

**UNIVERSITY OF LJUBLJANA
FACULTY OF ECONOMICS**

MASTER'S THESIS

**THE DEVELOPMENT OF DYNAMIC CAPABILITIES WITHIN
STRATEGIC MANAGEMENT IN MACEDONIAN COMPANIES**

Ljubljana, September 2015

FISNIK OSEKU

AUTHORSHIP STATEMENT

The undersigned Fisnik Oseku, a student at the University of Ljubljana, Faculty of Economics, (hereafter: FELU), declare that I am the author of the master's thesis entitled The Development of Dynamic Capabilities within Strategic Management in Macedonian Companies, written under supervision of prof. Dr. Marko Jaklič.

In accordance with the Copyright and Related Rights Act (Official Gazette of the Republic of Slovenia, Nr. 21/1995 with changes and amendments) I allow the text of my master's thesis to be published on the FELU website.

I further declare

- the text of my master's thesis to be based on the results of my own research;
- the text of my master's thesis to be language-edited and technically in adherence with the FELU's Technical Guidelines for Written Works which means that I
 - cited and / or quoted works and opinions of other authors in my master's thesis in accordance with the FELU's Technical Guidelines for Written Works and
 - obtained (and referred to in my master's thesis) all the necessary permits to use the works of other authors which are entirely (in written or graphical form) used in my text;
- to be aware of the fact that plagiarism (in written or graphical form) is a criminal offence and can be prosecuted in accordance with the Copyright and Related Rights Act (Official Gazette of the Republic of Slovenia, Nr. 21/1995 with changes and amendments);
- to be aware of the consequences a proven plagiarism charge based on the submitted master's thesis could have for my status at the FELU in accordance with the relevant FELU Rules on Master's Thesis.

Ljubljana, September 07, 2015

Author's signature: _____

TABLE OF CONTENTS

INTRODUCTION	1
1 CONTEMPORARY STRATEGIC MANAGEMENT INFLUENCES	2
1.1 Organizational Analysis through a Resource-Based Approach	5
1.2 Core Competences/Capabilities.....	8
1.3 The Learning Organization.....	10
2 DYNAMIC CAPABILITIES – CONCEPTUAL OVERVIEW	12
2.1 Identifying Company Assets as Dynamic Capabilities	16
2.2 Embedding Dynamic Capabilities into Strategic Management.....	18
2.3 Utilizing Dynamic Capabilities towards Sustainable Competitive Advantage	23
2.4 Adapting Strategy to Dynamic Environments.....	26
3 RESEARCH DESIGN AND METHODOLOGY	30
3.1 Description of the Researched Business Environment.....	31
3.2 Company Profiles and Backgrounds	35
3.3 Research Questions and Main Areas of Focus	39
4 ANALYSIS OF THE RESEARCHED DATA.....	40
4.1 Identifying and Summarizing the Key Research Information.....	40
4.1.1 Dynamic Capabilities as Main Sources of Competitive Advantage	41
4.1.2 Anticipating and Managing Changes in the Business Environment	46
4.1.3 Strategic Decision Making to Utilize and Develop Dynamic Capabilities	49
4.2 SWOT Matrix Analysis through Balanced Scorecard Perspectives.....	53
4.3 Evaluating Company Performances through Metrics.....	57
5 RESULTS AND RECOMMENDATIONS	62
5.1 Result Evaluation and Interpretation	63
5.2 Essential Findings and Recommendations	67
CONCLUSION	69
REFERENCES	70

LIST OF FIGURES AND TABLES

LIST OF FIGURES

Figure 1. A Model of the Strategic Management Process.....	2
Figure 2. A Model of Competitive Advantage.....	5
Figure 3. A Resource-Based Approach to Strategy Analysis: A Practical Framework.....	6
Figure 4. The Four Dimensions of a Core Capability.....	8
Figure 5. Contrasting Conceptions of Dynamic Capabilities.....	13
Figure 6. Dynamic Capabilities and Types of Dynamic Markets.....	14
Figure 7. Elements of Asset Orchestration.....	18

LIST OF TABLES

Table 1. Summary of the Key Profile Information from the Researched Companies.....	38
Table 2. Classification of the Research Questions.....	39
Table 3. Company Dynamic Capabilities as Sources of Competitive Advantage.....	45
Table 4. Managing Business Environment Influences through Internal Processes.....	49
Table 5. Strategy used to Utilize and Develop Dynamic Capabilities.....	52
Table 6. Filtering Company Information through the SWOT Balanced Scorecard.....	54
Table 7. Performance Evaluation of Researched Companies through Metrics – part I....	59
Table 8. Performance Evaluation of Researched Companies through Metrics – part II...60	

INTRODUCTION

The primary research purpose of the master thesis stems from the field of strategic management. Due to the high degree of diversification in the external/internal factors of influence, the modern strategic management approach is facing a constantly increasing need for the strategy formulation and implementation process to develop into an ongoing activity within an organization. Most commonly the business evaluation and control process is the one that faces frequent modification, based on the assessments made regarding successful performances that arise from the previously set organizational goals and objectives. However as a result of the increasingly dynamic nature of technology, competitors, and suppliers as well as the economic, social and political environment, many companies are being faced with the crucial necessity in adopting a proactive position when tackling the challenges of the modern day business circumstances. Therefore it is important to understand the utilization process of core competencies. This could then lead to the creation of short term competitive positions, used towards building longer-term competitive advantage by anticipating shifts in markets and technological innovation.

The relevance of the research question is whether companies in Macedonia are capable of being proactive, or they are still relying on historic capabilities and conduct adjustments only as a response to financial downturn. This will serve the purpose of understanding whether these selected companies in Macedonia are utilizing their organizational capacities to learn, communicate and transform or simply follow pre-defined patterns and routines. This research process will provide general insight of different types of dynamic capabilities models that can be implemented in improving performance. The predicament in this case would be the progression from traditional business conventions into a dynamic challenging business environment. The research question is focused on inquiring into ways through which companies can take advantage of their dynamic capabilities, by engaging them to provide successful solutions to different challenges. The tools for the satisfactory conversion nonetheless lie within the strategic assets of the company task environment, a notion that this research process will set out to prove.

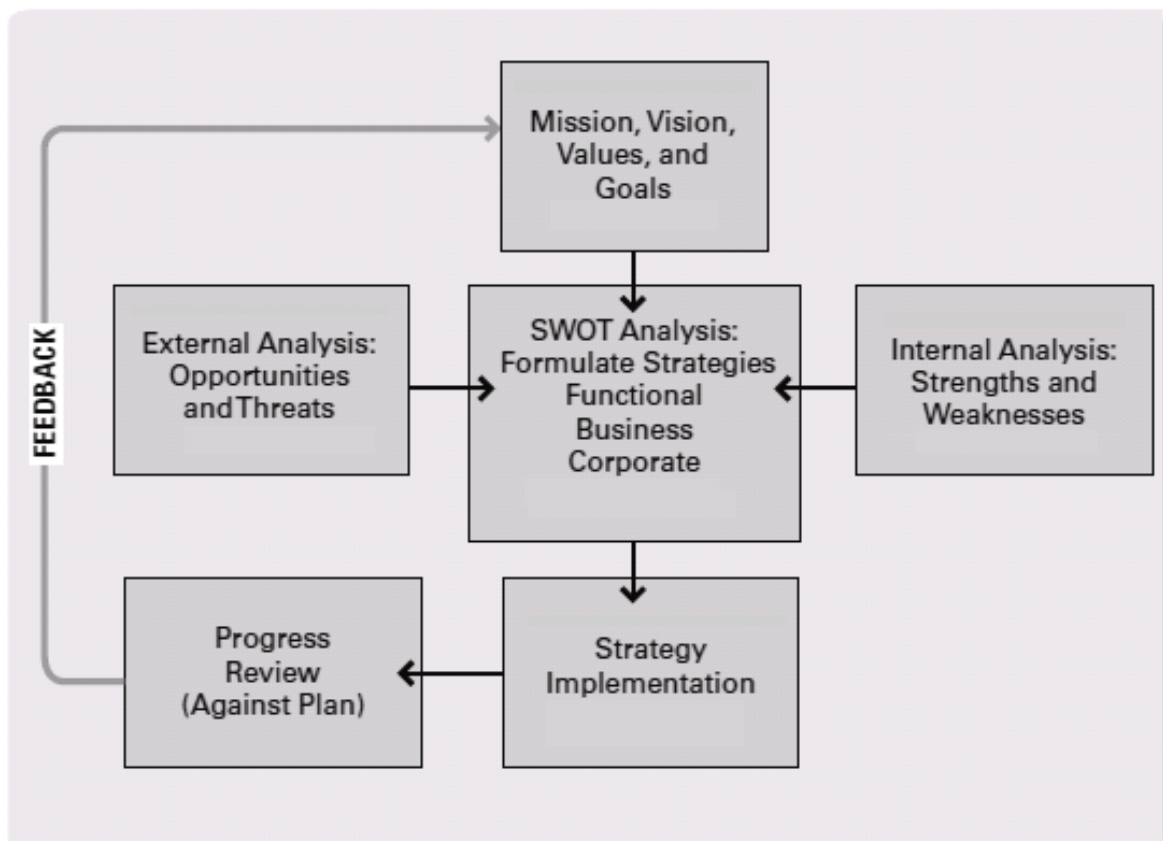
The foundation of the master thesis analysis will concentrate on the methods that are utilized by major companies in Macedonia from different industries, as an ability to cope with the dynamism of the ever changing business background. It will analyze the degree of anticipation inputted within company strategy formulation and its corresponding flexibility capable of responding to change. The reason supporting the research process is to gather qualitative information from the strategic decision making processes in selected Macedonian companies, in order to determine their business practices designed towards using company resources and utilizing them in achieving maximal effectiveness from the market economy in which they operate.

1 CONTEMPORARY STRATEGIC MANAGEMENT INFLUENCES

The concept of **strategic management** represents a set of managerial decisions and actions that determines the long-run performance of a corporation (Wheelen & Hunger, 2011, p. 29). It includes environmental scanning (both external and internal), strategy formulation (strategic or long-range planning), strategy implementation, and evaluation and control. The study of strategic management, therefore, emphasizes the monitoring and evaluating of external opportunities and threats in light of a corporations strengths and weaknesses.

Immediately we can identify one of the necessary core elements of creating a successful strategy for managing a company in a modern dynamic environment. Establishing a strategy flexible enough in order to tackle the shifts within the business surroundings where companies operate, by carefully examining and anticipating the possible benefits or disfavours that might occur.

Figure 1. A Model of the Strategic Management Process



Source: C. W. L. Hill and G. R. Jones, *Essentials of strategic management*, 2012, p. 8, Figure 1.2.

The SWOT analysis is formulated and embedded into internal strategy only after the all the adjacent factors from the external analysis are carefully examined with regards to the impact on company processes. It helps the company to understand its capabilities and as a result try to choose or adapt to a suitable strategy. Some academic opinions exist that suggest the formal process of planning when creating a company strategy is unnecessary, due to the whole unpredictability of the real time business environment and the fact that often crucial decisions stem from the convenience of opportunistic management reactions.

However having a carefully planned process even one formally structured has proven to be highly successful especially when interconnected between company operations and strategic planning. It seems that quite often it is not enough to only strive for operational efficiency but also to try to use it as support upon which the strategic processes are modified. According to one of the most influential leaders in reengineering and process management Michael Hammer (1997, p.159), a crucial difference between task-centered organizations and process-centered organizations is that in the former case separated processes make individual performance so similar that outstanding performance would in the end not be so significant and in the latter case high performing process performers could produce a excellent result.

According to Mintzberg (1973), the main approaches to strategic decision making can be classified into three modes:

- **Entrepreneurial mode**, where the strategy is made by the top manager based on his own point of view characterized by brave decision making. The decisions are focused on taking advantage from opportunities and dealing with problems is considered secondary. Such an approach is mostly used by powerful individuals in fast paced and fast growing industries.
- **Adaptive mode**, is characterized as trying to find a solution by reacting to existing problems and rather than proactively looking for new opportunities. There is a lot of negotiation regarding prioritizing objectives while strategy is fragmented and designed in order to progress a company incrementally.
- **Planning mode**, involves a decision making mode that systematically gathers all relevant information for situation analysis, generation of feasible alternative strategies and rational selection of the most appropriate strategy. It is a combination of the proactive search for new opportunities and reactive solution of existing problems.

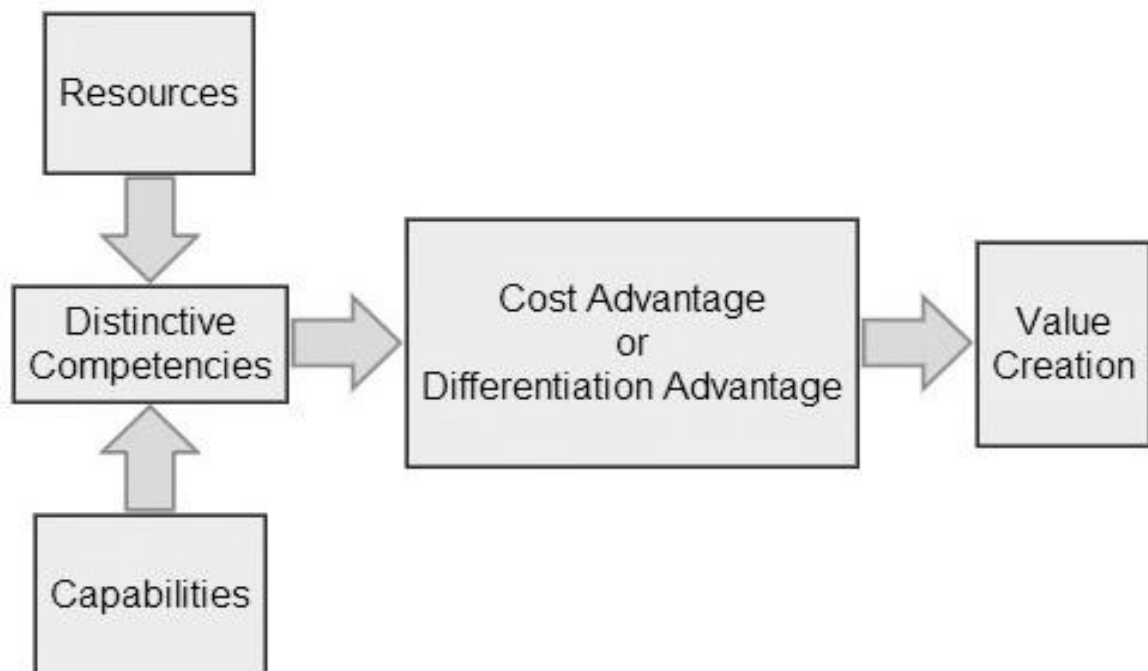
Afterwards Quinn (1978), added a fourth mode titled **Logical instrumentalism** that represents a synthesis of the planning, adaptive and partially the entrepreneurial modes. This mode is considered as the most suitable for the more modern company approach because it consists of probing the future, experimenting and learning of partial

commitments rather than basing operations on pre-formulated strategic concepts. The logical instrumentalism argues that formal planning often becomes a substitute for control instead of a process that stimulates innovation and entrepreneurship. And even though the mission and objectives are established the strategy should emerge out of discussions and experimentation. By using this mode companies have the possibility to handle the cognitive processes and limits regarding different decisions, shape the information quality as well as all analytical frameworks that these decisions require and build the organizational awareness, understanding, acceptance and psychological commitment necessary for effective implementation of these strategies. If implemented properly it could be a useful approach in a rapidly changing environment where managers have difficulties in predicting how changes in the industry might evolve. Before operative objectives as part of strategic processes are formalized there has to be a full perception upon expected risks and a flexible consensual approach. Subsequently agreed upon commitments will justify pursuing a specific strategy with full certainty as the desired unified company approach.

More or less the ultimate objective of every modern strategic management strategy is to successfully establish a system that will lead the company to achieve advantage over its competitors. Porter (1985) was one of the first to establish the concept of **competitive advantage** by defining it as a situation when a company possesses an upper hand over its competitors, resulting with the generation of higher sales figures or margins and attaining/retention of a larger number of customers. It can be achieved through different strategies through the adaptation of the company cost structure, product offerings, distribution network and customer support. There are two basic types of strategies companies are able to pursue in order maintain above average performance in the long run compared to their competitors apart from all other strengths and weaknesses they might possess: **low cost or differentiation**. Then they can be additionally supplemented by trying to achieve cost leadership in a broad industry segment or differentiation focus in a narrow segment. In terms of pursuing the strategy of cost advantage a company tries to minimize their cost of delivering products and services. This can be achieved either by choosing to increase their profit by reducing the costs while simultaneously pricing products at the same level with the industry average; or increasing their market share by lowering the prices while simultaneously realizing profit through the benefit of reduced cost. However this cannot solely remain the focus of the company in the long term because sooner or later competitors will attempt and even succeed in reducing their costs as well and in such a way block/reduce the company progress in profits and market share. To be successful companies have to be sure they can reach and maintain the market leadership position through the cost advantage strategy by utilizing the following capabilities: easy access to capital required to invest in technology, efficient logistics system and low cost base in terms of labor, material, facilities etc. After determining these advantages, they have to be continually maintained and developed so that the advantage is kept at a level

above the competition. Through the differentiation strategy the company tries to make the products and services that it offers different and more attractive than the ones offered by their competitors. The offer needs to be adapted to the specific industry features, functionality, durability, support and a brand image that customers value and respond to. Also due to the necessity of reaching sustainability differentiation needs to be supported with: constant development, research and innovation; a high quality product/service; and effective sales supported by a good marketing strategy. Porter (1990), has always maintained that innovations have always been an essential part of company efforts to sustain their leadership position, but only through the pursuit of relentless improvement because almost every advantage can be imitated after a certain amount of time.

