in the study proved that SMEs use Project management to implement projects to a considerably lesser extent than in large companies (Turner, Ledwith, Kelly, 2012). In light of the reduced number of employees and simple organizational structure, SMEs use a simplified version of Project Management (Ghobadian, Golllear, 1997; Andersen, 2008) compared to large companies which use traditional forms of Project management that are inherently more complex. The tools and techniques as showed in the Literature review used by SMEs differ considerably in the degree of appliance as well as the degree of complexity compared to large companies. It is explained that the use of simple practices is caused by the need of SMEs to have a people-focused approach in the managerial process. These findings have made it possible to answer the first question of the research paper: To what extent are projects and Project management used in SMES?

The comparison between the secondary data and the primary data identified that the nature of Project management in the investigated companies is largely the same like in the majority of SMEs: simplistic and people-oriented. However, according to the Moldavian supermarket companies more formal approaches are applied to the managerial process as against the more informal processes in SMEs. This comes to answer the following research question: What is the nature of Project management generally in SMEs and particularly in medium sized supermarket chains from Moldova?

Through the analysis of the primary data the research was able to answer the next research question: To what extent do supermarket chains in Moldova use projects in their operations, innovation and growth? The analysis identified that like all SMEs, medium sized supermarket chains from Moldova used projects to innovate, enhance internal processes and grow. The project types vary from product advertising campaigns, image advertising



campaigns, to the development of new products and improvement of existing products (referring to own pastry, fast food products etc.). Additionally, occasionally companies are implicated in projects implying the improvement or/adjustment of specific sites within supermarkets to enhance the experience of customers while shopping. More complex projects are undertaken as well, like the opening of a new supermarket, which in this type of business is considered a massive project that could reach up to 1 year.

The analysis of the secondary data allowed for the identification of the extent of Project management used in SMEs by determining the specific practices used in SMEs to implement projects. It identified a list of 16 common practices that were used less or more in the managerial process (See Table 5). Requirements definition, Work breakdown, Risk management, Status reports on time and cost, were mentioned to be in the extensively used category and, thus central to project success. The analysis of the most essential practices used by supermarket chains confirmed the findings of Ledwith and Mullaly (2008) according to which medium sized enterprises relate project success to 4 main management processes: clear goals and objectives, planning, monitoring and control, resource allocation and Risk management. The primary data also identified which practices are generally used in the investigated companies. While the identified essential practices indicated a coincidence with the generally accepted essential practices among SMEs (See Table 5) including Requirements analysis, Work breakdown, Work schedule, Risk management and Status reports on cost and time, it is surprising to see that the overall usage of the other practices was relatively lower than that identified in SMEs. It is suggested that the poor usage level of practices is caused by lack of professionalism among the Project managers who as was identified did not have any degree or participated in specialized courses in Project management. However, the respondents were not frustrated with the overall level of Project management within their companies suggesting that these are enough for them; as one of the respondents stated – "...more important it is to get the job done in time without exceeding the budget...". Therefore we conclude that Project practices are used less in medium sized supermarket chains from Moldova than compared to SMEs and considerably less than in larger companies. This paragraph answered the last research question: What is the extent of Project Management used in medium sized supermarket chains from Moldova compared to the extent of Project management in SMEs?

This research paper is an initial insight in studying the extent of Project management in supermarket chains from Moldova and attempted to give a general understanding of the existing situation at the moment. Additional research comprising quantitative analysis is necessary to investigate the topic more extensively. However, the main idea is that Project management within these companies still has ground for development and improvement because there are practices in Project management the value of which is not fully understood and thus appreciated by the Project practitioners who implement Projects.

The next section will give some recommendation as to what could be done by these companies in order to improve their knowledge regarding Project management and eventually improve Project performance.

### **Recommendations**

The following are considered as initial recommendation for supermarket chains from Moldova deriving from the research results:

- As a first step to it would be required to increase the interest of Project practitioners regarding Project management by promoting self-learning
- Develop the skills and improve the knowledge in Project management of Project managers by enrolling them to courses specialized in the application of Project management or consider the option of offering tuition to existing Project practitioners for a degree in Project management
- Hire a consulting company to investigate the level of Project management in the company in order to offer a model that would incorporate the tools and techniques tailored to the size and specific needs of the company and would advice on the correct and efficient use of tools and techniques
- Promote the institutionalisation of Project management within the culture of the company to develop Project management implementation standards
- Create networks with supermarket chains from the European Union to create a platform for knowledge sharing in Project Management

## Self-reflection on own learning

The research that I conducted focused on a really practical matter personally for me because before this master program I was employed as a Project Manager in one of the supermarket chains from Moldova. Having activated in this industry and dealing with the implementation of projects involving strategic innovative changes, I was able to gain insight into the level of Project management that was being used as well as the quality of the managerial process itself. Realizing that there were significant discrepancies between theory and how Project management was used in practice, I sought to research this matter in an attempt to come up with a solution to enhance the project capabilities in these companies. My motivation to research this subject grew even higher when I started to dig into this subject and realized that 97.5% of all the companies from Moldova were SMEs (National Bureau of Statistics, 2013); that is when I realized that this research might have a higher impact than only on supermarket chains and could also help SMEs from other industries understand their level and quality of Project management and try to improve it in order to enhance the delivery of projects. Eventually, when I had to pick a topic for my dissertation I realized that this is the right opportunity to do it. The other reason why I picked this topic was because I considered it primordial for my future career as a Project Manager. Understanding that I want to stick to a career in Project Management in the future, I realized that by selecting to research this subject I will be able to enhance my overall knowledge about Project Management and prove to my future employer, as well as myself, that I am capable to conduct research if it this will be requested.

