Developing Stage Theory:

An Industrial Management approach to validate an Organizational Life Cycle Developing Theory

By

Anika Viljoen

Thesis presented in partial fulfilment of the requirements for the degree of

Masters of Engineering Management at the University of Stellenbosch

Supervisors: Prof CSL Schutte and W Bam

March 2016

Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

March 2016

Anika Viljoen

Abstract

Kenneth Boulding (1950) developed the first concept of an organizational life cycle model in 1950 (Ionescu and Negrusa, 2007). Ever since, discussions of this concept have developed within many disciplines, including management, education, sociology, psychology and marketing. Some organizational experts are of opinion that no organization progresses through a discrete set of development growth stages, while others have modernized Boulding's (1950) original life cycle model to accommodate the growth changes seen in organizations today (Penrose, 1959).

Marc van der Erve (2013), an organizational philosopher and expert, developed a stage theory which focuses on the growth of *natural organizations* (Van der Erve, 2013). Although his developed theory is based upon natural sciences (thermodynamics) and the social sciences (particularly sociology), he states that it can be applied to business organizations as well. He is of the opinion that his developed stage theory can predict the future success of organizations.

The study is set out to investigate these claims and to determine whether Van der Erve's (2013) theory can be accepted and is feasible in the industry today. The main discussion however will focus on the investigation of Van der Erve's development stage theory and the comparison thereof with already existing life cycle models.

Together with the main project statement, the study aims to answer two objectives, namely:
- *Firstly:* The investigation of Van der Erve's (2013) development stage theory and the comparison thereof with already existing life cycle models.
- *Secondly*: Determining whether an organization is successful if its organizational life stage is aligned with the specific leadership role, as presented by Van der Erve (2013).

Moreover, in order to answer the above mentioned objectives, the study attempts to formulize a proposed hypothesis on which various organizations will be tested on by evaluating them against certain variables. The hypothesis specifically examines the relationship between organizational life cycle stages, leadership roles, competitive strategy in the market and financial performance of an organization.

The motivation for this study derives from the research done by Van der Erve (2013) stating that the successful performance, as measured by its revenue growth, of any organization can be predicted if the right leadership role is in line with the respective organizational growth stage of the organization. The focus of this research is to offer a variety of ideas, measures, and empirical facts on how organizations grow and develop throughout their life cycle, and if, as stated in the newly developing stage theory, can predict the success of any organization.

The study concludes by stating that the formulating hypothesis can neither be accepted nor rejected when analysing and investigating the four chosen organizations operating in the technology industry. Two organizations, in the service-based technology industry, showed significant correlation between the two factors, developing stage and leadership role, which resulted in a successful performance for the organizations. While the two organizations in the product-based technology industry showed similarities of a product life cycle.

Together with the proven formulated hypothesis, interesting results and conclusions were seen in the outcomes of all four organizations under investigation. It can thus be said that the development theory can be applicable to some organizations in the technology theory, but research must be expanded to determine whether it is valid in other industries as well.

Opsomming

Kenneth Boulding (1950) het die eerste konsep van 'n lewensiklus model vir organisasies ontwikkel (Ionescu and Negrusa, 2007). Sedertdien het die model ontwikkel en uitgebrei in na ander disiplines en velde, onder andere bestuur, opvoeding, sosiologie, sielkunde en selfs bemarking. Deesdae is sommige organisatoriese kenners van mening dat Boulding se model nie meer toepassing vind in die hedendaagse organisasie nie en dat geen organisasie deur 'n diskrete stel stadiums van ontwikkelende groei beweeg nie. Ander het weer Boulding (1950) se lewensiklus model gemoderniseer om die ontwikkeling en groei wat gesien word in vandag se organisasies, te akkommodeer (Penrose, 1959).

Marc van der Erve (2013), 'n organisatoriese filosoof en kenner in die veld, het 'n teorie ontwikkel wat fokus op die ontwikkeling en groei van *natuurlike organisasies* (Van der Erve, 2013). Alhoewel sy ontwikkelde teorie hoofsaaklik gebaseer is op die natuurlike wetenskappe, termodinamika en gedragswetenskappe, is hy van mening dat die ontwikkelde teorie ook toepaslik is op besigheids organisasies. Hy is van mening dat sy ontwikkelde teorie die toekomstige sukses van enige organisasie kan voorspel.

Die studie is daarop gemik om van der Erve se opinie te bestudeer en te bepaal of die teorie werklik beskou kan word as geldig vir hedendaagse industrieë. Die hoofbespreking sluit onder andere die ondersoek en vergelyking van Van der Erve se teorie met reeds bestaande lewensiklu modelle en ander teorieë in.

Saam met die voorgestelde projek verklaring, is twee ander projekdoelwitte bereik:
- *Eerstens*: Die ondersoek van Van der Erve (2013) se ontwikkelde teorie en die vergelyking daarvan met ander alreeds bestaande lewensiklusmodelle en teorieë.
- *Tweedens*: Om te bepaal of 'n organisasie suksesvol is indien die organisasie se lewensiklus in lyn is met 'n spesifieke leierskapsrol soos voorgestel deur Van der Erve (2013) in sy studies.

Verder, om bostaande projeksdoelwitte te kan beantwoord, poog die voorgestelde studie om 'n hipotese te formuleer waarteen verskeie organisasies teen die geïdentifiseerde kriteria getoets kan word. Die geformuleerde hipotese ondersoek spesifiek die verhouding

tussen organisatoriese lewensiklusmodelle, bestuurstyle, kompeterende strategieë in die industrie en die finansiële prestasie van 'n organisasie.

Die motivering agter die studie word verkry deur die empiriese studies gedoen deur Marc van der Erve waar die sukses van 'n organisasie, indien in terme van finansiële prestasie gemeet voorspel kan word indien die leierskapstyl in lyn is met die ooreenstemmende organisatoriese stadium waarin die organisasie homself bevind. Die hoof doelwit van die studie is om 'n verskeidenheid van idees, maatreëls en empiriese feite van hoe organisasies groei en ontwikkel deur hul lewensiklus, bekend te stel e naan die hand van die nuut voorgestelde ontwikkelde teorie, die sukses van enige organisasie te bepaal.

Die studie word afgesluit deur om die stelling te maak dat die geformuleerde hipotese nie aanvaar of verwerp kan word nie. Twee van die organisasies wat ondersoek was, het sterk korrelasie getoon tussen twee faktore, die organisasie se ontwikkelde fases en die betrokke leierskapstyl, wat daarnatoe gelei het dat die organisasie suksesvolle uitkomste in hul prestasie getoon het. Terwyl twee organisasies, gebaseer in the tegnologie industrie en produkte aan hul kliënte lewer, 'n sterk korrelasie van 'n produk lewensiklus getoon het.

Daar kan dus tot die gevolgtrekking gekom word dat die ontwikkelde teorie relevant is vir sommige organisasies in die tegnologie industrie, maar verdere navorsing gedoen moet word om te bepaal of dieselfde gevolgtrekking bereik kan word vir organisasies in ander industrieë.

Acknowledgements

"Unselfish and noble actions are the most radiant pages in the biography of souls."
~ David Thomas (2008)

I am thankful for all the support, inspirational words and encouragement I have received during the past two years. I dedicate this project to my supportive, loving parents, Hannes and Margaret Viljoen, without whom this would not have been possible! Thank you for the valuable insights and the admirable vision you shared with me during my final project. Marianne Williamson once said, *"We are all meant to shine, as children do…it's not just in some of us, it's in everyone… and as we let our own light shine, we unconsciously give other people permission to do the same."* Thank you for reminding me to always let my light shine.

First and foremost I offer my sincerest gratitude to Dr Marc van der Erve, who has supported me throughout the project with his patience, wise words and knowledge whilst allowing me the freedom to work in my own way. Thank you for giving me a new appreciated outlook on life cycles and supporting me to be creative with my own piece of work.

I would like to express great appreciation to Me Marike Sieberhagen from MMI Holdings for her valuable and assisting guidance throughout the testing phase of the project. Her willingness to give her time and efforts so generously is truly appreciated.