Figure 2. A Model of Competitive Advantage



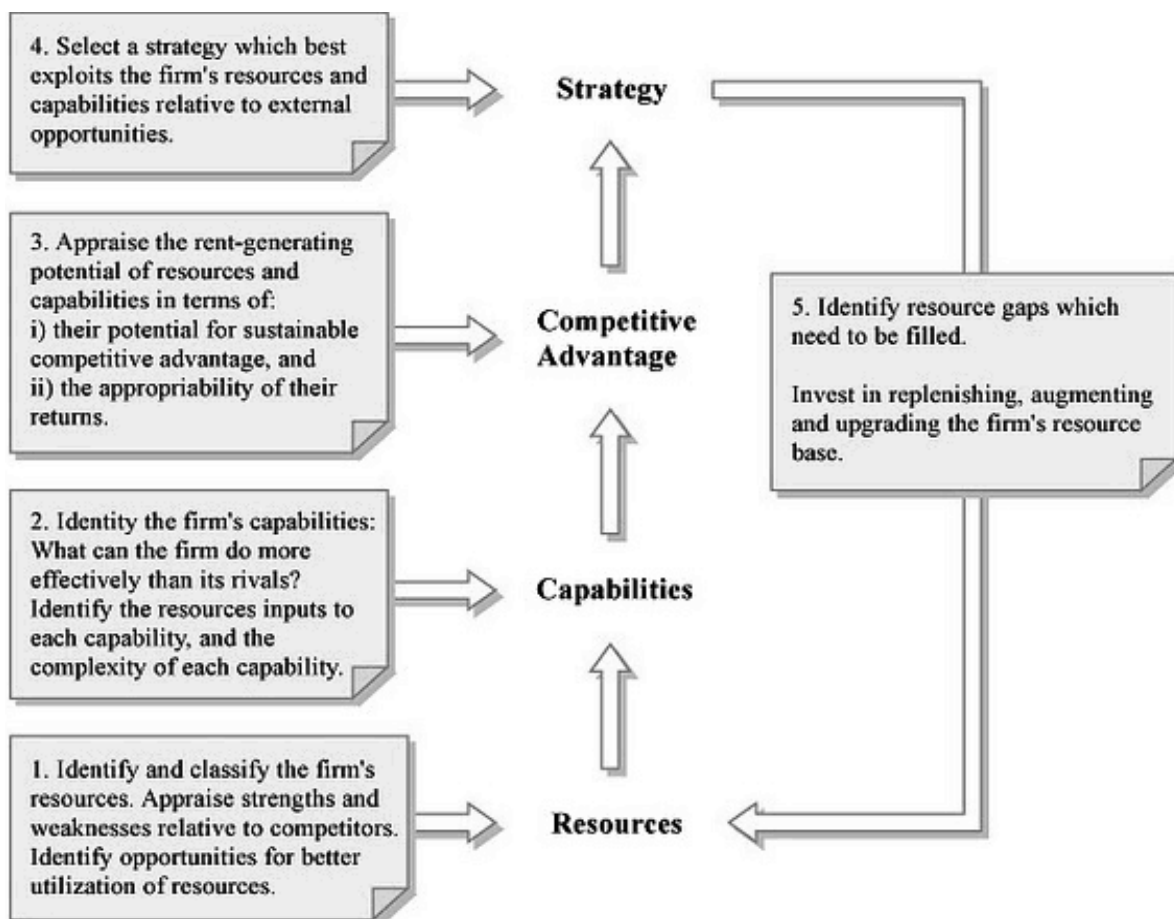
Source: *QuickMBA – Web portal*. Retrieved January 05, 2014, from <http://www.quickmba.com/strategy/competitive-advantage/>

1.1 Organizational Analysis through a Resource-Based Approach

The **Resource-Based View** represents an important concept in strategic management that confirms the necessity of a company's approach towards using its resources in an effective and efficient way while pursuing competitive advantage. As company resources are considered all assets, capabilities, organizational processes, attributes, information, knowledge, etc., controlled by a company that enable it to create and implement strategies

that will improve its efficiency and effectiveness (Daft, 1983). Resources represent anything which could be thought of as a certain strength or weakness of a given firm. Firm resources at a given time could be defined as those tangible and intangible assets which are tied semipermanently to the firm (Caves, 1980). Grant (1991) classified six main categories of company resources: financial, physical, human, technological, reputation and organizational. A resource-based view of a firm explains its ability to deliver sustainable competitive advantage when resources are managed in such a way that their outcomes cannot be imitated by competitors, which ultimately creates a competitive barrier (Mahoney & Pandian, 1992). The difficult part however is determining exactly which company resources are the significant ones, upon which competitive advantage can be created. This topic has often been the subject of debate and subsequently many researchers have tried to create a framework that will identify the necessary characteristics of such resources.

Figure 3. A Resource-Based Approach to Strategy Analysis: A Practical Framework



Source: R. M. Grant, *The resource-based theory of competitive advantage: Implications for strategy formulation*, 1991, p. 115, Figure 1.1.

Barney (1991), argues that the so called VRIN (Valuable, Rare, Inimitable & Nonsubstitutable) framework can determine if a resource is a source of sustainable competitive advantage:

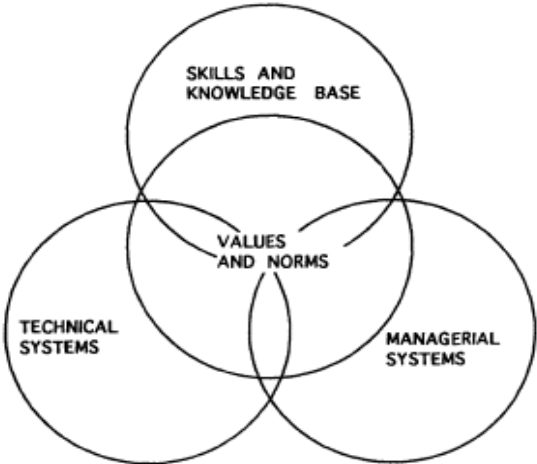
- Valuable – firm resources have to be valuable so they can enable the implementation of strategies that improve efficiency and effectiveness. Only valuable firm attributes can provide a source of competitive advantage. This means that they must be a source of greater value, both in regards to relative costs and benefits, when compared to the similar resources existing or used by competing firms.
- Rare – if a certain resource is possessed by a large number of competitors then it cannot provide competitive advantage. These resources must be scarce relative to demand for its use or what it produces. If a resource is unique within a competitive environment or industry and others do not possess it, then automatically the possibility for achieving sustainable competitive advantage is created.
- Inimitable – value and rarity of company resources can be a source of competitive advantage only if other companies cannot obtain them. At the very moment when competitors within an environment are able to identify the source of a competitor’s advantage, the first rule of action is to try to imitate the actions of its rivals. However if it is hard for the rivals to access the resources or the costs for imitation are high then they will most likely try to substitute that resource.
- Nonsubstitutable – there should not be a possibility to substitute the resources that poses the three above mentioned characteristics. If competitors are not able to obtain or imitate a resource then they will try to develop their own or acquire the most similar alternative. If they are successful then establishment of the sustainable competitive advantage will be affected.

Later Barney made some modifications to the initial VRIN framework adapting it to the VRIO (Barney & Hesterly 2012). The change occurs in the previously last characteristic of “Nonsubstitutable” which is placed and explained under the third category of “Inimitable”. The fourth category was then changed into “Question of Organization” which has to do with a firm’s ability to organize its resources for which it has previously identified to be in possession of value, rarity and inimitability. This can be implemented mainly through the company’s formal reporting structure, management control systems and compensation policies. If the company is in possession of resources that have all the necessary criteria and then can organize its internal structure to manage them, then sustained competitive advantage can be achieved. Authors such as for example Amit & Schoemaker (1993), often make the distinction of dividing the term “resources” into two separate categories: resources and capabilities. Specifically the concept of capabilities is the one of interest to this research paper and one of the key focuses of the research method.

1.2 Core Competences/Capabilities

The terms competence and capability are often used as similar concepts in academic literature. Such is their similarity in interpretation that most of the time they are even used interchangeably and there is little distinction made when being used in describing utilization of company resources. The **core competence** concept was initially developed by Prahalad and Hamel (1990). They formulated it as a collective learning process through which companies are able to obtain the necessary knowledge in order to diversify production skills and integrate technological systems. According this concept companies have to try to allocate resources so that they can connect production and technology in achieving competitive advantage. And Leonard-Barton (1992, p.111), simply summarized that “capabilities are considered core if they differentiate a company strategically”. This differentiation is based on the knowledge that the company acquires and uses to define a core capability that will in turn provide it with competitive advantage.

Figure 4. The Four Dimensions of a Core Capability



Source: D. A. Leonard-Barton, *Core capabilities and core rigidities: A paradox in managing new product development*, 1992, p. 114, Figure 1.

The first dimension of knowledge and skills often seems to provide the initial basis to define a core capability. Even the establishment of the capabilities as a concept is deeply connected to the workforce management process. Boyatzis (1982), states that a theory of performance is the basis for the competency concept and maximum performance can happen when a person’s capabilities or talent is consistent with the needs of the job demand and organizational environment. Employee knowledge and skills are essential for a company to create a stable structure through the development of their processes, systems

and procedures. If a company is able to recruit and efficiently place talented staff that possess a certain skill set, in different positions within its organizational structure then this can have a great impact in the formulation of a competitive advantage. The technical system dimension also is an important aspect because it gives companies the possibility to beat their competitors in producing a more technically superior product. This dimension is also quite linked to the skills and knowledge base of the company because the employees are the ones that have to implement their technical qualification, specialization and methods when creating the product model. Then there's the management system dimension which has to do with the way company management is able to coordinate, combine and utilize the skills and knowledge within the company in a unique way. Add to this mix the support of an innovative approach and a strong core capability can be established. Last but not least we have the values and norms dimension which in one way or another has touching points with all the previously mentioned dimensions. Values can be a great asset if they are embedded to the core of work activities. They provide companies with a distinguished component that separates them from the other competitors. All successful corporations have somehow been able to integrate their company values and norms into their products. Exactly this aspect helps make them unique in the global marketplace.

In order to be able to utilize their competences, companies have to first be able to recognize them. The following questions can be used within a company so that core competencies are identified (Prahalad & Hamel, 1990):

- How long could we dominate our business if we didn't control this competency?
- What future opportunities would we lose without it?
- Does it provide access to multiple markets?
- Do customer benefits revolve around it?

These four simple questions can provide companies with a filter through which they can explore their competences. And after the identification process is finalized and the company has a clear idea which core competences it has under its disposal the enhancement phase can begin. This phase could be crucial towards offering product or provide a service that other organizations will not be able duplicate. Prahalad & Hamel (1990), propose that companies follow the following steps in order to build up their core competences: investing in technology, infusing resources through business units and the forging of strategic alliances. Additionally they suggest companies need to work on continually enhancing their core competences by creating a suitable mindset within the company. This would involve the following characteristics: not to think of business units as something unchangeable, to identify projects and people who personify the company's core competences and select managers who will look towards the future and identify next generation competences.

1.3 The Learning Organization

Organizational learning is the process by which the organization's knowledge and value base changes, leading to improved problem-solving ability and capacity for action (Probst & Buchel, 1997, p.15). A *learning organization* is an organization skilled at creating, acquiring and transferring knowledge, and at modifying behavior to reflect new knowledge and insights (Garvin, 1993, p.80).

The following five characteristics or “component technologies” formulate the basis of the concept of learning organization (Senge, 1990):

- **Systems Thinking** – has to do with the process of connecting and interpreting events as part of a pattern. Businesses also represent systems that are connected by interrelated actions that produce certain results after a period of time. Because company leadership is often at the centre of this type of unbundling of actions it could be difficult to see the whole pattern of changes. Therefore the learning organization applies this method of analysis to measure performance. By using conceptual thinking as a method or conceptual framework it helps to clarify these patterns and make changes more effective.
- **Personal Mastery** – the commitment and capacity for learning within an organization cannot surpass that of its human resources. Therefore organizations need to invest in the growth and encouragement of its personnel. Individuals that have developed a high level of personal mastery are able to have a clear vision, focus their energy, develop patience and evaluate objectively. The sum of individual learning represents the learning organization and organizations need to focus their efforts to develop a culture that supports personal mastery.
- **Mental Models** – assumptions, generalizations and images influence perception and in turn shape the culture, mindset and different theories that establish organizational functionality. Managers through the process of learning have to challenge and adapt their mental models to the changing business environment. Critical observation and examination is important to an organization's continuous adaptation and development within a business environment.
- **Building Shared Vision** – it is important for organizations to have a shared vision of the future it hopes to achieve or create. It would be difficult for an organization to be successful if it cannot succeed in sharing the goals, vision and mission within its structure. Leaders need to be able to translate individual vision into a shared vision, so that the whole organization can harmoniously pursue one collective picture of what they intend to achieve. Finding the discipline for this type of transformation is probably

the most essential trait in bringing together and connecting individuals towards the pursuit of the common vision.

- **Team Learning** – teams and not individuals are the main learning component in an organization. The concept of team learning involves the dialogue and thinking together between members of a group within an organization. During the process of team learning the capacity of individual members grows more rapidly through better access to knowledge/expertise/problem solving capacities and organizations produce better results.

Argyris & Schon (1978) propose a three-leveled evolutionary model of learning consisting of single, double and triple loop learning:

- **Single-loop learning** – is the type of adaptive learning that occurs within an organization with the goal to identify and fix problems in the organizational structure in order to improve functionality. It does not change the originally set objectives and it only looks to improve and correct existing processes.
- **Double-loop learning** – questions the purpose and functionality of the placed standards and practices by challenging their appropriateness in the first place. It is referred to as reframing or reconstructive learning which tries to understand the concept behind the set objectives and not to only make them more effective.
- **Triple-loop learning** – known as transformational learning, seeks to question the rationality behind organizational functionality and radically transform it. It doesn't only examine processes but also attitudes and used practices towards realizing objectives. It challenges the understanding of how previous conditions and actions led to current difficulties that the organization might be facing. By implementing this system of learning organizations might change the relationship between its structure and behavior.

Cummings & Worley (2001) state that there are five organizational characteristics that support organizational learning: a structure that needs to be flat and based on teamwork; information systems that will provide acquisition, processing and sharing information; human resource practices that will promote reward and appraisal that will support new skills and knowledge; organizational culture built upon values which promote openness, experimentation and creativity; leadership within an organization that will promote, support and even involve themselves in the process of organizational learning. According to Bersin (2012), there are also five keys to achieve success when companies are focusing towards building a learning organization: remembering corporate learning is informal and HR doesn't own it; promoting and rewarding expertise; unleashing the power of experts; demonstrating the value of formal training; and allowing people to make mistakes.

2 DYNAMIC CAPABILITIES – CONCEPTUAL OVERVIEW

The basic definition of **dynamic capabilities** is specified “as the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments”, Teece, Pisano & Shuen (1997). More specifically dynamic capabilities refer to “the particular (nonimitability) capacity business enterprises possess to shape, reshape, configure, and reconfigure assets so as to respond to changing technologies and markets and escape the zero-profit condition. Dynamic capabilities relate to the enterprise’s ability to sense, seize, and adapt in order to generate and exploit internal and external enterprise-specific competences, and to address the enterprise’s changing environment” (Teece & Pisano, 1994; Teece et al., 1997). The term “dynamic capabilities” emphasizes two strategic aspects:

- **Dynamic** – the constant change, activity or progress that a company needs to implement so that it can be aligned with the changes within the business environment where it operates. A rapidly changing work environment that surrounds an organization by bringing high risk, a high level of competition and requires fast decision making. As such it refers to the necessity of adapting to new situations and overcoming possible obstacles that might occur.
- **Capabilities** – refer to the role that strategic management plays in adapting, integrating, reconfiguring internal and external organizational skills, resources and competences to match the requirement described above within the dynamic environment.

Eisenhardt & Martin (2000), expanded on the definition of dynamic capabilities by categorizing them as processes and explaining their impact over market changes. Their definition states that dynamic capabilities are “the firm’s processes that use resources specifically the processes to integrate, reconfigure, gain and release resources to match and even create market change. Dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource configurations and markets emerge, collide, split, evolve, and die”. Basically they describe it as a connection of different processes within a firm that combines resources and company functions to achieve superior performance. Their theory is supported by providing examples when dynamic capabilities integrate resources within a firm by combining product development routines with different skills to provide a certain product. Another example is given where they are used in order to reconfigure or allocate resources within a company so that the process of production is significantly improved. Then they give cases of: segmenting operating businesses to adapt to customer demands, alliancing and acquisition routines to reach new external resources and even assembling different know-how to improve performance. By connecting their concept with the effects of market dynamism they were able to make a comparison between necessities to adapt the traditional concept to a more dynamic

structure that will support company processes in these types of environments. The initial more traditional view is based on a few basic concepts that seem more adapted to the necessities of a market environment that is subjected to a lower velocity of change and does not face a high degree of uncertainty. This provides the companies with the possibility of focusing their resources in creating routine patterns and processes with a specific outcome. However in the reconceptualised view we can notice the necessary adaptations to the concept in line with the increased market dynamism.

Figure 5. Contrasting Conceptions of Dynamic Capabilities

	Traditional view of dynamic capabilities	Reconceptualization of dynamic capabilities
Definition	Routines to learn routines	Specific organizational and strategic processes (e.g., product innovation, strategic decision making, alliancing) by which managers alter their resource base
Heterogeneity	Idiosyncratic (i.e., firm specific)	Commonalities (i.e., best practice) with some idiosyncratic details
Pattern	Detailed, analytic routines	Depending on market dynamism, ranging from detailed, analytic routines to simple, experiential, ones
Outcome	Predictable	Depending on market dynamism, predictable or unpredictable
Competitive Advantage	Sustained competitive advantage from VRIN dynamic capabilities	Competitive advantage from valuable, somewhat rare, equifinal, substitutable, and fungible dynamic capabilities
Evolution	Unique path	Unique path shaped by learning mechanisms such as practice, codification, mistakes, and pacing

Source: K. M. Eisenhardt and J. A. Martin, *Dynamic capabilities: What are they?*, 2000, p.1111, Table 1.

Eisenhardt & Martin (2000), also make a clear distinction of the effects and influences as a result from companies operating in moderately dynamic to high velocity markets. According to them the effectiveness of dynamic capabilities depends from the dynamism of the market where the company is operating. At the moderate dynamic markets, changes occur frequently but along roughly predictable linear paths. On the other hand at very dynamic market surroundings, the changes become nonlinear and less predictable. Of course it is clear that the higher the velocity of change the larger the uncertainty level and therefore it would require that the dynamic capabilities are adjusted accordingly. In both types of markets one of the key elements to ensure successful results is the reliance on knowledge, in order to manage different situations and react in line with the company strategy. In moderate markets dynamic capabilities rely mainly on existing knowledge and managers face less uncertainty. As a result they can use their knowledge in planning their activities in an organized ordered fashion while using predictable and stable processes. In

dynamic markets, dynamic capabilities rely much less on existing knowledge because they have to adapt to rapidly creating specific new knowledge according to the situation.

Figure 6. Dynamic Capabilities and Types of Dynamic Markets

	Moderately dynamic markets	High-velocity markets
Market definition	Stable industry structure, defined boundaries, clear business models, identifiable players, linear and predictable change	Ambiguous industry structure, blurred boundaries, fluid business models, ambiguous and shifting players, nonlinear and unpredictable change
Pattern	Detailed, analytic routines that rely extensively on existing knowledge	Simple, experiential routines that rely on newly created knowledge specific to the situation
Execution	Linear	Iterative
Stable	Yes	No
Outcomes	Predictable	Unpredictable
Key to effective evolution	Frequent, nearby variation	Carefully managed selection

Source: K. M. Eisenhardt and J. A. Martin, *Dynamic capabilities: What are they?*, 2000, p.1115, Table 2.

Exactly due to the above described adaptations of capabilities as a result of market dynamism Zollo & Winter (2002), proposed an adjustment to the initial definition given by Teece, Pisano & Shuen (1997), where dynamic capabilities are identified only with rapidly changing environments. They provided the following definition “A dynamic capability is a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness“. According to Zollo & Winter (2002), this definition provides a more accurate description because it identifies capabilities as operational routines that an organization uses in order to adapt its processes and improve. However it has been pointed out that this definition is also limited due to the reason that not all dynamic capabilities act upon operating routines (Helfat et al., 2007).