The results of the research basically matched my own assumptions regarding the use of Project management within these companies. My assumptions were that first the level of PM tools and techniques was too low, and secondly the application of these practices was unprofessional which means that they were not taken seriously and were ignored by the majority of the participants in a project. However, for me the surprising fact of the findings was to see how uninterested the project practitioners (project managers or project coordinators) were in trying to develop and enhance the usage of Project management in their companies. Despite a clear understanding from the respondents about the importance and benefits of Project management for innovation and growth they showed reluctance in trying to improve the existing situation. There were several factors that influenced this

attitude: project managers with low expertise and knowledge in Project management, lack of professionalism from the participants in the projects, and low understanding of the benefits of Project management practices. These findings were interesting because they helped point out what the essence of the problem was which in effect would lead to the establishment of a solution to overcome the existing barriers. On the other hand the results of the literature were slightly different. Turner, Ledwith and Kelly (2012) suggest that SMEs require a reduced level of Project management and were able to identify the optimal extent of Project management practices that small and medium companies should use in order to use Project management efficiently. In this case, the analysis of the primary data (the interviews) suggested that small and medium sized supermarket chains from Moldova use Project management practices relatively less than the optimal level identified by theorists.

During the research process I experienced different kinds of challenges like availability of information, accessibility of journals specialized in Project Management, access to top managers in the companies that were researched, the timeframes of the dissertation (less than 3 months) etc. The main challenge was that no one has ever researched Project management before in small and medium sized companies specifically in Moldova, and therefore, a lot of work was done to analyze and synthesize the same subject but in the context of western SMEs. At that point I learned that making sure that there is enough relevant information out there before starting a research would have saved enormous amounts of time. Before starting the official process of research I investigated the availability of literature sources and found some really good articles and thought that there was plenty of information and stopped looking for it. Only when I was in the process of research have I realized that finding relevant information was a very difficult task. On the other hand, accessibility to relevant secondary data was quite a challenge as well. During the secondary data collection process I found numerous articles available in specialized Project Management journals but to which DBS did not offer access to. I managed to download these articles by accessing resources from friends who study in UK, like for example Exeter University, which granted access to those articles. Access to managers from the companies that I investigated was one of the most interesting experiences during the entire research process. Face-to-face interaction with these persons has consistently contributed to improving my interpersonal and communications skills. Specifically, during

interviews the respondents could divert from the question and I had to direct them back in a manner that would not disturb the flow of the discussion. I guess having studied during the master program with different types of people from different countries I was able to professionally and competently interact with the interview respondents. Another challenge was the time management. Being time constrained, this dissertation experience has helped me improve my time management skills because I always had a sense of urgency. Time management as one can notice is central to all the activities that we undertake in our lives as it is the irreversible resource that motivates us to prioritize the tasks that need to be accomplished. Evidently, time management is a key skill that I developed not only during my work experience but during the master program as well, where I had to prioritize and manage the delivery of assignments according to set deadlines.

Like any other task, conducting research and writing a dissertation is a process that implies learning from your experience. As Kolb (1984) put it, “learning is the process whereby knowledge is created through the transformation of experience”. He identified that learning takes place when a learning cycle implying four stages takes place. These are: having a concrete experience, observing and reflecting over that experience, followed by the formation of abstract concepts and generalizations, which are finally used to test hypothesis in future situations which results in new experiences (Kolb, 1975). However, Kolb stresses that this learning model is effective only when all four stages of the model are executed; therefore, there is no one stage more important than the other. Later studies conducted by Honey and Mumford (1992), which derived from the concept introduced by Kolb (1975), developed a set of learning styles that each individual can identify him/herself with. Honey and Mumford (1992) claimed that by increasing the awareness of your personal learning style and other styles one can enhance his/her learning capability first through the improvement of the existing learning style and secondly, by developing the ability to learn in other styles. The following are the four types of learning styles:

- **Activist** - These are open-minded persons who tend to act first and consider consequences after. Activists involve themselves fully and without bias into new experiences and only after make conclusions about their experience. The preferred activities are brainstorming, problem solving, group discussions and competitions.

- **Theorist** - People having this learning style prefer to systematically analyze and synthesize observations in order to create complex and logical theories. They are driven by perfectionism and therefore, are exigent in regards to themselves. The preferred activities include the use of statistics, models and application of theories.
- **Pragmatist** - People who seek for a practical implication of theories and concepts. In essence they are experimenters who try new ideas, theories or techniques to see if they work. Preferred activities are case studies, problem solving and discussion.
- **Reflector** - This learning style relates to people who prefer to stand back and reflect on experiences from different perspectives. Only after they have thoroughly collected and analyzed the gathered data can they come to sound and logical conclusions. These individuals tend to observe activities, to coach, to interview and take time outs.