A kind-hearted thank you should be given to my two supervisors, Prof Corné Schutte and Mr. Wouter Bam, for their professional guidance, advice and valuable insight. The useful and constructive recommendations for this project are appreciated.

This has been an interesting eventful journey, I can only be grateful for all the unselfish and noble actions from every person who supported me throughout.

Table of Contents

List of Figures

List of Tables

List of Graphs

Glossary

In order to avoid any ambiguity, definitions and meanings of some words are provided to provide more clarity throughout the presented study.

- ***Organization***: An organization is considered an entity or a group of people united to achieve a common goal, while a business is an economic system where goods and services are exchanged in an attempt to make money (McCraw, 2003). An organization is thus a broader term that encompasses a business (Festre, 2002). An organization can be referred to profitable – or non-profitable entities, for example the Red Cross, and profitable entities, like universities, schools, the World Bank. While a company refers to firms intended to generate money. However, when discussing the various life cycle models in the presented study, each organizational expert has a different definition of an '*organization*' – this will be examined further in the applicable chapter.

- ***Management:*** Whereas, it is specifically referred to in an organization. Management mainly covers the technical aspects of running the day-to-day operations in an organization, such as good marketing, finance, as well as manufacturing (Festre, 2002). This is the key departments where knowledge and skills are applied to a department in order for the department to survive.

- ***Leadership:*** Leadership speaks of the next level of sustainable performance within an organization, by placing the staff members and the fulfilment of all stakeholders' interests at the centre of how the organization should be run (Jansen, 2004).

1

PHASE ONE

"Setting the Framework"
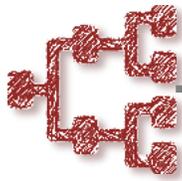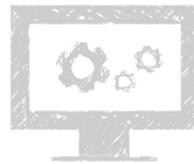
"Setting the Framework"	"Uncovering the History"	"Unveiling the Present"	"Looking at the Future"
Chapter 1 & 2	Chapter 3, 4, 5 & 6	Chapter 7 & 8	Chapter 9

Phase one of the presented study shapes and sets the framework of the overall research approach. An introductory chapter provides a background view of the presented research opportunity, and the desired objectives are stated.

The introductory chapter also sets the *inspiration* behind the project. Chapter two is also presented in phase one, where the complete research methodology to achieve the set objectives, is discussed. Both these chapters act as the starting blocks of the overall project.

Structure of the Project

"Ideas float all around us like balloons. It is when you are able to capture one and make it pop, that truly makes the outcome astounding."

~ Confucious (Chinese teacher & philosopher)

Some of the world's best products and services came from innovation and inspiration that struck ordinary people with a brilliant idea. Like Jay Sorensen who invented the cup sleeve after burning himself through a scalding hot paper cup of coffee while driving his daughter to school (Collony, 2013). Another example is the birth of Facebook which was initially created by Mark Zuckerberg for only Harvard students (Pierce, 2005). All of which, and many more, are ideas that sprung from a thought or a spark of innovation which was put into action. This project not only evaluates the feasibility of a theory that sprung from an idea, but also portrays the development of an idea in itself.

The layout of the project is thus presented in such a way which is significant to the development of an idea into a product. The basic flow of the project symbolises the process and formation of the start of an idea, straight through to the deployment of it. Each phase in the successful *creation of an idea* can be associated with a different phase in the project. The project will primarily be focused on four different phases to provide the most logical flow. The project layout can be illustrated by the figure 1 below:

Phase 1:	***Phase 2:***	***Phase 3:***	***Phase 4:***
"Setting the Framework"	"Uncovering the History"	"Unveiling the Present"	"Looking at the Future"
Chapter 1 & 2	Chapter 3, 4, 5 & 6	Chapter 7 & 8	Chapter 9
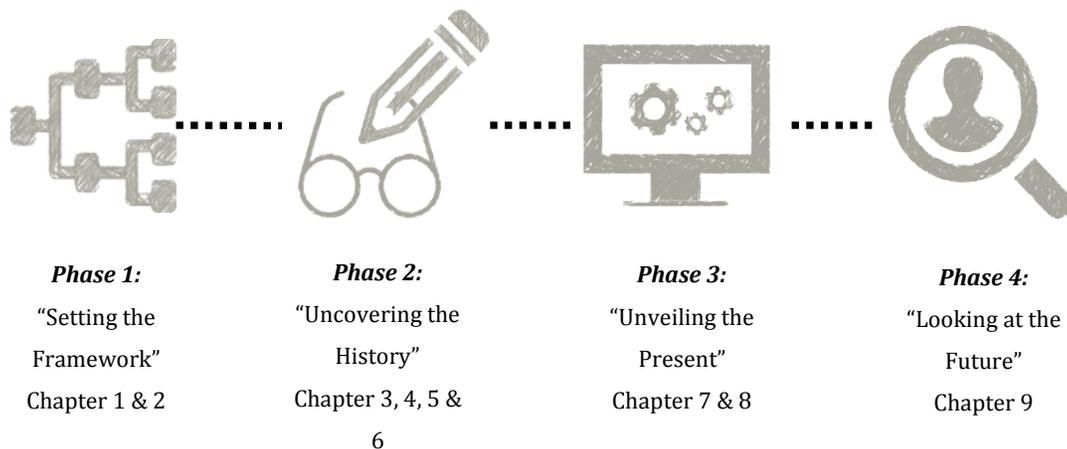
Figure 1: Presentation of the presented project structure

Each chapter adds significant value to every phase in the overall growth process. Following is a short description of each chapter with the associated phase in the overall process:

Phase 1: *"Setting the Framework"*

In the first phase of the presented project, the fundamental basics of the project are introduced. This is similar to the founding of any new idea. It starts with a new discovery and the possibility of the idea developing further into a success (Pierce, 2005). Making sense of the *discovery* and stating the basic fundaments and principles of the idea is what the first phase of the projects sets out to do. The overall project statement and what the project intends to deliver are discussed.

Chapter 1: Introduction ~ The start of an idea

The first chapter frames the overall idea. How the spark of innovation and inspiration came about and how the *new discovery* will improve the lives of people today (Wax, 2015). The idea is plotted and a background of the project statement and desired outcome is given. The introductory chapter also sets the inspiration behind the idea. It is the stepping stone or starting block of the overall project.

Chapter 2: Research Approach ~ Bringing organization to the thoughts

The next step in the discovering of an idea is to organize all of the different thoughts around the idea into one main subject (Pierce, 2005). No detail and research on *why* the idea will work in the market is necessary at this stage (Wax, 2015). Chapter two in the first phase of the project can be identified as the step in the project where the *complete study approach* is discussed. In this chapter the methods, principles and processes which will be implemented on reaching the final conclusion will be identified and discussed. The study approach sets the structure and framework for the project.

The scope of the project is also presented in chapter two of the first phase. The outlook of the project is specifically identified and narrowed down to the most relevant research area that is applicable today.

Phase 2: "*Uncovering the History*"

The second phase in the presented project is similar to the next step in the exploitation of a new idea to the market. At this stage, the *founder* of the idea starts to investigate the current market and its customers in order to determine whether the product will have any attraction (Pierce, 2005). In the second phase, '*Uncovering the History*', the project investigates various organizational life cycle models and theories. Furthermore, a detailed discussion is given on the development stage theory as presented by Marc van der Erve (2013). Phase two of the project concludes with the evaluation of the various life cycles with Van der Erve's (2013) theory discovery.

Chapter 3: Organizational Life Cycle Models ~ The start and end of it

In the third chapter *value* is added to the project. Before an idea can be exploited to the market, it is important to ensure that it will create traction in the industry (Wax, 2015). Research needs to be done on the customers' needs and whether an opportunity for this new venture is presented in the market (Phenomena, 2014). The *literature study* of the project can be associated with the value of an idea. The very existence of organizational life cycle models and theories are explored, together with the development and change of the models over the years. In this chapter, various organizational life cycle models and theories which will specifically be discussed further are identified.

Chapter 4: Investigating deeper into life cycle models ~ What do the experts say?