Winter (2003), pointed out the contrast of dynamic capabilities against operational or ordinary capabilities. As previously defined by Winter (2000), “An organizational capability is a high-level routine (or collection of routines) that, together with its implementing input flows, confers upon an organization's management a set of decision options for producing significant outputs of a particular type“. His explanation of operational capabilities is an elaboration that dynamic capabilities are simply those which extend, modify or create the ordinary ones. Within a company you can have a hierarchical structure of capabilities where some are ranked higher or lower depending on their significance over company processes. There is the so called “Zero Level” in the capability hierarchy which Winter (2003), classifies as processes that allow the continuing of a type of business activity that provides the company with a stable success. This means that the

company would sell the same product on a same scale to the same customers. And the capabilities it uses in order to do so keep it at this stable unchanged level and allow for a reasonable success rate. However if capabilities are implemented that would allow the company to change all these elements such as its production process, the scale or its customers; this would then surpass the previously stated zero level and would provide an example of a dynamic capability. As previously stated within the definition of Zollo & Winter (2002), it is also implied that dynamic and operative capabilities are distinguishable from one and other. They focus on the concept of organizational learning as a process that shapes or creates dynamic capabilities. By doing this companies repeat a certain organizational behavior in order to increase the efficiency of processes and therefore as a result improve their performance.

All the definitions and concepts of dynamic capabilities described above have the purpose of outlining the key characteristics. However the concept itself is somewhat difficult to specify since it does not represent a clear cut description. It somehow gives the impression that the term dynamic capability has an abstract meaning that cannot be clearly defined and represents a mixture of company activities. Therefore as a result a key question arises from the aspect of how does one measure dynamic capabilities? A standard or benchmark is required to evaluate the performance success of dynamic capabilities. One measurement type can be to rate the performance of dynamic capabilities through the term of **evolutionary fitness** (Helfat et al., 2007). Evolutionary fitness is connected to the way dynamic capabilities are utilized by companies in creating, extending or modifying their resource base and strongly related to the external environment. The success rate of the evolutionary fitness depends strongly from the level of how well the dynamic capabilities match the “external fit” where the company operates. The better the “external fit” the more chances the company will have to achieve a stable market position and develop in the future. Evolutionary fitness has four main components that influence the dynamic capabilities: quality, cost, market demand and competition. Regarding the two first components quality and cost the term “technical fitness” has been used in order to describe the relation between the qualities per unit of cost. Technical fitness covers the aspect of internal measurement of capability performance and the other two components market demand and competition are part of the environmental influences. The technical fitness dimension can be analyzed through the quality of the capability without taking into consideration how much it costs to create or utilize that capability. And the other aspect is the opposite which means taking into consideration the costs required to develop and utilize a certain capability. Companies can combine and variations of both strategies to achieve success such as for example aiming to provide high quality while keeping the costs at a minimum, or they can choose to provide a high quality product with a higher cost that will be a more innovative trendsetting product on the market. Market demand influences the capabilities through the quantity of production output demanded at each price. So to

evaluate market demand, the strength of market demand for the output of the capability has to be measured. And the last component is the external environment where the competition from other companies defines or influences the evolutionary fitness of dynamic capabilities. If companies competing in an environment use similar capabilities, the competition will be higher and the evolutionary fitness will be lower. Here we have the necessity for companies to cooperate together in order to develop their capabilities and increase their evolutionary fitness.

2.1 Identifying Company Assets as Dynamic Capabilities

According to Teece, Pisano & Shuen (1997), the successful strategic positioning of a company is determined in a large part by the type of assets that it possesses. They proceed to group and classify the different assets a company could possess in the following way:

- **Technological assets** – are quite significant in the creation of the strategic advantage of a company simply because acquisition of technological know-how is very rare. Market players that do achieve certain technological innovation or progress, understandably very seldom decide to sell or share their acquired know-how. And of course the most common action is to try and protect such breakthroughs via different elements of intellectual property law.
- **Complementary assets** – different assets that are not directly connected with the technological innovation but provide necessary support. These additional activities are required so that the company can produce and deliver the new products and services as a result of innovative technological breakthrough. Such activities can involve for example different infrastructure or marketing that will support the successful commercialization of the product or service.
- **Market assets** – the position a company achieves within the product market is an important aspect of the external environment. Additionally important is defining the market where the company competes that is justified in terms of profitability.
- **Institutional assets** – taken into consideration the environments where companies operate, markets are not the only important aspect that influences performance. Public institutions also play a large role in defining the rules and regulation within which companies have to structure their activity. Regulatory agencies, intellectual property agencies, different laws, educational systems etc., can influence or change the formulation of company strategy.
- **Financial assets** – in the short run a company's cash position and degree of leverage can influence strategy. Although there can be different implications to raising cash from external markets, in the long run it is more determinant in relation with the degree of leverage.

- **Reputational assets** – have a lot of influence over company market positions because they often can determine relationships with customers, suppliers and competitors. Reputation represents an intangible asset that allows the company to achieve its goals.
- **Structural assets** – the development level of competences is linked to formal and informal company structures. The management model that the company follows can have different influences over innovation practices. There are for example multiproduct companies, integrated companies; virtual corporations; conglomerates etc., and all these models can have various influences over innovations or competence development.

Due to the dynamism of change within the business environment companies are faced with the necessity to somehow internally/externally coordinate all of the above mentioned categories of assets. An efficient model of doing so can be the process of **asset orchestration** which frequently involves co-specialized and complementary assets within the resource base of the organization (Helfat et al., 2007, p.29). The model is connected with the way companies need to develop their strategy in order to successfully manage their market participation and competition. This necessity arises from the situation that a large part of products, assets and services are not traded in open, organized, developed markets and not always will the consumers react to price increases by reducing their consumption and on the other side producers by increasing their production. This means that the market cannot always clear via automated quick/efficient market mechanisms. In such cases these markets are referred to as “thin”, because they offer limited liquidity to asset holders. As a response managers must use the opportunity to utilize different resources in order to build value inside their companies. Thin markets have a difficulty of describing, defining and accessing services that specific assets provide or the difficulty to assess the value of assets if they represent a capability for the firm. Therefore certain assets are more often built rather than bought and are deployed/redeployed within the firm rather than sold and resource allocation inside the firm substitutes/complements resource allocation by markets. Due to their often idiosyncratic nature a lot of assets may end up being much more valuable to the firm if they are somehow connected and coordinated with other assets so they can co-evolve together. As a result it is a common approach for managers to try and create greater value by assembling a collection of assets within a company. By doing this they can enable the production of highly innovated and differentiated products/services for their customers and achieve economic gain for their company. Helfat et al. (2007), also provide a good overview between the key differences in the process of asset orchestration when compared to company practices of coordination and adaptation. They argue that the management functions of coordination and adaptation do not fully capture the essence of managerial activity in dynamic markets. These functions need to be supplemented among others with the following: orchestration of complementary and co-specialized assets, asset alignment, opportunity identification,

accessing co-specialized assets, invention and implantation of new business models, accomplishing incisive investments specifically related to research and development as well as mergers and acquisitions.

Figure 7. Elements of Asset Orchestration

Search and selection
<ul style="list-style-type: none"> → Design business models → Select configurations of co-specialized assets → Select investments (e.g. R&D, M&A) under conditions of uncertainty and ambiguity → Select organization, governance, and incentive structures
Configuration and deployment
<ul style="list-style-type: none"> → Orchestrate and coordinate co-specialized assets → Nurture change and innovation processes

Source: C. E. Helfat, et al, *Dynamic capabilities: Understanding strategic change in organizations*, 2007, p. 28, Figure 2.3.

To achieve successful coordination managers need to gather, analyze and synthesize as much information as possible about customer requirements and technological advancement. Then there is the necessity of establishing a suitable organizational model that will support the utilization of specific assets. For example internal organization would be the most suitable mode to support efficient production. Significant emphasis is also placed on the way managers should strategically and proactively orchestrate co-specialized assets: by keeping co-specialized assets in value crating co-alignment, selecting new co-specialized assets for development through investments and divesting co-specialized assets that no longer support the yield value. Essentially all these elements support the key concepts within dynamic capabilities by supporting change processes, inventing or reinventing business architecture, asset selection and orchestration.

2.2 Embedding Dynamic Capabilities into Strategic Management

Strategic decisions represent the type of decisions that determine the overall direction of the company and its ability to face the predictable, unpredictable and unknowable changes that may happen in the surrounding environment (Mintzberg et al., 2002, p. 10). According to Rumelt (2011), “bad strategy” does not simply represent the absence of a “good strategy” but often grows out of specific misconceptions and leadership dysfunctions. The foundations upon which companies build a productive and well organized strategy can be

reached by simply applying company strengths against weaknesses. And these strengths or advantages can be reached by utilizing two key sources:

- Having a coherent strategy that coordinates policies and actions – a good strategy has coherence, coordinating actions, policies, and resources to accomplish important objectives. In order to establish a strong and successful strategy companies need to focus on not only using existing advantages but also creating new advantages through the coherence of their own design. Most of the companies within a competitive environment have defined different goals and initiatives that will bring them progress but without a clear coherent approach on how to reach them. Exactly this lack of an organized approach creates an initial competitive advantage for companies that actually implement a coherent strategy.
- Creation of new strengths through subtle shifts in viewpoint – by insightfully reframing its competitive situation, a company can gain access into new sources of strength/weakness as well as advantages/opportunities. Such game changing insights could provide companies with a fresh perspective that translates into strategic advantage.

Kaplan & Norton (2008) provided a management system consisting of six stages that links strategic planning and formulation with operational execution:

- **Stage 1 – Develop the Strategy** defining the company mission, values and vision. This allows the executives to be able to affirm the company's purpose, guide its actions and define aspirations for future results. Then a strategic analysis has to be made in order to define the key issues, by using the external/internal environment and progress of the existing strategy as sources of input. The final stage within this step represents the strategy formulation and that would be to find the best way for the company to compete in its environment by defining niches, customer value propositions, key processes that create differentiation, human capital capabilities and technology enablers of the strategy.
- **Stage 2 – Plan the Strategy** creating strategy maps which will describe the strategy, selecting measures and targets, choosing strategic initiatives which will identify the action programs require, establishing a special budget category for strategic expenditures that will fund the initiatives, creating teams that will lead the execution of the strategy.
- **Stage 3 – Align the Organization** aligning business units in order to make sure that multiple business or operating units are on the same page, aligning support units with business unit and strategies by negotiating service level agreements, motivating the employees and making sure they understand the strategy so they can link day-to-day operations with strategy execution.

- **Stage 4 – Plan Operations** improving key processes by determining which business process improvements are crucial for executing the strategy by using total quality management, the six sigma techniques or reengineering programs. Afterwards the resource capacity plan has to be developed so that the strategy can be linked with operating plans and budgets. The operating plan is consisted of sales forecasts, a resource capacity plan, and operating and capital budgets.
- **Stage 5 – Monitor and Learn** after the previous stages have been established the company starts to implement its strategic and operational plans, monitor performance results and improve strategy and operations based on received information and learning. The two main processes that help the company do this is the holding of meetings for operational and strategic review. The company conducts operational review meetings in order to make sure that the operations are under control. This is done by reviewing short term performance and responding to identified problems that require attention. The strategy review meetings are scheduled in order to bring together the company leadership team so they can review the strategy. Key topics for review are whether the strategy execution is on track, checking and identifying if there are problems within implementation, why are such problems occurring, proposing actions for correction and assigning responsibilities to reach target performances.
- **Stage 6 – Test and Adapt** conducting additional meetings apart from those defined in Stage 5, in the form of strategy testing and adaptation meetings to check whether the strategy is working. This meeting should be supplied with information from the current external conditions gathered from a PESTEL analysis and the competitive environment. Company leadership can then identify where the existing strategy has been functioning correctly and where improvements are necessary.

The general idea behind dynamic capabilities is to support the effect of the strategic management of companies by taking it beyond the processes of simple coordination and adaptation of resources. It should involve management functions that will eventually lead to value creation such as: proactive search, asset alignment, opportunity identification, access to critical co-specialized assets, interrelationship between different strategic elements, selection and implementation of certain actions that are critical to a company's business strategy (Teece, 2009, p. 99). Additionally Helfat et al. (2007), provide a correlation between the impacts of dynamic capabilities over the strategic process. The strategy process covers numerous topics such as strategy formulation, strategy implementation, strategic decision-making, resource allocation, patterns of managerial actions and managing strategic change. Teece & Pisano (1994), point out that in order to build a conceptual framework of dynamic capabilities it is necessary to identify the foundations upon which advantages that are distinctive and difficult to imitate can be built. The first step to doing this would be to decide which business elements constitute as strategic and which are not. To be recognized as strategic a dynamic capability must be

adapted or focused to customer needs so that there is a customer base, unique so that product/service can be defined without excessive regard to competition and difficult to imitate so that competitors do not create a similar product that will reduce profits. Augier & Teece (2009) note the necessity of the managerial function of developing decision making skills and organization processes to sense and seize opportunities within the dynamic capabilities framework. Management plays a key role in the process selection/development routines, making investment choices, orchestrating nontradeable assets and returns from innovation. The manager of a company needs to articulate goals, evaluate opportunities, set culture build trust and take up a critical role during strategic decisions. Mintzberg et al. (2002, p. 15), provide a summary of the initial criteria that are necessary to evaluate a strategy: clear decisive objectives; maintaining the initiative; concentration; flexibility; coordination; coordinated and committed leadership; surprise; security. Clear and decisive objectives, seems to always be placed as the basis for every successful strategy formulation. Strategic goals have to be initially set and then remain clear so that all organizational units have a clear vision for the tactical goals that are implemented. Maintaining the initiative is important because it sets and defines the intensity with which the company reaches its goals. Initiative is important because it helps the company to have a proactive approach to surrounding events. By maintaining initiative the company can raise moral, lower unrest and provides the correct timing when combating the competition. Concentration is necessary for a company to determine what makes its performance so special, which will bring advantage compared to the competition. If a company is able to concentrate its efforts in creating a distinctive competence, this will then bring a higher rate of success and higher profits as a result. Flexibility within a strategy enables companies to be superior compared to the competition while at the same time using a minimum of resources. By planning reserved capabilities, maneuverability and repositioning, companies can keep their opponents at a disadvantage. Coordinated and committed leadership is necessary because successful strategies need to be based on commitment and not just on acceptance. Surprise, gives companies an element which they can use in order to catch their competition unexpected, exposed and underprepared. It is an important advantage if used at right time in the right manner. Security, as the last criteria has to do with whether the company has taken all necessary precautions to secure main operations and resources with key strategic importance to the company. Companies should use intelligence, logistics and coalitions effectively so they can secure the functionality of their business.

Martin (2014) argued that strategy should be kept outside the “comfort zone” because the objective of a good strategic plan is not to eliminate risk but to increase the chance of succeeding. He considers that managers too often make the mistake of going into excessive detailed analysis of costs and revenues stretching far into the future, just to create a scenario that justifies the investment by making it as safe as possible. As confirmation to

his theory he continues to present the following so called “comfort traps” related to the concepts of: Strategic Planning, Cost-Based Thinking, and Self-Referential Strategy Frameworks. The first trap related to Strategic Planning occurs due to the common occurrence of mistaking planning with strategy. Managers usually prefer the safer choice of supervising planning and focusing on short term goals rather than supporting the long term goals strategic decision making. The second trap of Cost-Based Thinking has to do with companies trying to adopt an identical approach to revenue planning based on the process they use to plan their costs. But revenue planning often does not have the same result as cost planning, because while costs are controlled by the company revenues are controlled by the customers. Therefore revenue planning can never be fully under control no matter how precise the planning, budgeting and forecasting process is. The third trap of Self-Referential Strategy Frameworks happens when company leadership take the approach that the unpredictability and volatility of the future makes it senseless to adopt strategic decisions until things become more clear. But on the other hand if the future is so unpredictable and volatile, how can managers identify the right time to make a strategic choice? The third trap simply shows an approach company leaders tend to use in order to justify not making difficult strategic decisions and pursuing a risky strategic path. However at the same time companies that are able to identify themselves as falling into these types of traps can use the following rules to get out of them: keep the strategy statement simple; recognize that strategy is not about perfection and make the logic explicit. In order to keep strategic decisions simple companies need to focus on their customers, more specifically which customers to target and how to provide them with maximum value. The second rule is related to the notion that strategy is focused primarily on providing revenues and therefore cannot be perfectly controlled or planned. Therefore managers need to view strategic decision making more as a bet for the future rather than a perfect process of planning. The third rule has to do with the recommendation that companies should record the logic behind their strategic decisions and compare it to the real events as they unfold.

Lafley et al. (2012) provided seven necessary steps that would help establish creative and innovative strategy: Frame a Choice; Generate Possibilities; Specify Conditions; Identify Barriers; Design Tests; Conduct the Tests; Make Your Choice. The first step has to do with moving away from issues that traditionally instigate the formulation of a strategy and framing the problem as a choice. Afterwards the company can continue to generate strategic possibilities that correspond to the choice that needs to be made. The next step is specifying the conditions for success by assessing the validity of a strategic option. Then the barriers of choosing a certain possibility have to be identified. Afterwards tests have to be designed in order to be able to test the barrier conditions. After the design is finished the test must be conducted so that the number of risks or uncertainties surrounding the possibilities is minimized as much as possible. And lastly the final difficult step of choosing a suitable strategy can be made.

2.3 Utilizing Dynamic Capabilities towards Sustainable Competitive Advantage

Sustainable advantage from resources and capabilities is a competitive advantage that persists in the face of competitive efforts to duplicate the value created by a resource or capability or a set of resources and capabilities. Sustainability derives from barriers to imitation and/or substitution that prevent rival firms from matching the value created by a capability (Helfat et al., 2007, p.14).

Lately there have been some suggestions that argue that competitive advantage theory in today's modern dynamic business environment has to be adapted in order for companies to be able to achieve sustainability on the long run. Denning (2010), proposes a different approach to management by referring to the utilization of seven inter-locking principles of continuous innovation: focusing the entire organization on delighting clients; working in self-organizing teams; operating in client-driven iterations; delivering value to clients with each iteration; fostering radical transparency; nurturing continuous self-improvement and communicating interactively. In his article through the analysis of the reasons for the failure of Michel Porter's consulting firm, he argues that no competitive advantage is sustainable mainly due to the fact that customers now days through the effect of globalization and vast internet usage are in charge of the marketplace. As a result entry barriers have collapsed, market shares are no longer fixed but rather elastic concepts and in general entry into markets has become easier. Therefore companies should join in the aggressive innovation trends within their industries in order to keep up with their competitors. McGrath (2013), one of the leading world experts on strategy in highly uncertain and volatile environments in her latest publication states the following "Virtually all strategy frameworks and tools in use today are based on a single dominant idea: that the porpoise of strategy is to achieve a sustainable competitive advantage. This idea is strategy's most fundamental concept. It's every company's Holy Grail. And it's no longer relevant for more and more companies... Strategy was all about finding a favorable position in a well-defined industry and then exploiting a long-term competitive advantage. Innovation was about creating new businesses and was seen as something separate from the business's core set of activities". She then continues to argue that competitive advantage cannot be sustainable and can only last for a certain amount of time. Therefore companies can achieve better results by "figuring out what people really need and will pay for, at designing better experiences, and at wresting new efficiencies from existing assets".

It is understandable that the basic strategies and techniques initially designed to help companies reach a sustainable position of competitive advantage against their competitors, require certain modifications/adaptations due to the dynamism of the modern business

environment. Competitive advantage depends on whether a resource creates relatively more value, defined as willingness-to-pay minus costs, than the comparable resources of competing organizations (Peteraf & Barney, 2003). To achieve this managers are faced with the challenge to identify, develop, protect and deploy resources and capabilities in such a way that it provides the firm a sustainable competitive advantage and therefore a superior return on capital (Amit & Schoemaker, 1993, p. 33). Rumelt (2011) states that whenever two identical competitors are faced with each other, neither one of them can be attributed as possessing advantage over its counterpart. The reason for this is that advantage is rooted in the differences or asymmetries among the rivals. Leaders need to identify which critical asymmetries can be turned into important advantages.