In most of the cases people tend to identify their learning styles with one or two of the styles enumerated above. Usually, the personality traits are determinant in regards to the preferred style of learning. Therefore, in terms of personality traits extroverts tend to be *activist* or/and *pragmatist* while introverts are inclined towards a *theorist* and/or *reflector* style. I consider myself an extrovert person and I associate my learning style with *activist* and *pragmatist* styles. I guess the process of learning for me started when I used to work for one of the supermarket chains from Moldova (IMC Market) as a project coordinator and back then I was an activist as I literally was involved in numerous new and unknown experiences for me in Project Management; later, after researching the theory regarding the extent of Project Management in SMEs, I realized that there are consistent differences between the general extent of Project management in SMEs compared to the extent of Project management in supermarket chains from Moldova; and, therefore, there is significant room for improvement. That is when I started to think like a pragmatist. On the other hand I have also experienced the disadvantages of the activist and pragmatist traits like taking unnecessary risk, tendency to reject anything that does not have obvious application, low interest in theory and rather task oriented than people oriented. I am pragmatic in essence and tend not to memorize unnecessary or useless information that has no real contribution to my professional and personal development. Despite these

disadvantages, I was still able to deliver the research project in time as well as learn a bunch of important things as mentioned earlier from the entire process of research.

As a result of this research process I managed to develop my knowledge not only about the use of Project Management within SMEs and supermarket chains from Moldova, but also about the general application of Project Management. Learning during class and reading books specialized in Project Management was highly efficient, however, analyzing the research papers conducted by theorists specialized in this field was a “game changer” for my understanding of Project Management. In my opinion I consider that there is still room for theory to be developed regarding the subject of project management in SMEs. As SMEs have an important contribution to our economic growth – roughly 60% of the EU GDP is generated by SMEs and projects account to approximately 20% of economic activity (European Commission, 2008), Turner, Ledwith and Kelly (2012) identified, and I confirm through my analysis, that there is a strong need for literature focused on Project management in SMEs that would provide specialized Project management models incorporating different sets of practices developed for different industries and types of companies.

This study gave me the opportunity to apply my existing research and analytical skills as well as improve them by realizing the mistakes I made. However, I guess I will be able to identify my mistakes only when I will have received the grade for the dissertation. In addition to becoming more knowledgeable about the subject that I researched, I also developed my soft skills like collaboration, communication and critical thinking. Conducting face-to-face interviews with top managers, analyzing the primary and secondary data and synthesizing the findings to translate into sound conclusions, developing recommendations for the supermarket chains from Moldova are only few of the activities that have contributed to my personal development. Of course I realize that by conducting two research projects (the first was during the Bachelor program) I have not achieved the “master” level of research, but now I have the basics that will help me conduct future researches more qualitatively and efficiently. There are still a lot of things that I need to learn or/and improve like data collection process, data analysis techniques, time management, research strategies, writing and so on and so forth.

More importantly, this study as well as the entire experience from this master program

will hopefully improve my chances to find a job in project management after I graduate. The accumulated knowledge, skills and experience are a good fundament to achieve this upcoming objective.



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## Appendices

### Interview Questions: Project Management Tools and Techniques

(TEMPLATE)

**Company:**

**Date:**

**Job position:**

1. Does your company use projects to innovate and improve internal processes?
2. Do you use formal Project Management for informal and external projects?
3. Do you find that Project Management is an efficient managerial practice?
4. Does the use of Project Management enhance the control over the resources of the company?

5. How do you qualify a project as being successful?
  
6. Are you familiar with the PM tools and techniques established by the Project Management Institute?

The list includes:

- Requirements Definition
  - Work or milestone schedule
  - Risk management
  - Milestones
  - Status reports - time
  - Work breakdown
  - Issue management
  - Status reports – cost
  - Resource schedules
  - Project road map, level 1 plan
  - Team building
  - Responsibility assignment matrix
  - Status reports – resource usage
  - Project book
  - Agile methods
  - Project Office (software used)
- 
7. Which of these tools and techniques do you think are essential for a project to be delivered within time, cost, quality and scope constraints?
  
  8. Do you use any other tools and techniques that could contribute to increased PM efficiency but which are not used within your company like for example EVM, Network diagramming, Monte Carlo analysis?

9. What is the reason why you don't use these tools and techniques? Are they too complex, irrelevant, or/and unnecessary for the needs of the company or is there any other reason?
10. Does your company support a systems project management approach or a people focused approach and what are the factors that influence this matter?
11. Do you employ professional Project Managers? Are they employed from outside or these duties and responsibilities are assigned to someone from inside?
12. Do the persons assigned as Project Mangers have any project management professional knowledge, experience or/and background?
13. What is the average period of a project that your company engages in?
14. Is there anything more you would like to add concerning the subject we discussed?

Thank you for your time and cooperation!