The fourth chapter in the presented project represents the next step in researching the market to determine whether the idea will be successful (Phenomena, 2014). It is also important to identify the different competitors in the market and to investigate what they offer to their customers in order to stay competitive (Wax, 2015). Further investigation on the specific identified organizational life cycle models and theories in the previous chapter, can be related to this step in the exploitation of a new idea.

Chapter 5: Marc van der Erve's Development stage Theory

Chapter 5 of the second phase examines Van der Erve's (2013) presented development stage theory. The origin of his theory, the specific stages it consists of and the corresponding applicable management style of each stage, is explored in detail in this stage.

Chapter 6: Evaluating 'history'

The second phase concludes with chapter six of the project when one determines by looking at the findings of the research shown in the market, whether further possibility of developing the idea and introducing it to the market, is *feasible* (Wax, 2015). Furthermore, this chapter in the project represents the same similarity: by exploring historic developed organizational life cycle models and investigating the newly developed stage theory of Van der Erve (2013), are there any similarities or discrepancies and can Van der Erve's (2013) theory be related to any of the previous models.

Phase 3: *"Unveiling the present"*

The next step in the exploitation of a new venture, and the third phase of the presented project, is associated with determining whether there exist a need for the idea in the *future* and if it holds a strong *competitiveness* against the other competitors in the market (Pierce, 2005). More specifically, by *'unveiling the present'* specific organizations which operates in the same industry, are investigated and analysed to determine whether they meet the formulized hypothesis set out at the beginning of phase three.

Chapter 7: Formulating the possible 'future'

Chapter 7 in the project sets out to formulize a hypothesis by which various organizations from the same industry can be evaluated and analysed accordingly. This chapter is similar in setting up a market survey or research campaign to determine whether there is any indication of desirability for the new idea in the future (Wax, 2015). The hypothesis is set out specifically to measure the identified organizations against various variables in order to determine whether Van der Erve's (2013) developed stage theory is acceptable on organizations today.

Chapter 8: The technology Industry

The next chapter presents the actually conducting of the market survey to determine if the new idea should be exploited in the market and whether it will be sustainable in the future (Pierce, 2005). This step in the *idea-process* can be associated with the actual analysing and evaluation of the identified organizations against the specific chosen variables. The main aim of this chapter is to determine whether the formulized hypothesis can be accepted or not accepted.

Phase 4: *"Looking at the future"*

The final phase of the exploitation of a new idea is to determine if the idea should be taken on and be further developed into a product or if the research shows that there is no attraction to the new venture in the market (Pierce, 2005). The project concludes with a similar view, whereas it is determined if the formulized hypothesis which were set out in the previous phase, should be accepted or not accepted.

Chapter 9: Conclusion ~ Is this the new future of Life Cycle Models?

In the concluding chapter of the final phase, it is determined if Van der Erve's (2013) developed stage theory is feasible and if the theory can be used to analyse organizations' development stage and management style to ensure organizational success.

1.   *Introduction: "The start of an Idea"*

"Setting the

Framework"
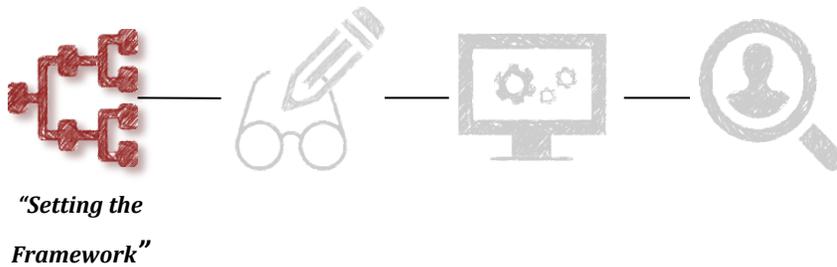
> *'Here's to the crazy ones, the misfits, the rebels, the troublemakers, the round pegs in the square holes…the ones who see things differently – they're not fond of rules…You can quote them, disagree with them, glorify or vilify them, but the only thing you can't do is ignore them because they change things…they push the human race forward, and while some may see them as the crazy ones, we see genius, because the ones who are crazy enough to think that they can change the world, are the ones who actually do…'*
>
> *~ Steve Jobs (1955 – 2011)*

More than often, we are intrigued by today's widely praised corporate success stories which when not adequately managed, become tomorrow's highly criticized nightmares and failures. Organizations are faced with different challenges every day: market-related, new competitors, financial crisis or management (Ionescu and Negrusa, 2007).

Like founder and previous CEO of Microsoft, Bill Gates, whose past ventures did not go according to plan. Before Microsoft, Bill Gates started Traf-0-Data, which specialized in creating products that processed raw information gathered from daily traffic encounters, and made reports for traffic engineers (Bort, 2004). However, an important demo of the organization did not work which caused Gates and his business partners to dissolve the organization entirely (Gates, 1999). Fortunately, the failure did not stop Gates and a few years later, he established Microsoft, which today is undoubtedly one of the biggest computer software organizations in the world (Bort, 2004).

A similar story is the one of Henry Ford, who was responsible for manufacturing the first reliable, simple, and cost-friendly version of the automobile. However, it took two major failures before Henry Ford succeeded (Bort, 2004). Ford was the founder of the Detroit Automobile Company, of which he was the man behind the design and production of the

automobiles (Crowther, 2008). A year and a half later, Ford's first organization dissolved due to major problems with the car design. It was only after the third attempt, together with the financial support he needed, that Ford finally perfected his car design and the Ford Motor Company was established (Crowther, 2008).

Though the product industry has shown remarkable success stories over the past few years, many organizations in the service industry, has shown a similar pattern. The ever-lasting battle between Google and Yahoo to attain the biggest competitor in the web-based search engine market, brought interesting developments in both organizations, where Yahoo started as an early success story is currently facing a fast decline and disintegration (Olanhoff, 2013). While another start-up organization, Uber, who indicated an organization value of $50 billion in 2014, makes it the fastest start-up organization to reach this value peak (Amine Belarbi, 2015).

But what made the second, or even third, organizational venture of these innovators, and so many before and after them, successful or unsuccessful? Was it the correct financial funds, the right team to execute on the venture or perhaps the right time-to-market?

Organizational success is often believed to be an appropriate measurement of successful organizational performance. Whetten (1980) remarked that organizational growth is an implicit assumption, since it is generally assumed that "organizational growth is synonymous for effectiveness", that "bigger is better" and that there is a "positive correlation between size and age" (Fleck, 2009). While some definitions focus on effectiveness or profit, other definitions of success emphasize the time dimension. According to Miller and Friesen (1988), success is related to "the degree to which the firms are able to achieve their objectives subject to the constraints of long run viability" (Miller, 2007). Another notion which was highlighted by Chandler in 1977 is organizational self-perpetuation or rather the firm's ability to survive its members (Chaston, 2010).

Nonetheless, if the stated cannot be assumed accurate for some organizations, how do organizations become successful and how do they maintain their successful performance throughout their organizational life cycle? Moreover, the question should be asked on how some organizations gain performance success, while others in the same market industry,

fail to achieve the same excellence. Is it possible to predict an organizations performance success if the correct factors are considered, and if so, will prevent many organization failures in the future?

The intriguing issue concerning the sustainability of an organization's success and performance over the long run has inspired much needed research into why some positions in the market are persistently maintained by the same organizations and why early success stories so frequently turn into stories of decline or failure.

1.1 The Purpose of the study

The introductory examples of successes and failures of many organizations and the fact that 54% of all start-up organizations fail within the first year, gives way to the need of a understanding of the development of organizations today (Bort, 2004). A newly presented Development Stage Theory by Marc van der Erve (2013), an organizational philosopher and expert, developed a stage theory which focuses on the growth of *natural organizations* (Van der Erve, 2013). Although his developed theory is based upon nature, thermodynamics and behavioural sciences, he makes the statement that it can be applied to business organizations as well. He is of the impression that his developed stage theory can predict the future success and effectiveness of organizations.