There are many different types of strategic combinations that companies can decide to pursue in order to reach competitive advantage. Because there is no clearly defined textbook approach that will secure successful results, it's up to the companies to develop and establish their own specific scenario. If capabilities are utilized correctly within the following activities, this could in turn provide companies with a possible source of sustainable competitive advantage (Partners Creating Wealth, 2013):

- **Localization in Global Markets** – this type of strategy seems increasingly necessary for international companies. To impose their presence in a certain market and maintain competitiveness, elements of a product have to be customized according to specific local requirements.
- **Strategic Alliance or Acquisition** – because of the fast paced market dynamism, companies rarely have all the required capabilities to achieve competitive advantage. Therefore companies partnering up with each other could be an effective way to supplement existing capabilities and receive access to new ones. Another option is to simply purchase the required capability through the acquisition of another company.
- **Competitive Actions** – certain competitive strategies undertaken by companies can provoke different responses from their competitors. Highly aggressive attacks towards competitors can trigger an equally aggressive response and draw attention to company activities. The best types of competitive attacks are those that would warrant a costly response, major organizational change, or complicated coordination among different departments.
- **Customer Clusters** – companies that operate in close continuous contact with their customers are more successful in innovating their products and services. Better customer participation and information flow allows them to understand the needs/requirements of their customer base.
- **Company Wide Market Orientation** – instead of having an existing product focus companies can attempt to tailor their products to customer demands. This will allow them to better understand their customer needs and in turn offer more value.

- **Strategic Fit between Marketing and Manufacturing** – meeting the requirements of the customers through the manufacturing strategy. Simply having a great product is not always enough to obtain competitive advantage. Companies need to tailor their products to specific requirements. Therefore this process should be implemented so that different misalignments can be identified and transformed into strategic fit.
- **Implementation of Strategy** – as markets mature and competitive environments become less dynamic, the opportunities to compete by developing a better product or new strategy are reduced. In such cases the difference can be made through successful strategy implementation. If companies are organized and disciplined to follow through with their strategic plan this can prove to be even more useful, than having a superior strategy but not being able to implement it correctly.
- **Human Capital** – the quality of employees that a company possesses can prove to be one of the biggest sources of competitive advantage. Their skills & abilities can add a lot of value to internal/external company processes. Therefore a qualitative workforce needs to be carefully developed and at the same time protected so that employees are not poached by market competitors.
- **Employee Engagement** – if employees are committed, motivated, enthusiastic and have a high degree of job satisfaction it could lead to the forming of a strong relationship between companies and their employees. This can prove to be a significant advantage in outperforming competitors.
- **Technological Change** – the high level of technological invention, innovation and diffusion gives companies a lot of chances to utilize technological change to achieve competitive advantage. However companies need to possess a culture that is open to adopting new technology while supporting the process of selection and effective implementation.
- **Business Analytics** – this method aims to develop new insights and better understanding of business processes through data and statistics. Statistical/Quantitative Analysis, Data Mining, Predictive Modeling, Multivariate Testing and other types of business analytics can help companies gain competitive value.
- **Production System** – companies that are able to effectively implement such a system based on artificial intelligence processes like automated planning, expert systems and action selection, can be quite successful. Some examples of production systems such as Just in Time Production or Lean Manufacturing are quite popular and often used from companies to improve their competitive positions.
- **Business Processes** – successfully and consistently managing different company management, operational and supportive processes can provide a significant advantage. Precisely organizing tasks and activities that will lead to the realization of a certain product/service can bring down costs while increasing quality.

- **National Export Promotion** – this last category is one that cannot be directly influenced and controlled from companies as it represents a government program. However in a dynamic external environment, establishing policies that will support export can give companies additional competitive advantage when exporting their products in international markets. It can be especially useful for smaller companies that are looking to establish their presence.

2.4 Adapting Strategy to Dynamic Environments

According to Winter (2003), companies can change even without having a dynamic capability but simply as a result of an influencing factor from the environment. And Amit & Schoemaker (1993), state that managerial decisions that prompt the utilization of resources in a dynamic way is influenced by environments characterized by uncertainty, complexity and intra-organizational conflicts. The necessity for companies to change and adapt is becoming increasingly necessary due to the fast intensity of global economic environments.

Technology, competition and customer needs are dynamically changing all the time and it would be unwise for companies not to proactively react to these trends. Therefore to identify new opportunities companies have to constantly scan, search and explore technologies and local/distant markets (Nelson & Winter, 1982). This means investing in R&D activities, analyzing customer needs, researching technological possibilities, following customer demand, analyzing the structure of markets and industries and predicting possible behaviors/responses of both competitors and suppliers.

Most of the startup companies in today's environment don't fail because they didn't produce or create the product they intended but rather because the customers didn't buy it. Therefore the key is to produce something that the customers want and adapt to their requirements instead of simply executing their original plan. This represents the concept of the **lean startup** (Owens & Fernandez, 2014). Lean startups have the ability to change their plan as part of their learning process and are able to find out what exactly the customers are searching for. By doing this they are in a position to sell for a certain price and scale it to a large number. This technique allows companies to establish a strong structure at an early stage, at low cost and with high speed. As a result it could be more useful for newly established startups in a dynamic business environment to use innovation accounting rather than discounted cash flow. It is more important for startup companies to predict user behavior in the future than to use discounted cash flow based on an interest rate to define net present value. Intangible assets such as marketing buzz are very important in predicting how the customers will respond to a product and as a result determine the potential for growth. This together with invested capital and demand for

equity are the main factors that can determine the success of a newly set up company within a dynamic environment. Companies can make this prediction initially by setting up a fictitious number that represents an ideal case scenario. Afterwards when a product is launched they can track their sales patterns or generated interest and determine the more realistic picture. Also if customer behavior changes or new capabilities are added companies can track the effects and see how it influences their business performance. This approach could really be crucial for new companies trying to establish themselves in an existing market under conditions of a dynamic business environment.

D'Aveni (1999) provides an excellent outlook amongst turbulences within different types of environments and how companies need to adapt their strategy in order to battle their competition. He separates the different types of environments into four categories depending on various types of turbulences: equilibrium, fluctuating equilibrium, punctuated equilibrium and disequilibrium. *Equilibrium* is described as an environment which is quite stable and where there are long periods without any significant turbulence which could influence company competences. These environments usually hold strong barriers for entry created due to the nature of the industry such as banks, airlines, utilities or telecommunications. This enables certain companies that have been able to be one of the first entrants in their industry to establish themselves a monopolistic environment where competition and rivalry are scarce and their position is seldom challenged. In the *fluctuating equilibrium* we have a situation where turbulences are rapid and competence disruptions are frequent. In such environments certain companies that have already achieved the status of industry leaders maintain their position by adding new competences on top of the old core competences. Then they are able to leverage them into new product markets while all the other competitors are trying to catch up. Historically there have been such cases in the phone or electronic industry, where innovations are frequent and whenever a company has a breakthrough technology they can use this core competence to expand in different markets. Because in such industries there is a high level of turbulence the competences of the industry leaders are very valuable. So instead of blocking competitors through entry barriers these companies can easily use their unique resources or capabilities to enter new markets and expand their profits. The competitors then must try to disrupt the core competences and challenge the position of the market leader by introducing new trends and changing the environment. In the *punctuated equilibrium* we have brief dynamic periods during discontinuous change or revolutions that destroy competitor's competences. These markets are characterized by longer periods of stability between the brief dynamic occurrences, where the market goes through a period of adaptation or convergence to the new established standard. In such types of environments industry leaders understandably try to neutralize the effect of these revolutionary turbulences so they can keep their advantage as long as possible. During this cycle the competitors have to try and challenge the position of the industry leaders during this

created window of opportunity. Basically the leaders and the challengers have to make the most during the periods of brief dynamic turbulence. The well positioned companies can try to limit the effects by using their resources, absorb their competitors or use joint ventures all with one goal to make the revolution less relevant. The challenger on the other hand, has to use the turbulent opportunities to disrupt the environment of the leaders in any way they can and take over their position. And lastly we have the *disequilibrium* which is the most difficult, challenging and hypercompetitive environment. These environments are subject to frequent and discontinuous disruptions characteristic for high-tech industries, newly deregulated markets and unlikely low-tech industries. In such industries competing companies have to constantly create new competences that will replace the old ones and in such a way disrupting/changing themselves before their competitors get the chance to do so. By using this strategy companies can achieve a status of market leader simply by moving faster than their competitors, which in turn have to spend a lot of time reacting to the frequent changes and catch up with their opponents. The challengers then have to find a way to attack even more intensely, swiftly and unpredictably all the while by trying to be more efficient in the process.

In this modern day business environment, innovating products and services is a very effective way to deal with the dynamic surroundings in which a company operates and secure a sustainable future development. Company leadership should always proactively search for ways to bring new changes in the market so that they can constantly be one step in front of the competition. Often even very successful companies that have held the position of a market leader at some time suffer the consequences of adapting to market changes. Instead of searching for ways to refresh and expand their products a large number of companies try to play it safe and hold on to their existing offers. It seems very often, focusing only on searching for ways to improve the products/services that have shown profitable results in the past is not enough when looking towards the future. Some companies however try to pursue a strategy that successfully combines both managing their existing organization while searching for ways to remain competitive also in the future.

In order to describe such cases various academics have used the term **ambidextrous organizations** (McDonough & Leifer, 1983; O'Reilly & Tushman, 2004; Gibson & Birkinshaw, 2004). They represent companies that are successful in being proactive and innovate but at the same time also know how to exploit their current business strategies in the best way possible. Companies need to strike some sort of a balance between both strategies in order to be able to survive the dynamism of the environment. For instance although innovating and innovation practices are almost always considered as a must do for companies looking towards future development, one must not overdo with the focus directed on innovating while forgetting about the present activities. Gibson & Birkinshaw

(2004), argue that focusing too much on adapting to future standards can negatively influence the performance of the company. As a concrete example they mention the case of a very successful mobile provider that concentrated a lot of efforts and funds on research and development activities, in order to prepare for the technological developments of the mobile phone industry. However they did this by not paying too much attention to the R&D employee structure which was quite large and it generated a high amount of costs. At the moment when sales revenues started to decline the hefty costs oriented towards technological development had to be significantly reduced and therefore the company operations suffered greatly.

To avoid such a possible negative scenario O'Reilly & Tushman (2004), suggest that companies pursue different combinations of innovation strategies. One of the strategies suggested are the *incremental innovations* through which companies make small improvements to their already established products and operations in order to make them even more efficient and increase the value delivered to their customers. Basic product features start out as an initial innovative framework which is then developed and continuously improved through additional innovations. This type of innovations is becoming increasingly important because of the rapid pace of technological development and intense competition for market share. Companies are being placed under pressure to constantly advance and upgrade their existing products. Then there are the *architectural innovations* that implement technological or process developments to change the core elements of company business operations. These types of innovations are done more seldom and as a result have a larger impact than the incremental ones, because they usually involve a decision that will have a larger effect over business activity such as significant cost cutting or the shifting of operative methods. As the most radical innovative strategy they describe the concept of *discontinuous innovations* which results with significant changes not only within the company itself but in the overall industry where the company operates. These types of innovations represent instances when a company develops a certain new product that completely eliminates the previous old product by making the latter one outdated. Discontinuous innovations are the most radical type, with the biggest impact and in a way represent a so called "game changer" that gives the company a huge advantage over its competitors. But of course they happen rarely and companies need to make different combinations from the above mentioned strategies during different periods depending from their goals. Sometimes the key focus is to stabilize current market positions, then there are phases where there is a need to search for expansion opportunities, increasing current customer base, strengthen industry competition and even changing the whole market flow by bringing in a completely new product. For this reason it is important for companies to be able to anticipate such crucial changes. And the objective of companies should be utilizing a strategy that will suit the company objectives during that specific period.

3 RESEARCH DESIGN AND METHODOLOGY

The main research objective of this thesis is to use the qualitative research method in order to further explore and discover insights into the field of dynamic capabilities. The goal is to gain perspective into how companies utilize their capabilities and the role that they play within the process of strategic management. The following segments of chapter 3 will include information regarding the researched business environment, short summaries of the main information relevant to the profiles of the researched companies and key research questions used in the process of collecting all the necessary qualitative data and information from the interview process.

Of course highly essential to the whole research process is the business environment where the researched companies operate and under which external influences/factors the dynamic capabilities are being developed. As mentioned during the beginning of chapter 1, adapting to the business environment is essential for companies to successfully implement their strategic objectives. A detailed understanding of the conditions of the business environment where this research takes place is important in terms of generating a realistic picture of how the companies operate. Managerial knowledge of the environmental changes supplies the company with the necessary tools to anticipate and capitalize on different business opportunities. Environmental scanning is crucial towards providing the strategy formulation process with quality information. This in turn generates valuable information to the planning formulators and decision making authorities in charge of execution. Therefore the specific connection between the business environment and the researched companies is a valuable part of the research methodology process and produced results of the analysis.

The number of chosen companies amounts to ten (10), in order to have enough examples of different decision making perspectives. All of the selected companies for the purpose of this research have different business functions and operate in different industries. As a result, the research outcome will provide a differentiated comparative view of all the characteristics of these companies when utilizing their dynamic capabilities. Intentionally the research model was not comprised of companies with homogeneous functions or operating in the same industries, because of the difficulty of comparing and evaluating dynamic capabilities. Because dynamic capabilities are often modeled and designed based on the specific company profiles and requirements, it would be very difficult to conclude whether companies operating in the same business practice have more or less suitable capabilities.

Exactly due to this relatively ambiguous nature of the dynamic capabilities concept, the completed theoretical research in the field of strategic management plays a crucial role in

defining the research focus. The research questions contain all the main required inputs for the purpose of conducting interviews with company representatives. They serve the objective of focusing the discussion towards several key areas that will provide the necessary information. The research questions were used as basis for conducting semi structured discussions or interviews with company representatives in different managerial positions within the selected companies in the research model. Because most of interviewed candidates preferred the identity of their companies to remain undisclosed, no company names or confidential internal company data will be published in this research study. Rather the research process and analysis will focus on all the necessary information that is relevant to the outcome of the research. As an additional clarification point all the information related to the profile, background, industry or area of operation, will not provide or disclose specific data or the identity of the researched companies. Understandably also the identity of the interviewed candidates or their specific job descriptions will remain undisclosed for confidentiality reasons. The research methodology has been formulated in such a way as to provide all the necessary information, in conducting a quality analysis on the subject matter.

3.1 Description of the Researched Business Environment

Although the status of the Macedonian economy is theoretically considered to be out of the transitional phase, the companies operating domestically are left facing a lot of different challenging developments. The scopes of market liberalization in Macedonia and implemented market reforms have been notable. Also there have been significant reforms within the main areas of economic, political and legal systems. However, although the formal processes regarding the structural transformations focused towards developing market based institutions have been finalized some time ago, there is still a lot of adapting to do towards reaching modern international business practices. Some important economical factors that have an impact over the business environment are: labor costs, extent of the informal economy, inflation levels, infrastructure, the legal system, skilled entrepreneurship, corruption levels and business practices.

One of the most attractive aspects of doing business in Macedonia seems to be the low cost of labor. This proves to be a very favorable condition for both domestic and foreign companies operating in the country. It represents a key attractiveness factor when the country is being considered as a destination for a direct foreign investment. For example the existence of an inexpensive workforce, is one of the main reasons why international companies tend to pursue outsourcing activities abroad. In year 2013 the average employment rate was 29% and the average gross monthly salary was ~500 Euros (State Statistical Office of the Republic of Macedonia, 2014). These statistical figures show that while there is a relatively low cost for a monthly salary at the same time there is a high rate

of unemployment, so inexpensive labor force is in abundant supply. Therefore companies can easily keep their personnel costs under control in the constant battle of trying to increase efficiency. At the same time the average education level of the work force is quite high due to the fact that elementary and high school education is mandatory. Additionally there are numerous private and public universities that provide a high percentage of undergraduates every year. However it would be necessary to point out that the quality level of the education system is debatable. Nevertheless the fact remains that there is a high percentage of an educated work force available to the companies operating domestically.

Another relevant characteristic of the Macedonian business environment is the extent of the country's informal or grey economy. A large number of the researched companies explained that it represents quite a complication because it destabilizes the environment within the sectors where they operate. It involves unregistered activities without the payment of taxes and other contributions while employing unregistered workers. The country has succeeded to implement a lot of practices in terms of governmental regulation, taxation and institutionalization. However due to its nature, the size of the informal economy within the country is hard to measure but understandably it has implication over the company business practices. Based on some speculative and unconfirmed studies the extent of the informal economy within the country is thought to be at around 30%. If the realistic extent of the informal sector would be even close to these figures this would have problematic and unpredictable consequences to the business environment. It would mean that companies would have to deal with much more difficult entry barriers as well as unfair competition from many different aspects. Even though almost all the cases of companies operating in the informal economic sector include small and medium sized enterprises, they can still cause problems for the bigger companies. By not declaring the full extent of their tax reports and not registering workers, these companies can create a situation where they have a significant cost advantage. Also there can be cases where companies do not fully administer safety standards, environmental regulation, healthcare practices as well as respecting intellectual property rights. All these aforementioned factors can cause quite a lot of headaches for companies trying to conduct standardized, formal and regulated business practices. But the government is constantly tackling and prioritizing this issue by broadening the tax base, executing regulation, improving control and enforcing collection of taxes. So during the following years this specific problematic should hopefully show certain signs of improvement.

In terms of inflation, the average rate in year 2013 was 2.8% (National Bank of the Republic of Macedonia, 2014). This shows that it is somewhat stable and does not represent a large concern in raising the prices of commodities or having a larger impact over the domestic market. However a continuous effort has to be made in order to keep it under control. Especially because of the fact that governmental borrowing aimed at

funding fiscal deficits could cause an increase of the inflation rates. Responses from some of the interviewed companies showed concerns that if inflation rates increase than this could also increase the interest rates and make borrowing loans from banks more costly. This was a bigger concern expressed from the capital intensive companies such as Company Alpha operating in the oil industry and Company Kappa operating in the telecommunications sector. Also the interviewed representative of Company Delta that operates in the construction industry mentioned that they are constantly monitoring the inflation rates of commodity prices such as metal because it directly influences the cost of their business operations.

The other factor where a lot of the companies seem to place emphasis is the development of infrastructure. Infrastructure investment in the development of communications, IT, roads/highways, airports and railroads, is important to business development. Although Macedonia has a stable infrastructural network, more can be always done in this direction. A good infrastructure does not only make the country more attractive for foreign investments but also allows for the local companies to develop and grow. Most of the researched companies conduct business also on a regional level and they need a developed infrastructure in order to be able to expand their business ventures. Because the Macedonian government is under constant budgetary pressure often infrastructural projects have to be put on hold. And rapid changes in technology and business environment create the constant need to maintain existing and invest in new infrastructural assets.

The legal system in Macedonia is a factor that highly influences all of the researched companies. Of course the perfect balance would be to have a system than on one hand would protect the rights of the consumers and on the other would fairly regulate the activities of the producers. Functioning market economies need a stable and efficient legal system that supports business development. Macedonia has done some significant legal improvements, however a lot of the interviewed companies indicated that they need more support in different legal aspect. They pointed out the necessity that legal governmental institutions have to increase the degree of cooperation with the private companies. They mostly refer this requirement in the process of establishing diverse legal regulation in the industries where all of these companies operate. They pointed out that by increasing the degree of cooperation between government officials and company representatives, the efficiency of implemented regulatory requirement would be much higher. This would also prevent possible misunderstandings and negative implications over business practices which have to be often rectified after the new regulation is under effect.

Entrepreneurship is probably an element that the Macedonian business environment is somewhat lacking. Innovations in the business environment can only come from individuals and companies that are ready to take a risk and establish new business ventures

or open up doors to new business sectors. The level and intensity of entrepreneurial investments is quite modest and there is not a lot of movement in this category. One of the main reasons for this situation is probably the fact that the domestic market is very small to support any growth in this sector. Entrepreneurship is a challenging activity and a lot of investors make an attempt but often fail with their start ups or new investments. Because there are a lot of uncertainties when creating a new product or offering a new service, investors need a larger consumer market open to ideas and concepts. If the percentage of new consumers is quite low then the risk is too high to take a chance on trying to bring a new global trend to the domestic market. And this is shame because in many cases the creation of new business opportunities through entrepreneurship directly affects the economy. Business innovation can increase the quality of existing products, lead to higher productivity and create economic growth. Also being able to predict different consumer trends can provide profitable business opportunities.

In general corruption within a business environment reduces efficiency and increases the level of inequality. Companies and individuals that engage themselves into corruptive practices directly influence the creation of an unfavorable and unfair business environment. Usually transitional economies often start out with a high degree of corruption. Macedonia is no exception to this common practice and the perception of corruption in the eyes of businessmen and consumers remains high. Many reforms have been implemented but the notion that corrupt business practices dominate the environment is still highly present. This can prove to be a very big obstacle to a countries economic development. The enforcement of law and regulation has to be unconditionally implemented to the full extent without exceptions. And corruption as a practice that hinders such functioning has to be deeply rooted out from every business process or governmental institution.

The degree of professionalism involved in business practices defines the nature of the business environment. Under socialism where the majority of companies are owned by the government a high degree of competence or productivity was not necessary. This somehow is embedded into the mentality of the majority of the Macedonian workforce although this is rapidly changing. In a highly dynamic globalised work environment where successful performance is essential towards achieving efficient results, the effects and influences are also reaching domestic environment. However due to the fact that the government still remains the highest employer in the country, this mental transition is changing with a slower pace within the state institutions. But a high degree of professionalism and evaluation based on meritocracy is required also in the private sector. Employees represent the most valuable company resource and if companies do not recruit properly they easily find themselves driven out of the market by superior competition. Additionally companies have to continually invest in improving the skills of their existing employees. Of course there is the risk of then being poached by competition but that is a necessary risk.

3.2 Company Profiles and Backgrounds

A total number of ten (10), companies have been chosen for the purpose of this research. Each company has a different function and operates in a different business area. The idea behind the diversification of the researched companies was not compare similar decision making models that focus on the same capabilities. The research objective is to determine how companies establish dynamic capabilities within their strategic decision making process and not to find out which companies in a selected business area do so most successfully. All of the selected companies represent well established brands in their business areas and operate successfully in their chosen market. The main aspect of categorization is the annual revenue these companies generate. This has been used as a main selective criterion in order to have representatives of different sizes of operation. The four main groups based on revenues are as follows: annual revenues of more than 100 Mio. EUR; annual revenues ranging from 75 Mio. EUR to 100 Mio. EUR; annual revenues ranging from 50 Mio. EUR to 75 Mio. EUR; annual revenues ranging from 25 Mio. EUR to 50 Mio. EUR; and annual revenues under 25 Mio. EUR. For the purpose of this research two companies have been chosen for every revenue based category. Another additional criterion taken into consideration for selection is the total number of company employees which ranges into four categories: 50-100; 100-250; 250-500 and >500.

- **Company Alpha** – operates within the oil and gas industry. Its main business operation is focused on the commercial trade and sale of petroleum products. As a subsidiary of a larger international oil company it is able to secure its resources and then sell them on the local market. The company has a broad network of more than 25 filling stations spread throughout the country's territory. All the filling stations are equipped with modern technological equipment for the underground fuelling installations and pump machines. The company also manages to successfully supplement its core operations by establishing convenience stores or super markets at all of the filling stations. The convenience stores sell different products from partnering retailers under the company brand name. It also owns and operates a large warehouse that serves the purpose of storing all the oil derivatives, which are then transported to the local filling stations. The number of employees ranges from 250 to 500. It generates revenues of more than 100 Mio. EUR annually.
- **Company Beta** – produces automotive parts. It is part of a larger international company that produces a diversified range of technological products. The local factory serves for commercial production of certain automotive parts such as catalysts for vehicles and stationary exhaust emission control parts that are later exported abroad. The company's products are not intended to be sold to the final customer but are sent to assembly lines of automobile plants in different international locations. The establishment of the local factory was a direct foreign investment due to the favorable

conditions offered by the domestic business environment. Also due to ever increasing regulatory conditions for automotive producers, this specific industry sector is expected to realize significant growth in the future. This would most likely result with additional investment in the local production facilities. The number of employees is more than 500. It also generates revenues of more than 100 Mio. EUR annually.

- **Company Gamma** – operates in the steel industry. It also represents a subsidiary of a larger international steel company that purchased an existing local plant which now continues to produce steel and ferro-alloys. The local company owns a mine from which the iron is extracted and then transported to the smelting furnaces. The complex company operations represent a combination of the complete steel production process which includes extracting the natural resources and transforming them into the primary steel product. Then the produced steel structures are turned into beams, rods, bars and other structural shapes. The final product is then exported for sale in the international marketplace. It is then purchased by other companies and utilized into other different industries such as: automotive, construction, packaging and household appliances. The number of employees is more than 500. It generates revenues that range from 75 to 100 Mio. EUR annually.
- **Company Delta** – operates in the construction industry. It is a well-established local company with a history of successfully implemented projects in civil contracting. It specializes in the construction of roads, highways, bridges, dams and other infrastructural objects. It also owns and operates several production facilities including plants, factories and queries. Apart from numerous implemented projects domestically the company also successfully operates in countries all over the region. It is able to achieve this by providing engineering and technological know-how paired with low project execution costs. This allows them to present favorable conditions and get different governmental contracts awarded also abroad. The number of employees is more than 500. It generates revenues that range from 75 to 100 Mio. EUR annually.
- **Company Epsilon** – trades, imports and distributes different types of consumer goods. Focused solely on the local market it has managed to establish itself as one of the most successful distributors. It holds exclusive distribution and selling rights of different popular brands of consumer products. The company imports the products from abroad, stores them in company warehouses and then through a developed transportation infrastructure supplies other local vendors across the country. An aggressive marketing strategy is one of the key strategic business functions of the company. The distributed products are constantly advertised through promotional activities all over the country and a significant budget is spent on marketing events, advertisement and commercials. This has allowed the company to develop an extensive sales reach and high product availability. The number of employees ranges from 50 to 100. It generates revenues that range from 50 to 75 Mio. EUR annually.

- **Company Zeta** – is a local retail chain. It operates with a large number of non-specialized retail stores in different cities all across the country. Through its discount stores it supplies end customers with a diversified array of products mostly in the food and beverage category. The company has a well-established network of internal distribution; transport infrastructure and warehousing through which it supplies and operates all the retail stores. The main focus of the company's strategic operations is the management of its supply chain. Organizing the store inventory in numerous locations is a significant process that involves the cooperation/collaboration with suppliers as well as coordinating purchasing and distribution. Demand planning is also very crucial, because it helps move the goods between the warehouses and the retail stores. The number of employees ranges from 250 to 500. It generates revenues that range from 50 to 75 Mio. EUR annually.
- **Company Kappa** – operates in the telecommunication industry. The company is a network mobile operator. It is part of a larger international company that offers telecommunications services and owns mobile operators in different countries. The company has so far made significant capital investments in license acquirement, network roll-out, procurement and implementation of the latest technological equipment, opening of shops in various country locations, education of employees and marketing activities. The local company apart from offering mobile services also provides a fixed telephony connection, television and broadband internet services as well as sale of various telecommunication technology products. The number of employees ranges from 100 to 250. It generates revenues that range from 25 to 50 Mio. EUR annually.
- **Company Sigma** – is a beverage producer. After successfully operating on the domestic market for a longer period, it was acquired by an international corporation also in the industry of beverage production. This allowed the company to supplement its locally established products with internationally recognized brands. It also gave them the opportunity to export existing products into larger regional markets. However its main and original business function was and remains the company brewery. The company owns and operates a large production facility that includes a factory, warehouses and administrative offices. The number of employees ranges from 250 to 500. It generates revenues that range from 25 to 50 Mio. EUR annually.
- **Company Upsilon** – operates in the automobile sales industry. The company is the importer and seller of several highly popular and well-established automotive brands. It operates as a direct representative of a large international automobile manufacturing corporation. Its dealership network has a wide coverage of the local territory and provides sales of both new and used vehicles on a retail level. Apart from the import and commercial sales of the vehicles the company also offers a maintenance service. The maintenance network has servicing points all across the domestic territory and

represents a stable source of additional income. The number of employees ranges from 50 to 100. It generates revenues of less than 25 Mio. EUR annually.

- **Company Omega** – is a distribution company for several well-known international brands. Its main business function is the import of certain brands of products mainly in the food industry and their distribution to smaller retailers. Its efficient logistics network and large number of retail partners have allowed the company to be successful domestically and even expand its operations in the regional markets. The company owns and operates with several distribution centers in the region, its own warehouses, several retail stores, a vast transportation fleet and a freight forwarding service. The number of employees is more than 500. It generates revenues of less than 25 Mio. EUR annually.

Table 1. Summary of the Key Profile Information from the Researched Companies

	Industry	Internat. Branch	Product or Service	Market	Empl. Number	Annual Rev.
Company Alpha	Oil and gas	Yes	Gas stations	Global	250 - 500	> 100 Mio. €
Company Beta	Automotive parts	Yes	Auto parts	Global	> 500	> 100 Mio. €
Company Gamma	Steel production	Yes	Steel and ferro-alloys	Global	> 500	75 - 100 Mio. €
Company Delta	Construction	No	Infrastructure construction	Regional	> 500	75 - 100 Mio. €
Company Epsilon	Trade, import & distrib.	No	Consumer goods	Local	50 - 100	50 - 75 Mio. €
Company Zeta	Retail	No	Retail stores	Local	250 - 500	50 - 75 Mio. €
Company Kappa	Telecommunication	Yes	Mobile operator	Local	100 - 500	25 - 50 Mio. €
Company Sigma	Beverage production	Yes	Beverages	Regional	250 - 500	25 - 50 Mio. €
Company Upsilon	Automobile sales	Yes	Autos	Local	50 - 100	< 25 Mio. €
Company Omega	Distribution	No	Food products	Regional	> 500	< 25 Mio. €

3.3 Research Questions and Main Areas of Focus

The research questions have been designed, in order to be able to gain qualitative insight into the utilization of dynamic capabilities within the company strategic management process. A total of 6 research questions were comprised, focusing on crucial research areas that will determine the main outcomes of whole process. The open format nature of the research questions is very important, due to the fact that every single one of the 10 researched companies have a distinctive strategic decision making process. It would have been counterproductive to the research process to limit the possibilities of answering the questions through closed format questionnaires. Therefore the research questions were used as a guideline, focused on providing direction to the semi structured interview and allow the interviewees to present the most comprehensive overview of their company practices. The classification of the questions is formed in a certain way in order to complement each other based on the research category and topic. It begins by defining and identifying the source of competitive advantage that is based on certain capabilities, continues with the process of their development, then follows the interaction of these capabilities with the external business environment, continues with the methods used towards improving as well as acquiring new capabilities and ends with the combined implications of dynamic capabilities over the strategic decision making process.

Table 2. Classification of the Research Questions

Number	Research Question
1.	Which dynamic capabilities provide the source of competitive advantage that allows the company to distinguish itself from the competitors by providing a superior product or service?
2.	Which decision making methods and managerial practices does the company use towards identifying, developing and utilizing its dynamic capabilities?
3.	How does the company manage the intensity of change within the internal/external business environment and adapt its dynamic capabilities to maintain a level of sustainable competitive advantage?
4.	Does the company invest in advancing, improving and supplementing existing dynamic capabilities?
5.	Does the company use different methods in order to identify and acquire new additional dynamic capabilities?
6.	How are company strategic decisions aligned with the process of utilizing dynamic capabilities?

4 ANALYSIS OF THE RESEARCHED DATA

The analysis part of this thesis focuses on processing the collected information from the interview process with representatives from all 10 companies. The main objective is to gain insight into the system through which all these companies identify, develop and utilize their dynamic capabilities within their strategic management process.

The interpretation and explanation of the all the processes and approaches that the companies use, will provide valuable feedback in terms of how the concept of dynamic capabilities is understood and implemented. Initially it is important to the analysis chapter to make a summary of the key researched information from all of the companies. The research information was collected through the interview process with management representatives. The main guideline for the information collection during these interview discussions were the six research questions. During the interview process company representatives were asked to reveal company specific information for the purpose of the research paper.

Within chapter 4 all these collected information and data will be identified and summarized in three main categories: dynamic capabilities as main sources of competitive advantage; managing changes in the external/internal business environment; strategic decision making to utilize and develop dynamic capabilities. After the identification and summary of the information, part of the insight will be adapted and analyzed through the SWOT matrix by Balanced Scorecard perspectives. The final segment of the analysis will be the identification of main performance indicators and their evaluation through designated metrics.

4.1 Identifying and Summarizing the Key Research Information

The qualitative research method used for the purpose of this master thesis, generated a certain quantity of information regarding the different crucial processes within the researched companies. One of the main necessary information crucial to the research topic is to find out how every company achieves its competitive advantage. Therefore it is necessary to adapt and categorize the feedback from the interviews in segments that are relevant to the analysis.

Because the interviewees would not always clarify exactly the specific context of the research questions, it was necessary to extract the main details and adapt them to the thesis requirement. Due to the fact that the key role or objective of a dynamic capability is to provide the company with competitive advantage, it was crucial to find out which

processes or capabilities provide it. Furthermore dynamic capabilities are attributed with the ability to provide the company with the necessary support to anticipate and utilize changes. Therefore a segment of the analysis is placed on finding out through which processes the researched companies manage the changes within their internal and external environments. This gathered information is also important for the SWOT analysis segment where the analysis of the business environment is also taken into consideration. And lastly there is the segment which describes how these selected companies develop their existing dynamic capabilities and whether they use different methods in order to acquire new ones.

Companies cannot simply rely on existing dynamic capabilities to provide them with continual sustainable competitive advantage. They have to constantly try to find ways of developing them and even exploring channels through which they can acquire new ones. Otherwise companies can very easily find themselves in a situation where they are following a certain decision making routine and outdated business practice. This would then allow the competition to catch up and reduce the competitive difference.

4.1.1 Dynamic Capabilities as Main Sources of Competitive Advantage

- **Company Alpha** – is able to provide a high quality product, in this case gasoline and diesel fuels at the filling stations. But compared to the competition this doesn't produce a large advantage because state quality regulations require that all companies adhere to the same standards. Additionally because this sector of the industry is regulated by the state, companies that own and operate filling stations are not allowed to change the price levels. Therefore all competitors have to offer an identical price for the different categories of product that they offer. This means that there is no possibility to achieve higher sales or a larger market share by offering a product with a lower price. Nonetheless the main source of competitive advantage that gives the company edge is its ability to pursue a low cost strategy. Because the local company is a subsidiary of an international oil corporation it is able to import fuel at lower costs. This is especially important as a competitive element in countries like Macedonia where the government imposes an excise tax on fuel.
- **Company Beta** – is one of the most successful on the list of researched companies by generating revenues of more than 100 Mio. EUR annually. They base their success on three main sources of competitive advantage: just-in-time production, time based management and total quality management. They use just-in-time production to supply their factory with materials just as they are required, which saves a lot of time and eliminates warehouse space. By doing this they also solve the problem of over production, transportation and defective products. Then there is the concept of time based management which reduces the time needed to complete business operations. In order to implement this concept the company invests a lot of resources in developing a

work force that is multi skilled, flexible and with a high level of expertise. The last source is the implementation of total quality management through which the company tries to create a climate within the organization that always tries to improve and deliver high quality products. They spend a lot of time and resources in shaping the company culture, attitudes and ethics towards implementing the right processes to produce quality products.

- **Company Gamma** – the main competitive advantage is based on the company's efficient raw material management. As part of an international steel manufacturer the company's successful sales strategy depends on its ability to negotiate long term contracts with affordable price margins. When the company decided to invest in the country, it did so by being able to acquire a mine and raw material processing facilities. This means that all the raw materials are extracted directly from the mine and are then transferred to the processing facilities or the smelting furnaces. By doing so the company is able to produce an end product with a relatively low cost and reduce sales margins when offering long term sales contracts. The implemented efficient control of incoming raw materials also helps reduce the potential production waste, provide a shorter production cycle and improve the overall quality of the end product. The company also has a system in place that aligns the forecasted demand and order processing. The main benefit of this process is balancing the cost of supply with availability for the long term. Additionally this allows them to plan ahead with possible orders that they are going to receive and in turn reduce the inventory levels of their raw materials.
- **Company Delta** – operates in the highly competitive construction industry which is one of the largest sectors in Macedonia's economy. Of course the main factors that distinguish the company are the high quality: project design, development and construction process. But what really gives the company a competitive advantage over others is its ability to reduce costs of produced construction materials. The company owns several quarries and factories that supply its construction projects with the necessary building materials. And company Delta has succeeded in implementing a lean production process. They simply focus a lot of effort in reducing waste by minimizing labor, materials, space and time. All this is coordinated in such a way as to bring all the production costs to a bare minimum, while keeping the quality of the construction materials on a high level. Similarly to company Beta they also use just-in-time production by only extracting and processing building materials when starting work on a specific project. This means they don't have to stock up warehouses with construction materials even when there are periods where fewer construction contracts are in development.
- **Company Epsilon** – is able to operate efficiently by implementing a successful procurement risk management system. Because the company has to procure different consumer goods from abroad, as a buyer it has to be able to quickly react to changes in

consumer demand. Basically the crucial process for the company in this case is to actively manage its own suppliers with the goal of reaching a cost-benefit scenario. The successfulness of this activity mainly lies in establishing strong direct relationships and collaborations with the suppliers. Most of the company suppliers are also long term partners and this gives them the possibility to negotiate and re-negotiate lower prices for the quantities they purchase. They employ a relatively low number of staff, mostly consisting of account managers, salesmen and administrative staff. Therefore it is highly impressive that they manage to keep the personnel costs quite low and on the other hand realize revenues of more than 50 Mio. EUR. And they achieve this by actively cooperating with their suppliers, placing orders at the right time and developing non-exploitive relationships that give them benefits in the long term. All these combinations provide them with a key competitive edge in the product distribution and supply industry.