The purpose of the present study is set out to investigate these claims and to determine whether Van der Erve's (2013) theory can be accepted in the industry today. In order to investigate the feasibility of Van der Erve's (2013) presented study two main objectives will be focused on:

- ***Firstly:*** The investigation of Van der Erve's (2013) development stage theory and the comparison thereof with already existing life cycle models.
- ***Secondly:*** Determining whether an organization is successful if its organizational life stage is aligned with the specific leadership role, as presented by Van der Erve (2013).

As part of the first objective, proposed life cycle models and the presented developing stage theory of Van der Erve (2013), are reviewed against a set of criteria to determine if common comparatives can be identified among them.

Moreover, in order to answer the second objective and ultimately determine whether the approach is feasible in the industry, the particular study attempts to formulize a proposed hypothesis on which various organizations will be tested on by evaluating them against certain variables. The hypothesis specifically examines the relationship between organizational life cycle stages, leadership roles, competitive strategy in the market and organizational revenue performance.

The motivation for this study derives from the empirical studies done by Van der Erve (2013) that the successful performance, as measured by its revenue growth, of any organization can be predicted if the right leadership style is in line with the respective organizational growth stage of the organization. The focus of this research is to offer a variety of ideas, measures, and empirical facts on how organizations grow and develop throughout their organizational life cycle, and whether the presented development stage theory can predict the future success of any organization.

2.   *Research Approach: "Bringing organization to the thoughts"*

"Setting the Framework"
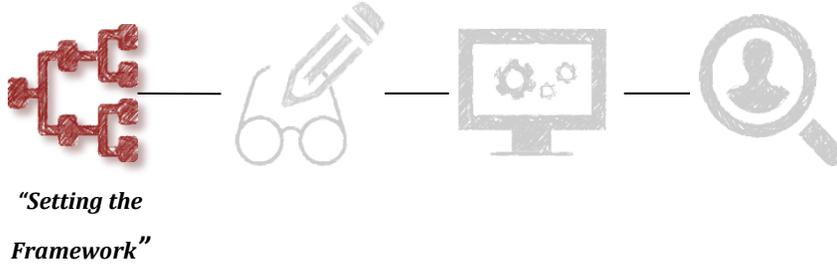
The next step in the discovering of an idea is to bring organization to all of the different thoughts in order to develop it into one main subject (Pierce, 2005). No detail and research on why the idea will work is needed (Wax, 2015). Chapter one introduced the main idea and problem statement of the presented project, while **chapter two** *discusses the complete study approach which will be undertaken throughout the project. In this chapter the methods, principles and processes which will be implemented on reaching the final conclusion will be identified and discussed. This chapter sets the structure and framework for the project.*

The scope of the project is also presented in the chapter. The outlook of the project is specifically identified and narrowed down to the most relevant research area that is applicable in the specific industry today.

2.1   Research methodology

In the development stage theory presented by Van der Erve (2013), it is stated that if an organization will have successful performance if the organization's life cycle stage is aligned with the associated leadership role required during that stage. The proposed project is set out to determine whether the develop stage theory stated by Van der Erve (2013) is applicable and relevant to organizations today. During the project a set of objectives will be arrived at to finally answer the main project statement. These objectives are:

- *Firstly:* The investigation of Van der Erve's (2013) development stage theory and the comparison thereof with already existing life cycle models.
- *Secondly:* Determining whether an organization is successful if its organizational life stage is aligned with the specific leadership role, as presented by Van der Erve (2013).

In order to determine the objectives set out in the problem statement, a deductive research approach will be taken to find solutions for the problem statement on hand, since it should be determined whether the presented theory is effective in organizations today.

According to Wilson (2010) a deductive research approach "is concerned with developing a hypothesis based on already existing theory, and then designing a research strategy to test the hypothesis" (Nazzari and Foroughi, 2012). The main outcome from a deductive research approach is therefor to deduct conclusions from premises or propositions (Wang, 2005). The main objective of a deductive research approach is to determine whether there are any links or connections in a particular theory, which further indicates that it might be relevant for other cases as well. In undertaking a deductive research approach, a set of hypotheses are formulated that needs to be tested and by implementing a relevant methodology; the study will prove whether the formulated hypothesis is right or wrong.
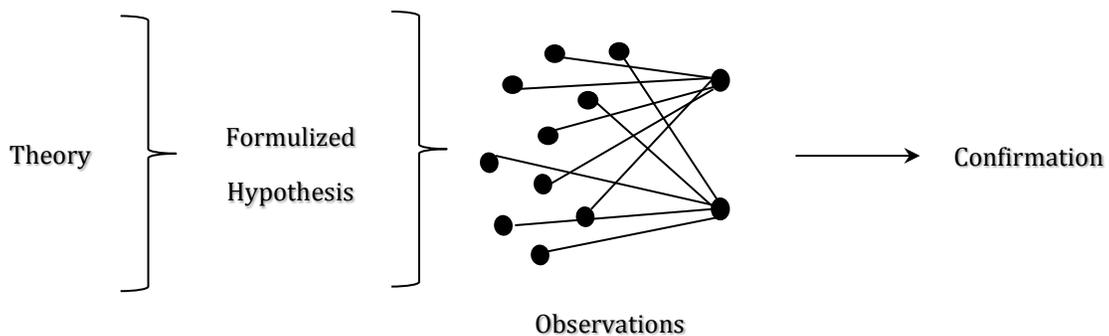
Figure 2: The process of a deductive research study when a deductive research approach is taken by a researcher

Based on the illustrated figure 2 above, a deductive study approach explores a known theory and tests whether the specific theory is valid under certain given circumstances (Nazzari and Foroughi, 2012).

2.1.1 First objective

The first objective will primarily be accomplished by using historic and current literature to determine whether there are any comparisons and discrepancies between Van der Erve's (2013) approach and previous organizational life cycle theories. Historic and current qualitative data of organizational life cycle models and theories will be studied, analysed and any correlations or differences will be highlighted. The illustrated process in figure 3 below describes the procedure that will be taken in order to accomplish the first objective:

1. Identifying life cycle models for investigation and applicable to presented study	2. Identifying criteria on which chosen life cycle models, and developing stage theory will be assessed on	3. Evaluate chosen life cycle models and Van der Erve's theory with identified criteria.	4. Compare chosen life cycle models with Van der Erve's theory and determine any similarities and discrepancies.

Figure 3: Process which will be followed in order to successfully achieve objective one in the presented study.

During the first step, as shown in figure 3 above, six life cycle models of various organizational life cycle researchers will be identified and thoroughly investigated, compared and analysed against a set of criteria. The six life cycle models were specifically chosen for their distinctive origin and background, as well as the role each model played in the specific market segment of the organizations it influenced. All of the chosen life cycle models also shares similar dimensions with one another. Some of these dimensions include the main rational behind the life cycle model as well as which business organizations influenced the organizational researcher to develop the life cycle model.

The criteria by which the life cycles, including Van der Erve's (2013) developing stage theory, were evaluated on during the second step in the process, were specifically chosen to emphasize and highlight the origin, purpose and reasoning behind the researcher's approach. These criteria are specifically chosen in such a manner to illustrate the core principles on which the life cycle models are based upon. By evaluating and comparing the main fundaments structuring of each life cycle model with one another, clear comparisons and similarities can be stated.

2.1.2 Second objective

In order to further accomplish the second objective, a hypothesis will be formulated and a chosen sample of organizations taken from the technology industry will be studied and analysed to determine whether the hypothesis can be accepted or not. The formulized hypothesis is set out to determine if the growth stage of the organization is in correspondence with the associated leadership role, both presented by Van der Erve (2013) in his developing stage theory. If both factors are aligned, the organization will show a successful performance.

The illustrated process below in figure 4 describes the procedure that will be taken in order to accomplish the second objective:
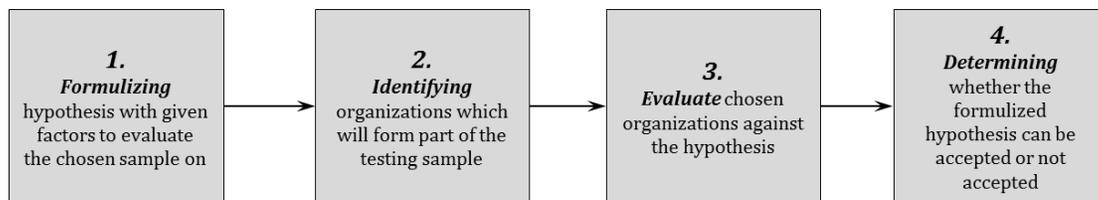
Figure 4: Process which will be followed in order to successfully achieve objective two in the presented study.