- **Company Zeta** – uses a very effective strategy that provides the company with competitive advantage. This is the utilization of the just-in-time approach to supplying its stores with goods. This allows the retail stores not to keep products that will take a long time to be sold and as a result hold up revenue generation. They achieve this by not stacking up and holding only one to two cases of products per shelf. They do not place or align individual units of product on the shelves. They simply place the case and after the products are finished they replace it with another. The employees are tasked with checking the stock constantly and as soon as they realize that the quantity has been reduced they immediately place a new order. This means the company doesn't need to pay for additional staff in charge of stocking warehouses or transportation. Plus they don't need to have a lot of products stored at the warehouses. Additionally all stores are designed in the no-frills approach. So there is no special investment needed in non-essential features or decoration which keeps the sale margins of the products quite low. A combination of these two elements allows company Zeta to keep the costs on a lower level and as a result establish a highly competitive position within the retail industry.
- **Company Kappa** – the main competitive advantage within the highly competitive communications sector comes from a successful customer relationship management. The company invests a lot of resources and efforts in order to create a strong relationship with the customers. Because the prices and offered products are relatively similar between the competing companies, the main battleground is increasing their reputation/attractiveness in the eyes of the customers. Therefore company Kappa uses CRM as a differentiation strategy. Of course this requires the company to make significant investment in the IT and technological sector. A specific successful case was the implementation of an online payment system, which gives customers the opportunity to make payment of their invoices at any time and from any location. They have also invested in establishing a data warehouse technology in order to be able to

track and follow different transaction histories and merge information with different CRM products. The company is also developing its sales force automation, in order to track the customer's history of sales so they can create and offer future services.

- **Company Sigma** – has one key element that provides it with competitive advantage and guarantees success. And this element is an effective utilization of the brand strategy. As a beverage producer this allows them to position their products above those of the competition and build a strong consumer base. Customer loyalty is important when selling a product and if a company has a recognizable brand preferred by their customers it helps in stabilizing/increasing sales. So by having a successful brand strategy they are able to effectively differentiate their product with those offered by the competitors in the beverage industry. Of course this is then supplemented with the quality of the product which is the main component in the brand establishment process. However in this case brand quality is used as a powerful tool in the marketing strategy. By investing heavily in marketing the company is able to make their products seen by the customers and as a result they avoid price competitiveness. As a result they have a high rate of customer retention no matter how many new beverage producers enter the marketplace.
- **Company Upsilon** – derives its competitive advantage from the company personnel and brand attractiveness. Because the company is a representative of a globally leading automotive brand, there is not much necessity of aggressive advertising. On the other hand this provides the restrictive aspect of not being able to pursue a price differentiation strategy. Almost all product prices are already set and predefined by the parent company. Therefore company Upsilon has to focus its efforts on reaching sales targets based on direct sales and sales contracts with different companies. For this reason the company has decided to invest heavily on improving the skills of their sales team. Their goal is to differentiate themselves from the competition by building a competent sales force, through continual training and coaching of their personnel. During the past few years the company has been implementing an aggressive training plan for the sales team. This has helped them to create a team of established professionals capable of promoting their products as the best in the market. They have also been able to negotiate many partnership contracts with different companies that use their autos. Basically their staff's expertise has allowed them to maximally utilize the brand attractiveness. As a result they have been able to achieve the necessary growth, establish a high market share and become a leader in the automotive sales industry in Macedonia.
- **Company Omega** – operating in the distribution industry the most essential component that would provide competitive advantage is an efficient logistics system. Logistics management is the main strategy upon which the company focuses towards successfully executing their business operations. The company implements a system consistent of: distributions logistics, coordination of material flows and coordination of

the supply chain. In order for the distribution logistics to function properly company Omega efficiently organizes the activities of purchasing, materials control, sales and distribution. By doing this they manage to reduce price volatility because they are able to take advantage of fixed pricing for longer contract terms or pre-set minimum order levels. All these activities are then supplemented through the internal coordination of material management and distribution channels. Additionally the company has to organize and coordinate the suppliers, internal supply chain and customers. The successful management of all these activities allows the company to be efficient in supplying their customers, which are mainly retail stores, with their branded products. Because the company does not manufacture their product themselves, it is crucial for the logistics network to work efficiently in both directions. And they have achieved exactly this by successfully managing the suppliers on one side and the customers on the other.

Table 3. Company Dynamic Capabilities as Sources of Competitive Advantage

	Dynamic Capabilities as Sources of Competitive Advantage
Company Alpha	Low costs strategy of product imports
Company Beta	Just-in-time production, time based management and total quality management
Company Gamma	Efficient raw material management
Company Delta	Lean production process and just-in-time production
Company Epsilon	Successful procurement risk management system
Company Zeta	Internal just-in-time supply process
Company Kappa	Focus on customer relationship management
Company Sigma	Effective utilization of the brand strategy
Company Upsilon	Continual sales skills development and brand attractiveness
Company Omega	Efficient coordination of the logistics management system

4.1.2 Anticipating and Managing Changes in the Business Environment

- **Company Alpha** – of course the main aspect that influences business performance is the global oil price which also determines the local sales price. But in this case the company can only react by adapting their prices. The other areas where they need to actively anticipate change is the governmental regulation and technological advancement. Regarding governmental regulation the company has an effective system in place. They have a number of company representatives involved in work groups together with representatives of governmental institutions. They work together in developing proposals for regulatory requirements and assessing the effect that eventual changes could bring to the company operations. In terms of technological developments, the company closely follows the technological advancements within the industry. They regularly replace their outdated equipment whenever new improved options are available. This improves the service that they provide to the customers through their filling stations and increases the efficiency of their business operations.
- **Company Beta** – the core of the company business operations is automated production. The technological advancement and degree of effective technological utilization plays an essential influence on company performance. Due to the influence of these factors, company Beta invests a lot of resources on continually improving and updating its technological equipment which is part of the production process. Another key factor is the maximization of asset performance. A lot of effort is placed in analyzing production equipment data and real time production statistics. The goal is to find more effective solutions in improving the automated production process. Through continuous efforts the company strives towards improving the effectiveness of utilizing the equipment and increase the level of automation. Production data is constantly analyzed with the objective of increasing the degree of integration between equipment and production.
- **Company Gamma** – fluctuating commodity prices represent the largest environment influence that can rapidly change the business performance of this company. Therefore the strategic focus is to constantly find ways to optimize operational performance. Company Gamma has already established its competitive advantage through cost minimization. Additionally, it constantly pursues a management strategy that focuses on reducing the costs of day-to-day activities. Simply all management levels are tasked with the responsibility to always try to find ways to reduce costs within their processes. This is more or less an imposed necessity from the international business environment, because during the past years there has been a constant fluctuation of commodity prices. So in order to stay competitive the company has to continually try to optimize its operational performance. A high degree of optimization, will allow the company to survive larger dips in commodity prices.

- **Company Delta** – mainly focuses its core business activities on obtaining governmental infrastructure projects. Therefore the main influence of the business environment is the amounts that the government plans to invest in infrastructure projects. In order to fully capitalize on such opportunities the company has established a process of investigating proposed engineering projects. There is a department within the company that focuses on analyzing possible infrastructural projects planned as public investment. They analyze the cost and benefit of such projects and prepare timely proposals for implementation. They also work on completely new project proposals that they then try to pitch to the governmental institutions. This represents a proactive approach that the company uses toward utilizing possible business opportunities.
- **Company Epsilon** – acts as a trade and distribution company. All of the company suppliers are from abroad. So the biggest risk comes from fluctuations of foreign currencies mostly in dollars and euros. This causes a lot of complications for the company because they usually are bound to long term contracts, with an obligation to the suppliers to import and distribute their products. The solution to this external influence has been found through hedging under forwarding contracts. This allows company Epsilon to buy and import its products with a specified price on a future date. Through forwarding contracts the company also defines the amounts they will purchase and the delivery dates. And this process effectively helps them keep their importing costs under control and reduce the risk from currency fluctuations.
- **Company Zeta** – sales performances in the retail industry are mainly dependent on consumer preferences, in terms of product demand for both quantity and product type. Of course such preferences vary and company Zeta has to carefully follow trend developments in order to keep product availability on the required level. The company already has a well-established IT system that allows them to implement a just-in-time supply. The solution to managing and anticipating changes in consumer demand was organized by integrating a software program, which tracks the trends within the just-in-time supply system. This process was then organized in the form of stock management in order to follow which type of product is more in demand, where do quantities need to be increased/reduced in the future and which new products could be introduced to the customers.
- **Company Kappa** – operates in the highly demanding and rapidly developing telecommunications sector. Technological innovation has significantly reduced the cost of communication services. Additionally the customers place the competition under constant pressure of providing better services and more varied options, while at the same time at lower costs. This creates the necessity for company Kappa to search for ways to optimize its operational performance. The main process that they use to realize such an improvement is the integration of information technology with operational technology. Integration in this case means improving planning and controlling of

operational technologies by analyzing information flows from informational technology. A higher integration level reduces the percentage of internal errors and also could lead to technological cost reductions.

- **Company Sigma** – relies heavily on satisfying rapidly changing consumer preferences by offering a high quality product. In order to make sure they remain competitive in the beverage industry, they use two key processes: lab information management and shorter time-to-market. The first one entails quality assurance processes within the laboratory, which tests existing as well as prepares/releases new flavors. For this purpose the company has invested in a state of the art laboratory with an integrated software solution. The second element represents the automation of batch processes through modular control. This basically is a software system the company uses to mix different types of flavors and recipes in order to create new products. It is then connected with the filling equipment, which provides them speed and flexibility when launching and testing a new beverage. A combination of both processes allows company Sigma to respond quickly to consumer preferences and keep the quality of existing products on a high level.
- **Company Upsilon** – is mainly influenced by consumer trends for their products. Shifts in consumer preferences and purchase ability play a crucial role in company sales. Therefore company Upsilon conducts regular analysis to identify and anticipate such changes. The internal tool or process that they use is trend forecasting and analysis. There is a team of employees in the company that do analysis and forecasting of the domestic environment in Macedonia as well as the local automotive environment. They focus on analyzing the changes in the purchasing power of the average consumer, preferences for specific brands of autos that the company sells, the impacts of new auto models that competitors bring to the market and sales trends in various locations. They then prepare monthly reports that are sent to the company management. Afterwards based on these implications the management is able to make decisions for the long/short term sales strategy.
- **Company Omega** – the successfulness of the company operations has resulted with growth. The company started locally and has expanded its services all across the region. This creates an added pressure of being able to efficiently coordinate their logistics in order to compete with all other distributors in different locations. Coupled with the increasing demand from clients/customers for a timely and qualitative distribution, it provides a difficult challenge for the company. To manage this situation, company Omega has established an efficient route control system. It is implemented through a practical software solution that plans, schedules, monitors and controls all material transport routes. This provides a lot of help for the planning process, reduces costs, increases productivity, provides better time management and simplifies the whole distribution network.

Table 4. Managing Business Environment Influences through Internal Processes

	Main influences of the business environment	Change anticipation and management process
Company Alpha	Governmental regulation and technological advancement	Inputs on regulatory frameworks and technological investment
Company Beta	Technological advancement and utilization of automated production	Technological investment and maximization of asset performance
Company Gamma	Fluctuating commodity prices	Optimizing operational performance
Company Delta	Planned governmental investments in infrastructure projects	Investigations of proposed engineering projects
Company Epsilon	Foreign currency fluctuations influencing the purchase of goods	Hedging under forward contracts
Company Zeta	Varying demand for product availability and consumer trends	Stock management process through an integrated software system
Company Kappa	Constant demand for improved, more varied and less costly services	Optimizing operational performance
Company Sigma	Rapidly changing consumer preferences	Lab information management and shorter time-to-market
Company Upsilon	Shifts in consumer preferences and purchase ability	Trend forecasting and analysis
Company Omega	Increasing pressure for a timely and qualitative service	Efficient route control

4.1.3 Strategic Decision Making to Utilize and Develop Dynamic Capabilities

- **Company Alpha** – bases its main capability development process on its recruitment policy and personnel development. The company implements an aggressive HR recruitment policy, which focuses on hiring top graduates as well as specialists and experts that they identify as useful additions from other companies. The skills and abilities that these candidates possess are then continually improved through talent, personal and career development activities. These include trainings for different specific skills, process based training, leadership training and mentoring programs. The strategic reasoning behind the process is that if the company is able to recruit and shape the skills of its personnel according to company requirements, this will in turn lead into an increase of efficiency in different operational functions.

- **Company Beta** – the key to their strategy in terms of developing dynamic capabilities is the research and development department. The company invests regularly in experimenting and testing existing processes as well as searching for new ideas. R&D activities are not implemented only towards developing new products. Of course this is an important element of the production process and a yearly budget is defined with the objective of creating/launching new products. But the company uses R&D also to analyze existing products or projects that maybe are not functioning properly or need an efficiency boost. They often use it to scan through different company projects in order to check if any organizational functions and areas can be improved through innovative or adaptive solutions.
- **Company Gamma** – uses organizational innovations to develop its capabilities. Periodically the company conducts analysis of the internal organizational structure in order to identify possibilities of improving its efficiency. One of the latest and most successful organizational innovations implemented in the company, was the establishment of a project management system. This represents a creation of a special team within the company that will manage all company projects in terms of classification, organization and coordination. This new company function has brought a lot of benefits because it has significantly improved the efficiency of project realization. Now different departments within company Gamma have access to a direct channel that serves the sole purpose of supporting their project realization activities.
- **Company Delta** – often establishes strategic alliances with other construction companies, usually when undertaking the realization of construction projects abroad. Company Delta operates regionally and there are often situations when they get awarded projects abroad that they need to realize by engaging additional support. In such cases they require to supplement their own capabilities by using the know-how, networking, capacities and resources, of other local companies operating in the specific country. Because the company mainly focuses on infrastructural development they often need additional expertise for the realization of other types of projects. So they tend to pursue the effective approach of setting up an alliance with a certain company, which in turn provides them with all the required support until the construction project is realized. During this whole process of collaboration they are also able to absorb different perspectives of practices and processes that other companies use. In this way they are able to gain insight into additional capability development for their own business operations.
- **Company Epsilon** – implements direct networking and direct interaction, which has proven to be a crucial strategy in forming the backbone of their success. The whole sales strategy of company Epsilon depends on the effectiveness of their marketing and promotional campaigns. In order to ensure the success of these activities the company tries to get even closer to the customers, suppliers and partners. The objective is to improve the understanding of their requirements and accordingly develop company

capabilities in order to provide the best possible service. They achieve this strategy by constantly organizing different social events, conducting research, establishing direct communication, and formal/informal networking. By organizing and coordinating all these activities the company is able to gather the necessary information, adapt their internal capabilities to specific requirements and build lasting relationships with all of their stakeholders.

- **Company Zeta** – develops its capabilities by maximizing the utilization of its business intelligence process. This is realized through the simultaneous interconnecting usage of both research and technology. The company constantly tracks fast changing retail and consumer trends. Additionally they monitor competitor sales performances, conduct pricing audits and organize mystery shopping activities. They collect all this information and data in order to create a benchmarking system. The goal is to create a full detailed overview of the company's position in correlation with the consumers, market and competitors. By fully implementing this business intelligence process they are able to identify areas where change is necessary and advance their capabilities to initiate improvement.
- **Company Kappa** – also focuses the majority of its strategic decision making and capability development in the field of customer relations. Maintaining and improving customer satisfaction is such a crucial process to the company, that they invest a significant effort in developing their customer care model. Company Kappa strives towards improving the capabilities that lead to customer satisfaction. Technological investment towards creating a reliable big data analysis system allows them to forecast and identify patterns within customer behavior. Through real-time analysis of company processes they are able to track: operating performance of their products, service quality of network locations, billing and payment behaviors and specific service related requests. After collecting all this data they are able to identify the improvement areas and start working on optimizing the different capabilities behind them, in order to increase productivity and efficiency.
- **Company Sigma** – places a lot of importance on advancing the competences of their personnel, especially those of a managerial capacity. Similarly to company Alpha, also company Sigma focuses its strategy on HR development. For this purpose the company has established a collaborative contract with a university. The concept entails setting up tailored management development programs for specific needs according to the position. This strategy has helped a large number of employees mostly in managerial or leadership positions, to be able to attend academic programs according to the requirements of their company function. The programs also include specialized business cases that focus on solving problems within actual situations in the company. This represents an effective approach towards developing the capabilities of the company's decision making structure.

- **Company Upsilon** – uses the process of acquisitions in order to develop its dynamic capabilities. Their acquisitions in the automobile sales industry represent a part of their expansion strategy. The company continually seeks out and acquires existing competitors that import the same brand of autos in different locations. By doing so they mainly benefit from reducing competition but also gain insight into different practices that can be useful to supplement their existing processes. During the acquisition process they aim to keep the existing management/staff and integrate their capabilities into those of the company. This is mostly useful when expanding into new locations because they provide insight into customer preferences. In one case the company has also acquired one local auto servicing company and utilized the skills of their staff. This strategy has proven to be very successful in strengthening the company position on the marketplace and provide them with competitive edge.
- **Company Omega** – follows the strategy of establishing joint ventures when expanding company operations into new regional markets. The main company business operations are in the distribution industry and therefore the company has identified a need to complement its sales capabilities. In order for their expansion strategy to be successful when entering into new regional marketplaces, the company has decided to seek support from retail partners. Apart from operating in Macedonia, the company has managed to set up joint ventures in four additional countries in the region. In these cases company Omega continues to manage the distribution business while the partner company takes over the management of the retail sales. Additionally the chosen partner company provides all the necessary supporting resources such as personnel, sales know-how, inventory management, market knowledge and marketing/promotional activities. This has been identified as an effective strategy in supplementing the existing capabilities which the company possesses, through partners that have capabilities with a higher expertise and skill level. This constitutes also as a learning process, because eventually the experience collected can be utilized to possibly shift the expansion strategy to direct entry.

Table 5. Strategy used to Utilize and Develop Dynamic Capabilities

	Strategy implemented by the company
Company Alpha	Aggressive recruitment policies and intensive personnel development
Company Beta	Research and development activities to improve and optimize existing processes in addition to launching new products
Company Gamma	Organizational innovations through internal optimization of company structures, processes and functions

(table continues)

(continued)

Company Delta	Strategic alliances for the realization of international projects
Company Epsilon	Direct networking and interaction with customers, suppliers and partners
Company Zeta	Utilizing business intelligence through research and technology
Company Kappa	Continuously developing a customer care model that utilizes forecasting and real-time analysis
Company Sigma	Management development through collaboration with academic institutions
Company Upsilon	Acquisitions as part of the company expansion strategy
Company Omega	Entering new markets through the establishment of joint ventures

4.2 SWOT Matrix Analysis through Balanced Scorecard Perspectives

According to Kaplan & Norton (1992), the **Balanced Scorecard** is considered as a set of measurements that give management a quick and comprehensive view of the business by including operational measures that drive business performance. The SWOT analysis was already introduced in this thesis at the beginning of chapter 1 as a part of the strategic management process. Because the Balanced Scorecard covers the main operative processes and the SWOT Matrix identifies the favorable and unfavorable internal/external factors, a combination of the two tools provides a great platform to analyze company capabilities. In the previous sub-chapter 4.1 a correlation was established between three key concepts: achieving competitive advantage, managing changes and implementing strategies to utilize capabilities.

Therefore in this part of the analysis it is important to identify which are the main favorable and unfavorable factors that require the utilization of dynamic capabilities to achieve company objectives. For this purpose all the main researched information will be filtered through the SWOT Matrix combined with the Balanced Scorecard approach. This categorization is important to the research analysis because it provides an overview of all the main implications of the dynamic capabilities. Each company representative was requested to determine one main strength, weakness, opportunity and threat for every Balanced Scorecard category. All of the interviewees hold management positions and therefore were already well acquainted with the Balanced Scorecard approach and even more so with the SWOT concept. They were able to very easily identify the main

categories that needed to be filled out for the purpose of this research. Because dynamic capabilities are necessary to neutralize the effect of rapidly changing business environments, it is important for each company to be able to identify the main opportunities and threats of that environment. Once they are clearly identified companies can try to formulate counter measures to utilize or neutralize possible effects.

Only when all the key challenges are defined, can a company restructure its competences to adapt to the necessary requirements. By filling out the SWOT Balanced Scorecard table the researched companies were able to prove that they have overview and control over the main external impacts over their previously defined strategic positions. Simply being aware of the impact factors can prove to be a great advantage when dealing with changes to strategic processes. Of course the table has to continually be actualized in order track shifts in the competitive marketplace.

Table 6. Filtering Company Information through the SWOT Balanced Scorecard

Company Alpha	Strengths	Weaknesses	Opportunities	Threats
Financial	Good shareholder value	Need to replace aging equipment	Increasing trend of fuel prices	Increasing costs of fuel import
Customer	Strong domestic presence	Declining purchase power	High entry barriers	Highly regulated marketplace
Process	Influential advisory board	Underutilization of HR capacities	Diversified service range	Pressure for “greener image”
Growth	Support from parent company	Excise tax limitations	Sustainable financial backing	Unpredictable economic cycles
Company Beta	Strengths	Weaknesses	Opportunities	Threats
Financial	High profit margins	High debt to equity ratio	Utilizing the R&D budget	Rising salary costs
Customer	International reputation	No influence on supply contracts	No local competition	Pressure to reduce prices
Process	Strong IT infrastructure	Over-reliance on automatization	Innovative research approach	Rapid technological advances
Growth	High level of staff expertise	Dependence on parent company	Increasing product demand	Governmental tax regulation

(table continues)

(continued)

Company Gamma	Strengths	Weaknesses	Opportunities	Threats
Financial	Longevity of supply contracts	Fluctuating commodity prices	Availability of iron ore resource	Increase of raw material costs
Customer	Strong client loyalty	Fluctuating steel demand	High nr. of steel intensive invest.	Keeping mining concessions
Process	Quality production output	Frequent technical defects	Utilizing infrastructure linkages	Environmental prot. solutions
Growth	Clear mngm. succession plan	Bargaining power of clients	Growing construction industry	Governmental trade policies
Company Delta	Strengths	Weaknesses	Opportunities	Threats
Financial	Lucrative gov. contracts	Declining dividend payout	Expanding project portfolio	Rising constr. material costs
Customer	Stable domestic sector	Vulnerability to recession	Increase in public investments	Large number of competitors
Process	Short time of construction	High level of bureaucracy	Exploit engineering experience	Effects of legislative changes
Growth	Solid company reputation	Carrying high risk in projects	New projects in regional markets	Local political influences
Company Epsilon	Strengths	Weaknesses	Opportunities	Threats
Financial	Lucrative client contracts	Delayed buyer payments	Available unique selling points	Currency fluctuations
Customer	Exclusive rights of distribution	Oscillating product demand	Progressive client relationships	Cheaper substitute products
Process	Versatile brand portfolio	Low social media presence	Utilizing marketing campaigns	Dependence on supply channels
Growth	Good referral network	Lack of staff training programs	Diversification of offered prod.	Alternative dist. channels
Company Zeta	Strengths	Weaknesses	Opportunities	Threats
Financial	Stable revenue growth rate	High interest rates on debt	Availability of cheaper prod.	Highly price sensitive sector

(table continues)

(continued)

Customer	Stable market share	Vulnerable to suppliers	New retail sales locations	Price wars with competitors
Process	Good inventory management	Short product life cycles	Utilizing the no-frills service	Complicated pricing structure
Growth	Excellent supplier relations	Low employee retention rate	Access to new supply networks	Possibility of trade barriers
Company Kappa	Strengths	Weaknesses	Opportunities	Threats
Financial	Good return on investment	Slight reduction in revenues	Rapid tech. development	High innovation costs
Customer	Strong customer loyalty	Rapidly changing preferences	Growing mobile customer base	Stagnating market share
Process	Building on brand equity	Frequent managerial changes	Util. innovation capabilities	Technological malfunctions
Growth	Strong customer relationships	Limited marketplace	Backing from state agency	Recent merger of competitors
Company Sigma	Strengths	Weaknesses	Opportunities	Threats
Financial	Good shareholder value	Moderate debt liabilities	Increased production capacity	Costs for regulatory approval
Customer	Dominant market share	Oscillating cust. retention	Utilizing brand attractiveness	Entrance of new products
Process	Distinctive marketing	Excessive accrued invent.	Util. product development	Disruptions in prod. facilities
Growth	Short product time to market	Changes in cust. preferences	Expansion of plant capacities	Price competitive industry
Company Upsilon	Strengths	Weaknesses	Opportunities	Threats
Financial	Healthy cash flow position	Unfavorable leasing rates	Availability of cash injections	Declining sales of new models
Customer	Excellent brand reputation	Low purchase power	Entering the used car market	Cheaper substitute products
Process	Superior product placement	High reliability of forecast data	Accommodating to market trends	Order cancellations

(table continues)

(continued)

Growth	Sales team cohesiveness	Small domestic marketplace	Low product import costs	Direct import by end users
Company Omega	Strengths	Weaknesses	Opportunities	Threats
Financial	Stable revenue growth rate	Moderate debt liabilities	Planned intro. of new brands	Rising fuel & electricity costs
Customer	Exclusive rights of distribution	Vulnerable to suppliers	Growing promotional activities	Aggressive competition
Process	Excellent logistics system	Limited reach of distr. facilities	Flexible org. structure	Dependence on supply channels
Growth	Setting up new facilities	Declining prod. awareness	Regional partnership requests	Alternative dist. channels

Source: R. S. Kaplan and D. P. Norton, *The execution premium: Linking strategy to operations for competitive advantage*, 2008, p.51, Figure 2-9.

4.3 Evaluating Company Performances through Metrics

Metrics are used to measure an organizations activities and performance, while they should support different stakeholder's needs including customers, shareholders, and employees (Brown, 2006). Essential to the analysis of this master thesis is to provide an evaluation of the implications of the utilization of dynamic capabilities over company performance. For this purpose during the interview process the company representatives where asked to provide an overview of how satisfied are they with their own company performance. They were asked to grade how their companies perform in selected areas defined by certain metrics. According to Brown (2004), there are ten most innovative and useful metrics that should be used to evaluate company performance:

- **Communication Effectiveness** – measures how effectively the company communicates to employees, suppliers, shareholders and others. The methods of exchanging information internally and externally can highly influence the successful performance of a company. Checking the level of effectiveness can help improve the clarity of communication if necessary.
- **Customer Relationships** – measures the relationship level that the company has with its clients or customers. This metric focuses on two main customer categories: attractiveness and relationship. The objective is to support the customer loyalty and establish long term relationships with costumers/clients.

- **Employee Satisfaction** – measures the level of satisfaction of company employees. Many different categories can be used to determine this metric such as: complaints, voluntary turnover, focus groups, overtime, survey data, etc. Positive morale within a company can have a significant influence over performance levels.
- **Brand Image** – measures how successful company business performance is based on brand image and recognition. It is important for the company to determine the percentage of people that recognize their brand as well as what they associate with it. A positive and well-known brand image is crucial to any successful business.
- **Distraction Index** – measures how much time is spent by employees performing the tasks of their job description. The index separates work obligations into job, administration and programs. In order for the index to show successful performance the proportion of job obligation needs to be higher compared to the remaining two categories, because it shows an employee’s main tasks and responsibilities.
- **Trust Index** – measures the level of trust that employees, stakeholders and outside public have for company executives. This includes implementing approaches that ensure honesty/integrity, outside boards that review major decisions, audits by outside organizations, clear communication rules, etc. Then there’s the measurement of effectiveness that’s done with surveys of public or employee trust.
- **Aggravation Index** – measures the level of aggravation they cause their customers and the difficulty of doing business with the company. The objective is to define how much aggravation do customers encounter when doing business with the company in order to improve. This would prevent customers from leaving and never returning.
- **Supplier/Partner Index** – measures the importance and performance level of the company’s suppliers or partners. Categories include: ease of work, supplier knowledge of the organization, responsiveness, timeliness and quality of goods/services.
- **Project Management Index** – measures specific indexes related to a company project that differ from regular and reoccurring work processes. This index includes the following sub-measures: budget/cost performance; schedule/milestones met; quality/performance; and innovation.
- **Intellectual Capital** – measures if the company possesses enough employees with the necessary competences. This includes assessing the mixture between knowledge and skills, that’s necessary for the completion of current and future work obligations.

Of course specific/unique metrics need to be developed in order to correctly evaluate each selected company. They need to include inputs from employees and management representatives from various functions and organizational levels. Additionally other company stakeholders could participate in the evaluation of the metrics as well as certain customer groups. But this generalized model serves as an example of how companies should approach the analysis and also represents a basic benchmarking of how dynamic

capabilities are utilized in each company. And even though this format focuses more on operational activates it can represent a good guide towards measuring the broader strategic goals of the firm. Company representatives were asked to self-evaluate how their company performs in each of the specified 10 metrics. During the discussion they evaluated each metric with a grade of lowest-1 to highest-5, according to their own perception of how well the company is performing in the selected area. In order to avoid subjectivity, company representatives were asked to also explain their evaluation by providing examples of why they think their company performs in accordance with the assigned grade. The objective was to find out which company has been the most successful in utilizing their dynamic capabilities to achieve a satisfactory performance level.

Table 7. Performance Evaluation of Researched Companies through Metrics – part I

	Company Alpha	Company Beta	Company Gamma	Company Delta	Company Epsilon
Communic. Effectiveness	4	5	4	5	4
Customer Relationships	5	4	5	4	5
Employee Satisfaction	4	4	3	4	4
Brand Image	5	5	5	4	5
Distraction Index	3	5	4	4	3
Trust Index	3	5	5	5	4
Aggravation Index	5	5	5	4	5
Supplier/Part ner Index	5	5	5	5	5
Project Mngm. Index	5	5	5	5	4
Intellectual Capital	5	5	5	4	3
<i>TOTAL SCORE</i>	<i>44</i>	<i>48</i>	<i>46</i>	<i>44</i>	<i>42</i>

Table 8. Performance Evaluation of Researched Companies through Metrics – part II

	Company Zeta	Company Kappa	Company Sigma	Company Upsilon	Company Omega
Communic. Effectiveness	5	5	4	4	4
Customer Relationships	5	5	5	5	5
Employee Satisfaction	3	5	3	5	4
Brand Image	5	5	5	5	5
Distraction Index	4	5	4	4	4
Trust Index	4	4	4	5	5
Aggravation Index	5	3	5	5	5
Supplier/Partner Index	5	5	5	5	5
Project Mngm. Index	5	4	5	4	3
Intellectual Capital	4	4	4	4	3
<i>TOTAL SCORE</i>	<i>45</i>	<i>45</i>	<i>44</i>	<i>46</i>	<i>43</i>

It is important to note that none of the researched companies use the metrics system in order to evaluate their performance or create an internal benchmarking system. The evaluation through these selected generalized metrics, showed a pattern with regards to areas where the companies see room for improvement. Company Beta stands out from the group with the highest number of accumulated points. Most of the other companies find themselves tied with the same number of points; however ranking priority has been given to the companies that realize a higher amount of yearly revenues. The ranking of the companies according to their evaluated performance through metrics is as follows:

- **1st Company Beta (48 points)** – has the highest performance in all metric categories. The only two areas where they indicated room for improvement are Customer

Relationships and Employee Satisfaction. As a category, Customer Relationships is placed in the background because clients are mostly handled on an international group level. In terms of Employee Satisfaction the company has had some complaints for payment increase from the employees working at the production and assembly plants.

- **2nd Company Gamma (46 points)** – is placed second because it generates more revenues compared to company Upsilon. Although Communication Effectiveness is satisfactory they indicated that they see room for improvement. In terms of Employee Satisfaction they have some difficulties due to the tough working conditions in the mine. But they are working on improving them. They also pointed out that within the Distraction Index they could do with some improvement especially in the administrative departments.
- **3^d Company Upsilon (46 points)** – also has a very strong performance. They would like to improve the Communication Effectiveness especially towards the sharing of information with the parent company. Distraction Index was an area where they indicated a slight need for optimization as well as with the development of Intellectual Capital, on which they are highly focused by organizing different employee training programs. They also indicated a need for better coordination within the Project Management Index specifically in setting and reaching sales milestones.
- **4th Company Zeta (45 points)** – has some difficulties with high employee turnover in the Employee Satisfaction metric. Room for improvement was also pointed out within the Distraction Index. The Trust Index could also see a different approach because a couple of managers have left the company due to professional differences with the general manager. The last metric is the Intellectual Capital where the company is making efforts to raise the quality of staff recruitment.
- **5th Company Kappa (45 points)** – has indicated there is room for improvement in the Trust Index in relation to decision making support from the parent company. Improvements are also being made in the Aggravation Index, where there are often complaints due to network service quality. The Project Management Index could use with a higher degree of cost optimization. And there are constant efforts being made to increase the quality level of the Intellectual Capital.
- **6th Company Alpha (44 points)** – has identified small areas of improvement within Communication Effectiveness with regards to internal company communication and overall Employee Satisfaction. The metrics where they seem to have most difficulties are the Distraction Index and Trust Index. They have identified that there is a larger segment of the staff that needs to improve their daily productivity. In the Trust Index minor difficulties arise from a degree of mistrust from the public in the company management. This is mainly due to the fact that all of the higher level management members are from another country.

- **7th Company Delta (44 points)** – has an overall satisfactory performance in all selected metrics categories. They have simply indicated that within half of the specified metrics they could see some improvements. But overall there is no specific area where they believe that they are facing significant difficulties.
- **8th Company Sigma (44 points)** – has indicated that Employee Satisfaction is often a topic of concern in terms of requests for higher salaries and high turnover in the financial departments because of the heavy workload. However the company is focusing its efforts on negotiating a new collective agreement and has restructured the hiring policy for the necessary departments where there is a lack of capacities. All the other metrics where they believe that there is a necessity for a slight degree of improvement do not represent a significant concern.
- **9th Company Omega (43 points)** – needs a higher degree of support in the Project Management Index. They have indicated that there's a necessity for a more structured project management system that increases the efficiency of specific projects in the company. In this aspect they are already working on establishing a team that will take over this role. Another area where improvement is needed is the Intellectual Capacity. The company has indicated a need for a larger number of educated employees and specialized experts that will support different company processes. The other metrics only indicate a smaller degree of required improvement.
- **10th Company Epsilon (42 points)** – has the lowest score within the metrics evaluation although according to revenues generated it ranks fifth. Obviously the company is operating quite successfully but they need to implement improvements in the Distraction Index and Intellectual Capital. They have indicated the need to increase employee work productivity and quality. A solution is already being implemented, by hiring an external consultant to coach their employees how to achieve maximal productivity as well as work with HR to develop a recruitment strategy. Other metrics only indicate a smaller degree of required improvement with no special urgency.

5 RESULTS AND RECOMMENDATIONS

The final chapter of this master thesis will serve the purpose of summarizing all the gathered research information and data analysis results. The aim of the conducted research process was to simply gain insight into the correlation of dynamic capabilities with strategic management processes at ten selected companies. Initially an extensive literature review was required in order to establish a clear concept between the main contemporary management practices and dynamic capabilities. What followed was a clear formulation of the concept of dynamic capabilities, which company assets can be considered as dynamic capabilities, implementing dynamic capabilities within strategic management concepts, the utilization of dynamic capabilities towards achieving competitive advantage, and coping

with the dynamics of the business environment. The categorization and segmentation of dynamic capabilities into these main concepts helped with the establishment of the research process structure. Additionally the link between dynamic capabilities and the business environment is crucial to industry processes and company performance. Before the identification of research information could begin it was necessary to provide a description of the country's business environment. This serves as a necessary overview under which economic conditions do the companies operate and the different challenges that they face. As follow up, the profiles of the researched companies were summarized and classified based on the following key information: industry, international branch, product or service, market, employee number, annual revenues. The research data was collected with the purpose of determining: which are the main capabilities that these ten companies utilize in achieving competitive advantage, how these companies utilize their capabilities in anticipating and managing changes in their respective business environments, and which dynamic capabilities are incorporated into strategic processes to provide the companies with an improved performance. Then additional analysis followed by researching all the main strengths, weaknesses, opportunities and threats that the companies influence the companies in terms of finances, customers, processes and growth. The analytical process was then concluded with a performance evaluation for all of the companies through ten selected metrics.

5.1 Result Evaluation and Interpretation

All of the researched companies hold well established positions within the industries they operate. Furthermore they implement modern managerial practices that serve as an example for the domestic business environment. The categorization based on annually generated revenues coupled with the number of employees serves only as an indicator of how large the companies are in terms of size. This is by no means a measurement of the successfulness of their business performance. The purpose of this categorization was to select two companies from every revenue group and determine that the size of the company doesn't matter when evaluating the successfulness of strategic processes. Furthermore each company was chosen so that it operates in a different industry and that it provides different products/services, in order to collect insight that's unique for every profile.

When evaluating the dynamic capabilities that provide the source of competitive advantage the results were expectedly distinctive for each company. However there were some similarities in terms of the strategic approach. For example both company Sigma and company Upsilon focused on utilizing their brand influence. Company Beta and Delta both rely on efficient production processes such as the implementation of just-in-time production. Interestingly company Zeta uses a similar approach only adapted to their retail

industry in the form of just-in-time supply process. Companies Alpha, Gamma and Delta on the other hand focus their efforts towards reducing and efficiently managing their costs whether that's connected to the procurement or production process. So in conclusion the majority of the researched companies do not offer something out of the ordinary compared to their competitors. They have simply managed to efficiently organize their internal processes in such a way as to give them a certain competitive advantage. This is then in turn coupled with the quality of their service/product and as a result positions them as industry leaders.

The ability to manage the external business environment is another crucial process related to the concept of dynamic capabilities. The modern international business environment provides companies with a large number of challenges that can define or change the course of strategic direction. It's up to the companies to use their internal capabilities to combat and manage the external dynamic effects. The main difficulties seem to come from shifts in consumer trends and preferences, which cause a lot of pressure for companies Zeta, Sigma and Upsilon. However each of the three companies has adopted a different approach in dealing with this predicament. Company Zeta uses a software system to manage their stocks, company Sigma uses information management and optimizes the necessary time to bring products to the end consumers, and company Upsilon uses forecasting and analysis to predict changes in consumer trends. This shows that although the external influences could be similar different industries require different approaches in order to neutralize possible complications. And these three aforementioned companies have managed to deal with the situation with great effect. Company Kappa also faces a similar challenge in the form of constant intensive demand for their services. So almost half of the researched companies base the success of their performance on how quickly they can satisfy their customer needs and requests. The other main category is technological advancement that affects company Alpha and Beta. Then there are global influences such as fluctuating commodity prices that affect company Gamma or currency fluctuations that affect company Epsilon. Another significant category is governmental regulation that influences the operations of company Alpha and Delta. However all of the researched companies have been able to utilize internal dynamic capabilities to establish processes that are able to anticipate all of these changes and even benefit from the dynamism of their respective business environment.