To fully undertake the two objectives which are set out to ultimately accomplish our presented problem, a set of research questions are set out with every objective. The figure 5 on the next page illustrates the deductive research approach taken throughout the presented study under investigation, together with the applicable objectives and research questions. Each objective and research question is also indicated in the specific phase of the project and chapter in which it will be discussed.

Phase 1			
Introduction to the presented study: Validating the feasibility of the newly presented Development Stage Theory.	**Project layout** of the presented study	**Research methodology & the scope** of the presented study	**Chapter 1, 2 & 3**

Phase 2

Presented Problem	Objectives	Research Questions	
Validating a new Developing Stage Theory as presented by Marc van der Erve (2013).	1. Identifying any similarities or discrepancies between already existing organizational life cycle models and theories in comparison with the newly presented Development Stage Theory by Marc van der Erve.	1. Where did organizational life cycles originate from?	**Chapter 4 & 5**
		2. How did organizational life cycle models and theories change over the years?	
		3. Which organizational life cycle models will be applicable and valuable to compare against Van der Erve's theory?	
		4. Why are these particular organizational life cycle models and theories chosen for the specific study?	
		5. What are the criteria by which the chosen life cycle models and theories, as well as van der Erve's theory, can be evaluated against?	
		6. Are there any research done on organizational life cycle models with no stages?	
		7. Where did Marc van der Erve's presented Development Stage Theory originate from?	
		8. What are the different stages presented in Marc van der Erve's Development Stage Theory?	**Chapter 6**
		9. What are the different leadership roles which Van der Erve associates with every presented Development Stage	
		10. How does Van der Erve's Development Stage Theory compare to the already existing organizational life cycle models and theories?	**Chapter 7**
		11. Are there any risks involved in depending on only one particular organizational life cycle model or theory?	
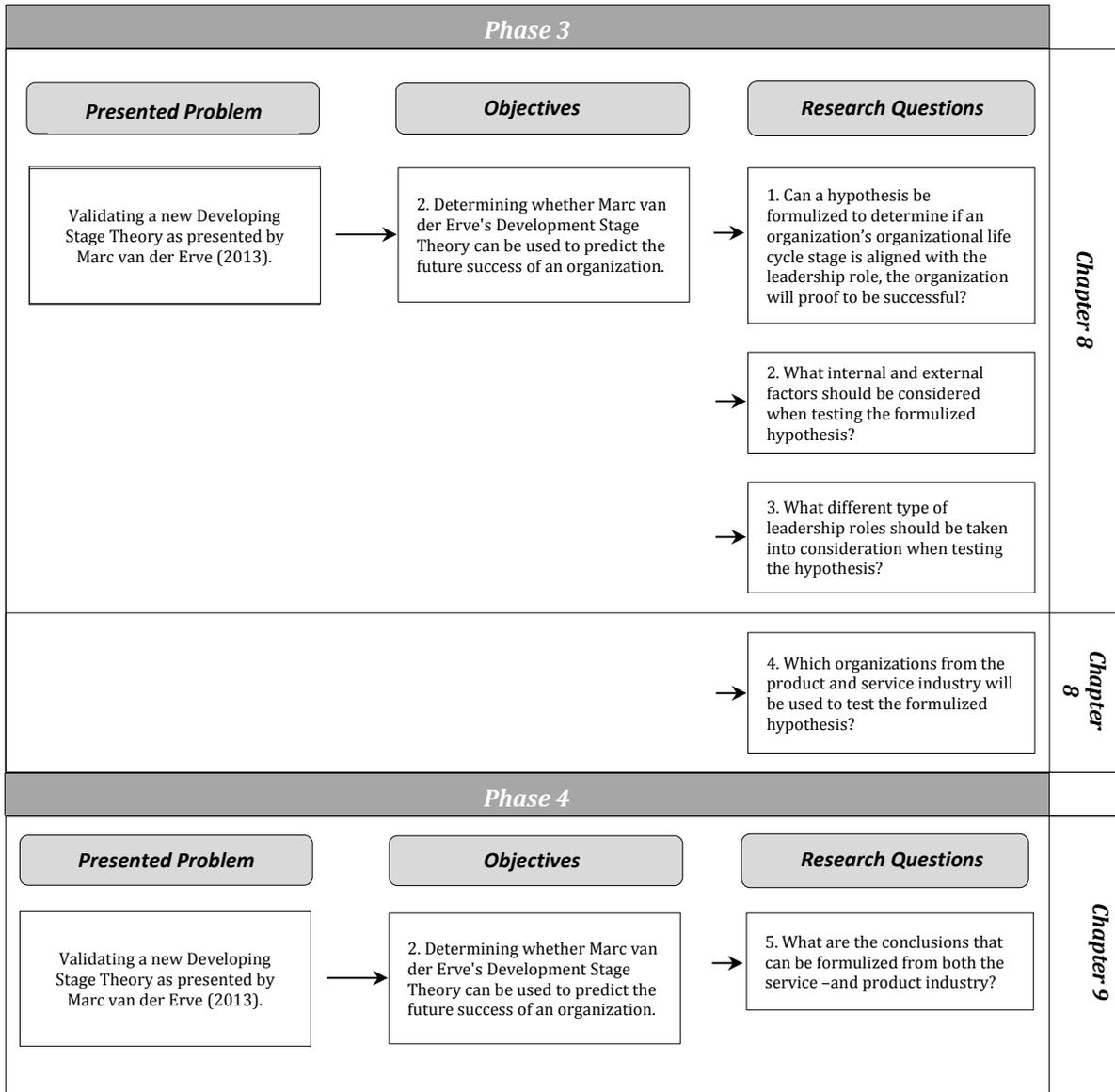
Figure 5: Complete project structure, including the main project statement, objectives and research questions

2.2 Scope of the presented study

The developing stage theory of Van der Erve (2013) will be described and studied using literature, while the stated formulated hypothesis will be tested by making use of historical data of organizations in both the product and service technology industry.

Because of the limiting time factor, only two organizations of both the product and service technology industry are investigated to determine whether the formulated hypothesis should be accepted or not. To accommodate time constraints, the two most relevant

competing organizations are chosen for further investigation; however, one of the chosen organizations might be more successful if compared to a non-chosen organization.

The complexity of different markets in which the chosen organizations are operational also ensured a more narrow scope. Only three variables are taken into consideration in testing the formulated hypothesis. The three variables which are investigated, includes the performance of the organization as represented in financial data, historic and current organizational life cycle stages of the organization, and the historic and current leadership role.

It should be taken into consideration that a much broader study can be investigated when the organizations discussed are not only restricted to three variables. Other variables that are secluded in the study, but can be investigated in further studies, includes external market and environmental factors, other funding from investors, and client satisfaction.