Dynamic capabilities need to be incorporated into company strategic processes in order to utilize them properly and develop them further. For this purpose the researched companies pursue different strategies to achieve the maximum effect from these processes and methods. The companies Alpha and Sigma focus their strategic efforts on developing human resource capabilities. Companies Beta, Gamma and Zeta pursue the strategy of utilizing and developing research and development capabilities. Companies Delta, Upsilon

and Omega utilize different channels as strategic alliances, acquisitions and joint ventures to develop their own capabilities and improve their performance. And the companies Epsilon and Kappa develop customer relationship capabilities as part of their strategy. Although in terms of utilization and development of dynamic capabilities we have more similarities between the companies, nevertheless the specific implemented processes and methods have been uniquely adapted to the necessities of each organizational structure.

The SWOT matrix represents a key element in analyzing organizational performances. Combined with the Balanced Scorecard approach it provides an excellent measurement tool in identifying capabilities within the main company operative processes. The main objective of utilizing this tool was to identify all the key characteristics that define the successful operational performance of the companies. But equally important was to place emphasis over the difficulties that they face in terms of weaknesses that could be improved or upcoming threats. Most of the researched companies have good financial positions within the strengths category consisting of revenue growth and stable cash flow positions. In regards to weaknesses it seems the main problem seems to be the debt level. But at the same time the financial future of companies seems promising, with most of them having different strategies in the pipeline that will provide additional financial benefit such as: diversification of products or services, introduction of new products/services, additional business opportunities, resource utilization etc. In the category of threats, 7 out of 10 companies are facing the challenge of dealing with direct and indirect cost increases. In the customer category of the Balanced Scorecard the main strengths arise from a strong market presence, customer/client loyalty and a good brand reputation. The main weaknesses on the other hand are low customer purchase power, dependence or vulnerability to suppliers and fluctuating customer preferences. In the opportunities category there are several different approaches. For example both company Alpha and company Beta view their best opportunity in the fact that they do not have any credible risk from their competitors. So their focus will be to utilize their capabilities into increasing the existing value that they provide for their customers. Companies Gamma and Delta on the other hand hope to use their dynamic capabilities to respond to the expected growth in their respective fields. Companies Omega and Sigma believe that opportunities lie in increasing their marketing reach to expand their consumer base. What is interesting within the threats category is that almost all of the researched companies identified their main threats from competition related factors. An increase in aggressive competition was pointed out as a main threat from companies Delta and Omega. Companies Epsilon and Upsilon are concerned about cheaper substitute products that might reduce their sales, while company Sigma has pointed out the risk of new products entering the market. And the competitive pressure to reduce prices is a challenge for companies Beta and Zeta. The following category in the SWOT Balanced Scorecard analysis is the internal company processes. Expectedly within the strengths category all of the companies simply indicated the main strong suit that their

operational processes have to offer: quality product/service, efficiency, versatility, productivity, successful management, etc. However as each company indicated a certain specific strength, this was then followed by identifying a weakness in their processes. The weaknesses vary however and they are quite specific for each selected company. Companies Beta and Gamma pointed out to weaknesses related to their production processes, while companies Sigma and Omega had concerns related with their logistical structure. Other indicated areas of improvement included human resources, administration, data analysis and marketing. In the opportunities category each company pointed out an internal process that they could maximally utilize in order to achieve positive development. Examples of capitalizing on process opportunities include: innovation capabilities, product development, marketing strategies, infrastructure networks, etc. In the category of growth several of the companies pointed out that nurturing good relationship with clients, partners or customers provide them with a stable basis for strategic growth. Others pointed out that the foundation for growth lies within human resources and organizational capabilities. When confronted with the weaknesses, most of the companies pointed out limitations imposed by their business environment such as: different regulations, bargaining powers, customer perceptions, personnel issues, market limitations etc. In terms of growth opportunities most of the companies pointed out towards expansion necessities through: increasing international presence, entering new markets, establishing partnerships, expanding capacities etc. The final category of threats was also based on the external changes that might alter their strategic orientation. Companies Beta, Gamma and Zeta pointed out to governmental policies, companies Epsilon, Kappa, Sigma and Upsilon had concerns related to the competitive environment, while companies Alpha and Delta indicated to economic and political influences.

The final analysis segment of this master thesis has to do with the evaluation of company performances through metrics. The ten selected metrics provided an excellent platform to evaluate the dynamic capabilities that the researched companies possess in each category. During the interview process the management representatives from each company were asked to evaluate their company performance in each metric. The anonymity of the company profiles allowed for a relatively objective evaluation and the results showed that almost all of the companies are quite satisfied with their performance in the selected fields. This was illustrated by the fact that on a scale from 1 to 5 none of the interviewees was willing to give his respective company a lower grade than 3. The sum of each company evaluation per category is as follows: Communication Effectiveness (44 points), Customer Relationships (46 points), Employee Satisfaction (38 points), Brand Image (48 points), Distraction Index (38 points), Trust Index (44 points), Aggravation Index (48 points), Supplier/Partner Index (50 points), Project Management Index (48 points), and Intellectual Capital (44 points). The results indicate that the only category where the companies rated themselves with a perfect score was the Supplier/Partner Index. This shows that the biggest

effort is placed in selecting, developing and maintaining excellent business cooperation with suppliers and partners. The lowest rated categories were Employee Satisfaction and Distraction Index. The largest number of researched companies pointed out that they often receive dissatisfied feedback from their employees regarding salary levels. However this situation has less to do with company payment practices and is more related to the difficult socio-economic conditions of the domestic business environment. The Distraction Index was a welcomed novelty for all of the researched companies. They all indicated that they never thought of conducting such an analysis in order to determine how much time is spent by employees performing their tasks and stated that they will further explore this metric.

5.2 Essential Findings and Recommendations

Although dynamic capabilities are attracting a lot of focus and are being considered as an important concept in organizational performance, most of the resources that describe it are purely theoretical. There is no clear categorization of what exactly constitutes as a dynamic capability or a clear indication of their implications over strategic decision making processes. Therefore this leads to the conclusion that each company has its own specific process that establishes its dynamic capabilities and the level of their successful utilization is open to interpretation.

It is important to point out that all of the researched companies do not possess a clearly structured organizational process that identifies, develops and utilizes dynamic capabilities. Even the sole concept was unheard of and required additional explanation and clarification for all of the company representatives. And this was quite surprising because all of the interviewees were top management representatives involved in high decision making levels. However the fact that they were not acquainted with the concept does not mean in any way that these processes do not function within company business operations. All of the companies possess certain dynamic capabilities that provide them with competitive advantage. Additionally they all have internal mechanisms that identify external influences and as a result are able to adapt their strategies accordingly in order to capitalize on such changes.

Perhaps one certain organizational area that could benefit from additional effort is for the companies to focus more on innovation. Research showed that most of the companies have limited budgets for innovation of their products or services. Their focus seem to be to provide quality and improve just enough so that the market competitiveness remains intact. However in order to remain competitive in the long run, companies need to place more effort and invest significantly in innovation processes that will reduce costs and increase productivity. This also includes being able to research and predict innovation trends. Such an approach will allow the companies to be better informed and able to provide diverse

options for their consumer base. A certain method of improvement would be to place a stronger commitment on implementing *systemic innovations* which require significant adjustment and successive alterations of other parts of business systems where they are embedded in (Teece, 1996; Chesbrough & Teece, 2002). Of course it is not easy to implement these types of innovations, because they require a lot of organizational modifications in order to be successful. Coordinating systemic innovations within the company needs to be supported by: different managerial practices, a high level of communication within organizational levels, cooperation between different departments, managing supplier relationships, following the development trends for new technologies, collecting information/knowledge from different industry segments and customers, etc. All these activities need to be carefully adjusted in order to provide successful results in terms of innovative improvements of the product development process. And if the researched companies manage to achieve this coordination, then they could efficiently take advantage of new market opportunities. This will then further strengthen their already established competitive positions and lead towards additional development of their organizational capabilities.

Corporate performance management could provide another supplementary option for the companies to implement. It represents “methodologies, metrics, processes and systems used to monitor and manage the business performance of an enterprise”, (Geishecker & Rayner, 2001). Basically it involves defining different key performance indicators that are crucial to company operations and monitoring them consequently. Most of the researched companies have already implemented good business intelligence systems, which can be supplemented with additional software in order to better track and manage corporate performance. It could prove to be a very useful process that will provide the management with a better overview of all necessary information but also serve as a benchmarking tool for setting objectives to company employees. And even though all of the researched companies actively track their key performance categories this could provide a more structured overview.

Enterprise risk management could be an additional benefit for these companies. It represents a “discipline by which an organization in any industry assesses, controls, exploits, finances, and monitors risks from all sources for the purpose of increasing the organization’s short- and long-term value to its stakeholders”, (Enterprise Risk Management Committee, 2003, p.8). Apart from company Epsilon that has a procurement risk management system, none of the other companies really have a structured system in charge of tracking and evaluating risks. This is a relatively new concept that is increasingly being implemented by larger corporations. It can prove to be a really useful tool for the companies especially when dealing with possible opportunities and threats from the external environment.

CONCLUSION

“Operational effectiveness is not strategy”, Michael Porter (1996). Although older, this statement provides an excellent summary of what type of diverse challenges organizations face in a modern business environment. It is no longer enough for companies to effectively manage internal processes in order to outperform their rivals. They need to be flexible and dynamic when interacting with the external environment and be able to anticipate and respond to change. By doing this companies would be able to sustain their competitive advantage for a longer period of time. The key to achieving this is the establishment and development of dynamic capabilities.

This master thesis was able to confirm that the selected companies are completely aware of the aforementioned necessity. The results of the research analysis showed that all of the ten selected companies have a proactive approach in formulating strategic positions in line with the prerequisites of their respective business environments. Each company has a well-developed system in place that utilizes internal competences, establishes and maintains competitive advantage, anticipates and manages external effects, and has specific capabilities that influence strategic decision making. And although the domestic marketplace offers many limitations to further advancement, the companies are aware of this fact and therefore in constant lookout to expand their operations regionally or internationally. Furthermore during the course of the research many of the company representatives showed willingness to point out possible areas where improvements could be implemented. This was an indication that the companies have embraced an approach that allows them to learn, develop, adapt and change, and that they are not explicitly bonded to their standardized functions and operational processes. And by doing this they have been able to not only achieve competitive advantage but also sustain it when compared to their competitors who are more resistant to change.

Understandably the future brings many different types of challenges to which the companies will need to adapt to in order to ensure continued success in their performance. The increased degree of globalization makes it increasingly difficult for companies to keep hold of their competitive positions. We are witnessing a constant increase of uncertainty, competition, diversity, complexity and innovation. All these changes simply make it impossible for companies to survive if they are not able to evolve. Therefore the progressive development of dynamic capabilities is a must, for those organizations that want to keep the pace with the dynamism of internationalization. This makes matters even more difficult for these companies which operate in an environment with limited resources, customers, and business opportunities. And although the research showed that they are well equipped and aware of this situation, they will need to build up on their current performance in order to remain successful.

REFERENCES

1. Argyris, C., & Schon, D. (1978). *Organizational learning: A theory of action perspective*. Addison-Wesley: Reading, MA, USA.
2. Augier, M., & Teece, D. (2009). Dynamic capabilities and the role of managers in business strategy and economic performance. *Organization Science*, 20, 410-42.
3. Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
4. Bersin, J. (2012). *5 Keys to building a learning organization*. Retrieved February 26, 2015, from <http://www.forbes.com/sites/joshbersin/2012/01/18/5-keys-to-building-a-learning-organization/>
5. Birkinshaw, J., & Gibson, C. (2004). Building ambidexterity into the organization, *Sloan Management Review*, 45(4), 47-55.
6. Boyatzis, R. E. (1982). *The competent manager: A model for effective performance*. New York: John Wiley & Sons.
7. Brown, M. G. (2004). Magic metrics: Top ten most innovative and useful performance measures. *Perform Magazine*, Spring 2004.
8. Brown, M. G. (2006). *Keeping score: Using the right metrics to drive world class performance* (1st ed.). Productivity Press.
9. Brown, M. G. (2011). *9 Magic metrics your organization needs to adopt*. Retrieved June 30, 2015, from <http://businessfinancemag.com/technology/9-magic-metrics-your-organization-needs-adopt>
10. Caves, R. E. (1980). Industrial organization, corporate strategy and structure. *Journal of Economic Literature*, 58, 64-92.
11. Chesbrough, H., W., & Teece, D., J. (2002). Organizing for innovation: When is virtual virtuous? *Harvard Business Review*, August, 127-134.
12. Cummings, T., G., & Worley, C., G. (2001). *Organization development and change* (7th ed.). South-Western College Publishing: Mason, OH, USA.
13. D'Aveni, R. A. (1999). Strategic supremacy through disruption and dominance. *Sloan Management Review*, 40(3), 127-135.
14. Denning, S. (2010). *The leader's guide to radical management: Reinventing the workplace for the 21st century* (1st ed.). Jossey-Bass.
15. Denning, S. (2012). *What killed Michael Porter's Monitor Group? The one force that really matters*. Retrieved January 04, 2014, from <http://www.forbes.com/sites/stevedenning/2012/11/20/what-killed-michael-porters-monitor-group-the-one-force-that-really-matters/>
16. Denning, S. (2013). *It's official! The end of competitive advantage*. Retrieved January 04, 2014, from <http://www.forbes.com/sites/stevedenning/2013/06/02/its-official-the-end-of-competitive-advantage/>

17. Eisenhardt, K., M., & Martin, J., A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21, 1105-1121.
18. Enterprise Risk Management Committee (2003). *Overview of enterprise risk management*. Casualty Actuarial Society. Retrieved July 13, 2015, from <https://www.casact.org/area/erm/overview.pdf>
19. Garvin, D. A. (1993). Building a learning organization. *Harvard Business Review*, 71(4), 78-91.
20. Geishecker, L., & Rayner, N. (2001). Corporate performance management: BI collides with ERP. *Gartner Research Note, Strategic Planning*, SPA-14-9282.
21. Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(3), 114.
22. Hammer, M. (1997). *Beyond reengineering: How the process-centered organization is changing our work and our lives*. Harper Business.
23. Helfat, C., E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S., G. (2007). *Dynamic capabilities: Understanding strategic change in organizations* (2nd ed.). Wiley-Blackwell.
24. Hill, C., W., L., & Jones, G., R. (2012). *Essentials of strategic management* (3rd ed.). Mason, OH: Cengage Learning.
25. Kaplan, R., S., & Norton, D., P. (1992). The balanced scorecard - Measures that drive performance. *Harvard Business Review*, January-February, 71-79.
26. Kaplan, R., S., & Norton, D., P. (2008). *The Execution premium: Linking strategy to operations for competitive advantage* (1st ed.). Harvard Business Review Press.
27. Lafley, A., G., Martin, R., L., Rivkin, J., W., & Siggelkow, N. (2012). Bringing science to the art of strategy. *Harvard Business Review*, 92(9), 56-66.
28. Leonard-Barton, D. A. (1992). Core capabilities and core rigidities: A paradox in managing new product development, *Strategic Management Journal*, 13(8), 111-125.
29. Mahoney, J., T., & Pandian, J., R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal*, 13(5), 363-380.
30. Martin, R. L. (2014). The big lie about strategic planning. *Harvard Business Review*, 92(1/2), 78-84.
31. McDonough, E., & Leifer, R. (1983). Using simultaneous structures to cope with uncertainty. *Academy of Management Journal*, 26(4), 727-735.
32. McGrath, R. G. (2013). *The end of competitive advantage: How to keep your strategy moving as fast as your business*. Harvard Business Review Press.
33. Mintzberg, H. (1973). Strategy - Making in three models. *California Management Review*, 16(2), 45-53.
34. Mintzberg, H., Lampel, J., B., & Quinn, J., B. (2002). *The strategy process: Concepts, context, cases* (4th ed.). Prentice Hall.

35. National Bank of the Republic of Macedonia (2014). *Annual Report 2013*. Retrieved May 01, 2015, from http://www.nbrm.mk/WBStorage/Files/WebBuilder_Annual_Report_2013.pdf
36. Nelson, R., R., & Winter, S., G. (1982). *An evolutionary theory of economic change*. Cambridge, Massachusetts: Harvard University Press.
37. O'Reilly, C., A., & Tushman, M., L. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review*, 38(4), 8-30.
38. O'Reilly, C., A., & Tushman, M., L. (2004). The ambidextrous organization. *Harvard Business Review*, 82(4), 74-81.
39. Owens, T., & Fernandez, O. (2014). *The lean enterprise: How corporations can innovate like startups* (1st ed.). Wiley.
40. Partners Creating Wealth (2013). *14 Sources of competitive advantage*. Retrieved February 8, 2015, from <http://www.partnerscreatingwealth.com/14-sources-of-competitive-advantage>
41. Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3), 179-191.
42. Peteraf, M., A., & Barney, J., B. (2003). Unraveling the resource-based tangle. *Managerial and Decision Economics*, 24(4), 309-323.
43. Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
44. Porter, M. E. (1990). *The competitive advantage of nations*. New York: Free Press.
45. Porter, M. E. (1996). What is strategy? *Harvard Business Review*, November-December 1996.
46. Prahalad, C., K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(3), 79-91.
47. Probst, G., & Buchel, B. (1997). *Organizational learning*. Prentice Hall: London.
48. *QuickMBA – Web portal*. Retrieved January 05, 2014, from <http://www.quickmba.com/strategy/competitive-advantage/>
49. Quinn, J. B. (1978). Strategic change: "Logical incrementalism". *Sloan Management Review*, 20(1), 7-20.
50. Rumelt, R. (2011). *Good strategy bad strategy: The difference and why it matters*. Crown Business.
51. Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. Doubleday/Currency.
52. State Statistical Office of the Republic of Macedonia (2014). *Statistical Yearbook of the Republic of Macedonia*. Retrieved May 01, 2015, from http://www.stat.gov.mk/PrikaziPublikacija_en.aspx?id=34&rbr=485
53. Teece, D. J. (1996). Firm organization, industrial structure, and technological innovation. *Journal of Economic Behavior & Organization*, 31, 193-224.

54. Teece, D. J. (2009). *Dynamic capabilities and strategic management*. New York: Oxford University Press.
55. Teece, D. J., & Pisano, G. (1994). The dynamic capabilities of firms: An introduction. *Industrial and Corporate Change*, 3(3), 537-556.
56. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
57. Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
58. Wernerfelt, B. (1995). The resource-based view of the firm: Ten years after. *Strategic Management Journal*, 16(3), 171-174.
59. Wheelen, T., L., & Hunger, D., J. (2011). *Concepts in strategic management and business policy* (13th ed.). USA: Pearson Education.
60. Winter, S. G. (2000). The satisficing principle in capability learning. *Strategic Management Journal*, *Special Issue 21*(10–11), 981-996.
61. Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic Management Journal*, *October Special Issue 24*, 991-996.
62. Zollo, M., & Winter, S., G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization Science*, 13, 339-51.