2

PHASE TWO

"Uncovering the history"

| "Setting the Framework" Chapter 1 & 2 | ***"Uncovering the History"*** ***Chapter 3, 4, 5 & 6*** | "Unveiling the Present" Chapter 7 & 8 | "Looking at the Future" Chapter 9 |
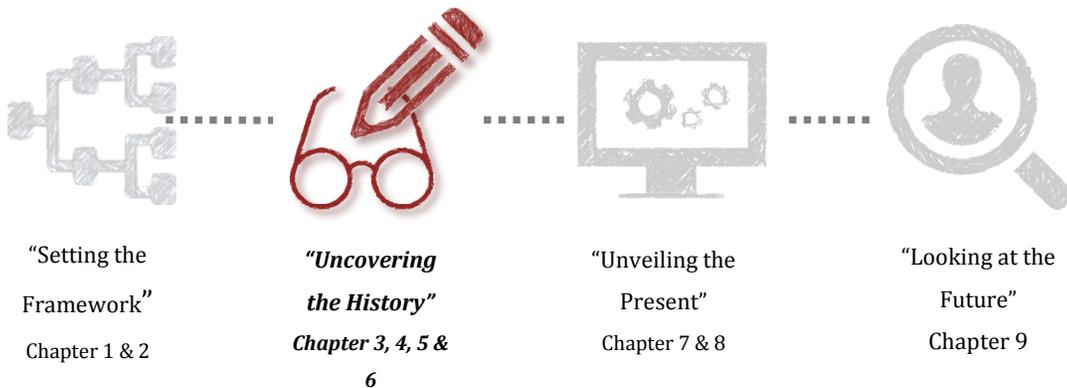
In the **second phase**, value is added to the project. Before an idea can be exploited to the market, it is important to ensure that it will create traction in the industry – every innovator or entrepreneur should explore the previous findings or similar products in the industry. Research needs to be done on the customers' needs and whether an opportunity for this new venture can be presented in the market. The 'history' of the product and previous competitors should be uncovered.

The literature study of the project can be associated with the *value* of an idea. The very existence of organizational life cycle models and theories are explored, together with the development and change of the organizational models over the years. In these chapters,

various organizational life cycle models and theories are identified and compared against Van der Erve's (2013) presented Development Stage Theory. The second phase concluded with a summary of the comparisons and differences between the organizational life cycle models under investigation.

3.   *Organizational Life Cycle Model: "The start and end of it"*

*"Uncovering
the History"*
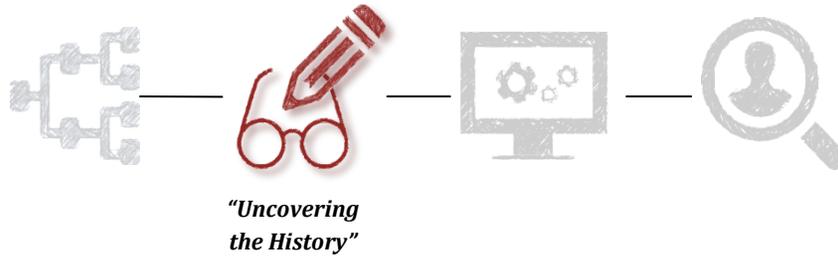
In the next step of the exploiting of an idea to the market, is to add value to the idea. It is important to ensure that it will create traction in the industry (Wax, 2015). Research needs to be done on the customers' needs and whether an opportunity for this new venture is presented in the market (Phenomena, 2014).

*The literature study and research done on various organizational life cycle models, aims to do the same. **Chapter 3** investigates and elaborates in detail the history of organizational life cycles, and how many organizational researchers' opinions changed concerning the growth path of organizations. The proposed outcome of the preceding chapter is to discover where organizational life cycle models and theories originated from and how the various models and theories revolutionized over the years.*

Furthermore, the different organizational life cycle models which will be used to evaluate and compare against Marc van der Erve's (2013) development stage theory, are also identified; together with the criteria on which every organizational life cycle model will be assessed against.

3.1 *The Organizational life cycle models*

Organizational growth and development have been studied and researched by organizational theorists for many years. Different terms to define the stages of organizational growth have been used by many researchers, but the basic events and activities the organization goes through with every stage; remain more or less the same (Quinn and Cameron, 1983). Although traditional organizational life cycle model is primarily based on the biological metaphor of any living organism, with a pattern of birth,

growth, maturity, decline and death as illustrated in figure 6 below; it has been reformed by organizational researchers throughout the years (Johannsen, 2015). These stages are:

1. Sequential in nature
2. Occur as a hierarchical progression that is not easily reversed
3. Involves a broad range of organizational activities and structures

The different organizational life cycles which were developed by researchers over the years, delivers the same message: they suggest that organizations start, and while they grow faces various challenges and obstacles, and finally mature and decline (Maddison, 1991).
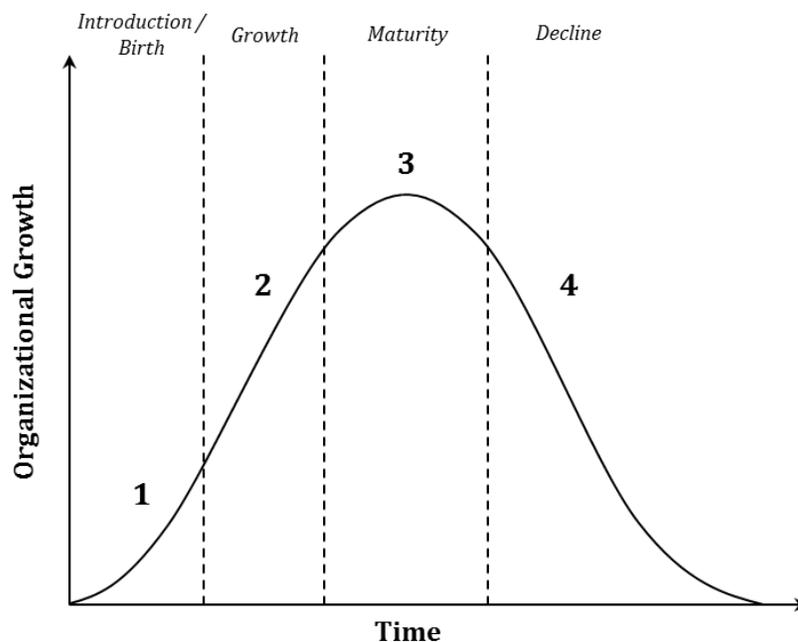
Figure 6: The most known traditional life cycle model to illustrate the growth of any organization.

Hanks (1993), an organizational researcher and theorist, defines an organizational life cycle as 'a life cycle model that captures and describes these activities and patterns of the different stages an organization goes through during its existence' (Hanks, 1993). Depending on how an organization handles these activities and patterns, determines ultimately whether an organization will be successful to move onto the next stage in its organizational growth cycle. Along with many factors which might determine an organization's success, there are also precursors which will ensure that an organization will move from the one stage to another (McCraw, 2003).

The different strategies and goals of every organization, and the emphasis the firm puts on a certain stage during a specific period of time, will also determine whether an organization will grow into the next stage or fail in doing so. Hanks (1993) and Greiner (1972) emphasise the value for managers to understand the organizational life cycle and also to take note of the changes that take place as the organization develop and grows through the various stages. Hanks (1993) noted the following for all managers to stress the value of an "accurate life cycle model":

> *'It could provide a road map, identifying critical organizational transitions, as well as pitfalls the organization should seek to avoid as it grows in size and complexity. An accurate life cycle model could provide a timetable for adding levels of management, formalizing organizational procedures and systems, and revising organization priorities. It could help management know when to "let go" of cherished past strategies or practices that will only hinder future growth.' (Hanks, 1993)*

Although many researchers and theorists believe that the key is to understand how these activities, structures and patterns change over time and to manage them efficiently will ultimately determine the successful growth of the life cycle of the organization (Douglas, 2010). This ultimately suggests a linear and predictable growth path which the organization will follow. However, both Greiner (1972) and Miller (2007) are some of the researchers who are of the belief that the growth of an organization is fairly opportunistic and unpredictable (Greiner, 1972). Growth-orientated organizations are a significant contributor in a nation's economic gain, but the concept of growth differs from organization and their founders (Gabisch and Lorenz, 1955). Organizational growth can be defined in terms of quantitative factors, such as revenue generation, value addition to its customers and employees, and also expansion of the organization (Mohapatra, 2012). It can also be measured in terms of qualitative features like market position, the quality of the product and satisfaction of the customers (Johannsen, 2015). Growth is a vital indicator for an organization's success or decline.

The understanding of whether an organization follows a predictable or opportunistic growth path depends solemnly on the strategies of the organization, how much it has grown and what the organization offers to the market (Mohapatra, 2012). It has been emphasised that the growth of an organization is a function of the decisions and actions management

makes, such as how to grow internally or externally and whether to further develop in the current market space or expand to an international market (Sabol, Sander and Fuckan, 2013). Many researchers have identified various theories which are aimed to identify the main factors underlying the growth of an organization. One specific theory, the *Evolution and Revolution* theory of Greiner (1972) addresses the influence of an organization's size and age on growth (Greiner, 1972). While others theories developed by researchers, deals with the influence of other factors, such as the organization's strategy, goals and the characteristics and behavioural patterns of the organization's management and employees. However, other researchers, like Mateev and Anastasov (2010) found that an organization's growth is related to both size and the productivity of the organization. Furthermore, they concluded that the total assets which is one of the measures of the organization's size has a direct impact on the sales revenue, but the number of employees, investment in R & D, and other intangible assets have not much influence on the organization's growth prospects (Mateev and Anastasov, 2010). What's more interesting, are the findings of Lorunka (2011), where the gender of the founder, the amount of capital required to start the organization, and the growth strategy of the organization are very important factors in predicting the growth of an organization (Lorunka, 2011).

Chaston and Mangles (1997) is of the opinion that if an organization adopts multi-stage transformation initiatives, the probability of an organization reaching their expected growth, is much higher (Chaston and Mangles, 1997). However, studies of Walton (2000) have also shown that the incorrect implementation of these initiatives, can also lead to the failure or decline of an organization (Chaston, 2010). Many start-up organizations are dependent on the founder's insight, managerial skills, training, education and overall background of the founders (Johannsen, 2012). It is often the lack of these characteristics which causes an organization to decline.

Unfortunately, empirical research has not been done to validate various life cycle models to ultimately determine the influential factors of the growth pattern in organizations. Stinchcombe, (1983), Hanks (1988) and Greiner (1972), and others argue that the management involved at the early stages of development of an organization has profound influence on what they subsequently evolve into, yet little is known about the managerial characteristics that should be in place in order for an organization to effectively progress

from one stage to the other. Given the fact that 54% of all start-up organizations fail within one year and that the average age of all firms is only 7 years, it would seem that an increased understanding of the factors involved in the development of an organizations might be significant for both theoretical and practical reasons (Chaston, 2010).

For these reasons Van der Erve (2013), organizational researcher, presented a Development Stage Theory in an attempt to identify the leadership roles that are critical in a specific development stage during the growth pattern of an organization. If an organization manages to align its leadership role with the specific development stage it currently operates in, it will illustrate optimal effectiveness.

3.2 Life cycle models & criteria under investigation

The aim of the preceding sub-chapters are to identify the most known organizational life cycle models which organizations progress through, and which will ultimately form part of the investigation for this study. Furthermore, in order to thoroughly investigate the chosen life cycle models, various characteristics by which the life cycles can be measured and evaluated against, will be identified. These characteristics are acknowledged and the reason for them being chosen is also stated. The comparison between the chosen life cycle models against one another with the identified criteria forms a basis for a comparative framework against Van der Erve's (2013) development stage theory.

3.2.1 Life cycle models

Six different organizational life cycle models have been chosen, each of which highlights different factors to explain the growth pattern of an organization. The choice of the specific life cycle models under investigation are based on the origin and the similarity in the purpose of the model it represents to Van der Erve's (2013) Development Stage Theory. The six life cycle models were also specifically chosen for their distinctive origin and background, as well as the role each model played in the specific market segment of the organizations it influenced. All of the chosen life cycle models also shares similar dimensions with one another. Some of these dimensions include the main rational behind the life cycle model as well as which business organizations influenced the organizational researcher to develop the life cycle model.

The chosen, most known, life cycle models for this specific study are the following:

- Boulding (1953)
- Lippitt and Schmidt (2012)
- Greiner (1973)
- Churchill and Lewis (1983)
- Hanks (1993)
- Miller and Friesen (1988)

Figure 7 below illustrates a timeline of the above identified life cycle models which will be investigated, researched and compared against the presented developing stage theory of Van der Erve (2013).
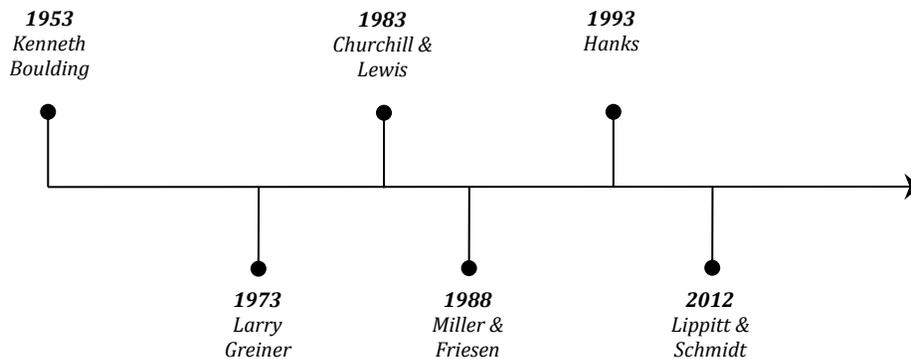
Figure 7: A timeline illustrating the chosen life cycle models which will be investigated in the presented study.

These life cycle models are mainly chosen because of their distinguished origin and background, as well as the role they played in the specific market segment of the organizations it influenced. All of these organizational researchers had different backgrounds in mind when they developed their life cycle model.

Kenneth Boulding (1953) was the very first researcher which suggested the concept of organizational life cycles by using the same growing patterns of any other organisms, namely: birth, youth, maturity and decline or death (Lorunka, 2011). There was no specific discipline on which Boulding (1953) focused when developing his life cycle, rather he emphasised the need of management and leadership within the organization to ensure sustainable growth (Ionescu and Negrusa, 2007).

He was also of the impression that during the earlier stages the organizations' focus is much more on gaining profit, than actually focusing on growth. The organization's focus and strategies only changes later on during the process.

Lippitt and Schmidt (2012) expanded Boulding (1953) study, but only focused on three main stages which they believed the organization progress through (Maddison, 1991). While most of the organizational researchers' life cycles focus mainly on organizations over a wide range of industries, Lippitt and Schmidt's (2012) developed their model based on organizations in the private sector (Chaston and Mangles, 1997). The influence of management and leadership in the organization was also one of the key driving factors of growth in Boulding's (1953) model, but in Lippitt and Schmidt (2012) they are of the impression that the key driving growth force in organizations are more focused on the issues, threats and opportunities the organization faces at a specific time period during its growth path (Nazzart and Foroughi, 2012).

Larry Greiner (1972) emphasised Lippit and Schmidt's (2012) view by also developing his own organizational life cycle model, the *Evolution and Revolution* model. His theoretical model however, is collaboration of both Boulding (1953) and Lippitt and Schmidt's (2012) model, since he stated that an organization experiences a form of management crisis at the end of every stage and the organization's management should ensure that the needed structures and leadership are in place in order for the organization to progress to the next revolutionary stage. Thus, he believes the driving force which enables the growth in organizations, are a combination between management and the hurdles the organization needs to overcome to progress to the next stage (McCraw, 2003). Greiner's (1972) model also consists out of five revolutionary stages. Churchill and Lewis (1983) then went further and expanded on Greiner's (1972) development model by focusing mainly on small entrepreneurial organization situations. By doing so, they developed a five stage development model.

While Hanks's (1993) life cycle model is one of the first life cycles which is primarily based on empirical data (Festre, 2002). By using a taxonomic approach to identify and specify stages in an organization life cycle model, he derived these specific stages from the use of multivariate analysis of empirical data to reveal the common patterns and correlation

between the different data points (Hanks, 1993). The only other organizational researcher which also used a taxonomic method to develop an organizational life cycle model was Smith (1985). However, his study only included a very small sample size and it resulted in various other weaknesses (Maddison, 1991). Furthermore, while the model predominantly only focuses upon stages of growth and development, recent studies and research showed that the model is not consistent with alternative gestalts of growth perspective.

Throughout history, several life cycle models have been presented by many organizational researchers. Some only consist of three stages, while others focus on four or five stages. Similar to Greiner's (1972) life cycle model, Miller and Friesen (1988) also developed an organizational life cycle with five significant stages an organization will experience during its growth path (Walton, 2000). However, the five-stage organizational model presented by Miller and Friesen (1988) differ from the one from Greiner (1972) in a number of ways. Firstly, Miller and Friesen's (1988) model is primarily based on historical organizational data and their performance. Also, the model is designed specifically for either small or larger corporate entities, but rather it is relevant for all organizations (Quinn and Cameron, 1983).

Another researcher in the same field which also made a significant contribution to organizational life cycles is Adizes (1979). However, his life cycle model will not be discussed in detail, since it indicates similar findings of other organizational researchers we already discussed. Adizes (1979) argues that the attitude and managerial styles in the organization, has a great influence on the life and effectiveness of an organization (Lorunka, 2011). He pointed out that during the first stage of an organization's development, reinforcement skills, self-commitment, risk-taking capacity, vision and administrative mastery are of crucial importance in an organization's growth (Adizes, 1979). The management in an organization needs to be result-orientated and should show proper planning and coordination skills when an organization reaches its main stage in the development cycle (Walton, 2000). During the maturity stage, the organization should be backed up by systems and procedures to achieve the final goal of the organization (Ionescu and Negrusa, 2007). Some of the characteristics of every life cycle stage will however be taken into consideration when the characteristics by which the life cycle models will be measured by, are discussed.

However, while several researchers have suggested and developed various theoretical frameworks for the study of the growth path of organizations, others are of the opinion that organizations do not progress through discrete stages throughout their growth path, but that there are other significant factors that plays a role in the development of an organization.

One particular researcher, Penrose (1959), is of the opinion that organization's consists out of a number of internal and external resources, which if applied and used correctly, can provide the organization to achieve a competitive advantage in the specific market space (Nazzart and Foroughi, 2012). Organizational activities and patterns are directed by productive opportunities, which in essence are dynamic interactions between the external and internal environmental factors (Jansen, 2004). These factors are then the main reason organizations develops through a certain growth path.

Bridge (2003) suggested that it is not necessary that an organization develops in discrete stages with clear boundaries between each stage. Bridge (2003) further emphasised that to 'separate the development process into different stages is rather like dividing the spectrum of visible light into colours' (Bridge, 2003).

Levie and Lichtenstein (2010) have also contributed to the studies of Bridge (2003) and Penrose (1959). He suggested that the life cycle development model consisting of a number stages do not provide sufficient evidence of the organization's growth and development. During their studies of organizational development, they found that there is no sustainable research and investigation which proves that the organizational growth path can be defined to the traditional organism growth path (Levie and Lichtenstein, 2010).

Levie and Lichtenstein (2010) suggested a new dynamic theory which is not based on the traditional organism growth path. They argued that organizations are not like organisms, rather, the main driving factor of an organization's growth, is the shifting of external and internal environmental factors (Gabisch and Lorenz, 1955). The very essence of dynamic stages is that an organization can survive and be sustainable by being flexible and adapting continuously to the changing environment (Festre, 2002).

All of the above mentioned researchers who believes that an organization do not develop through a concrete set of life cycle stages, but rather, that there are other variables and factors involved, will be discussed in the preceding chapter with the already mentioned life cycle models.

3.2.2 Chosen criteria for life cycle comparison

It is critical for management to study and understand how an organization manages its growth transition from one stage to another and also the pattern they follow (Greiner, 1972). The most known used framework for the studying of life cycle models in organizations, have been the life cycle analysis (Anderson, 2005). In most life cycle models, the organization's growth and development can be seen as organic, which can be assumed that the organizational growth happens over a period in a linear growth phase (Schumpeter, 1951). This linear growth phase can especially be seen by the life cycle models as mentioned in the previous section of this chapter.

However, many researchers differ from this view. They believe that some organizations show a more opportunistic and unpredictable growth path, since many organizations do not necessarily go through all of the suggested stages in a life cycle model, as seen with the studies and investigations done by Penrose (1959), Bridge (2003) and Levie and Lichtenstein (2010). These organizations grow and stagnate, and decline in any order – they do not follow the well-known development path stated in life cycle models (Knell and Robertson, 2004). Also, there are incidents where an organization can go through a number of these stages without reaching the declining stage, and there is also the possibility to reverse some of the stages.

As mentioned in the introduction of this chapter, the growth pattern of an organization is depended on a number of external and internal factors, including the leadership of an organization. It is thus important, as emphasized by Greiner (1972) and Miller (2007), for management to identify and understand the factors that influences the growth pattern of their organization. Each life cycle model holds specific unique characteristics that distinguish one model presented by a specific researcher, from other models.

These characteristics does not act as a measurement by which an organization can measure its performance throughout its life cycle, but rather it is criteria that will define each life cycle model and will in essence distinguish it from the rest of the life cycle theories. The identified characteristics are crucial, since by evaluating and analysing the life cycle models from the different researchers with the same criteria, will make it possible to make a comparative conclusion from all of the identified life cycle models, including the presented theory of Van der Erve (2013).

The characteristics chosen for the presented project were specifically chosen to emphasize and highlight the origin, purpose and reasoning behind the researcher's approach, in order to do detailed evaluations of each life cycle model against Van der Erve's (2013) development stage theory.

The chosen and identified characteristics by which the different life cycle models and theories will be distinguish by, are the following:

- **Purpose of the life cycle model/theory:** What the researcher wants to achieve or contribute to future studies and investigations by developing the presented life cycle model or theory.

- **Definition of organization:** Every organizational researcher sees an '*organization*' as a different entity, some are of the belief that an organization can be described by a group of behavioural patterns which causes an entity to move in a specific direction (Hanks, 1993), while others are of the impression that it can either be classified as a group of people working towards a profitable outcome or a non-profitable outcome (Lippitt and Schmidt, 2012). How the specific researcher defines an organization, should also be seen as a criterion.

- **Number of stages:** Determine the number of stages or phases the organization life cycle theory or model consists of.

- **Origin of life cycle:** Identifies the inspiration of the researcher to develop the life cycle model or expand on a previous historical life cycle theory. Inspiration might be from the growth of revenue, such as shown in Boulding's (1953) model or the management crisis an organization's faces at a certain point during its growth path, as seen in Greiner's (1972) model.

- ***Principle field:*** This criterion focuses on the main focus or field of study behind the life cycle model.
- ***Rationale behind the life cycle model/theory:*** Identify the main driving force behind the life cycle stages in the presented life cycle model or theory. The factors that enable the organization to progress from one point in the growth stage to another point.

Each of the life cycle models chosen will be evaluated specifically against the above mentioned criteria to conclude the differences and comparisons between the life cycle models. Furthermore, the research gaps of organizational life theory will be identified in the various life cycle models. These research gaps will act as an introduction of Van der Erve's (2013) development stage theory and how his theory can differentiate from the already developed life cycle models.

4. Life Cycle Models under investigation: "What do the experts say?"
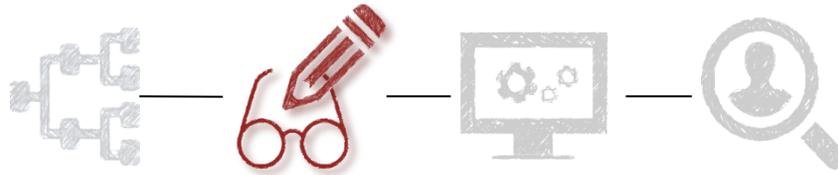
*"Uncovering
the History"*

*The **fourth chapter** in the project is symbolic of the next step in the exploitation of an idea: researching the competitors in the market (Phenomena, 2014). It is important to identify the different competitors in the market and to investigate what they offer to their customers in order to stay competitive (Wax, 2015).*

The preceding chapter sets out to do the same by reviewing the organizational life cycle models identified in Chapter 3. The concluding outcome of the chapter is to establish a basic understanding and overview of every organizational life cycle chosen in order to do a comparative analysis and evaluation on the various organizational life cycle models in Chapter 6.

4.1 Kenneth Boulding (1953): Most known organizational life cycle model

Kenneth Boulding (1953) first suggested the concept of organizational life cycles and introduced the most known organizational life cycle: birth, youth and maturity and decline (Wang, 2005). Since that time, discussions of this particular life cycle have taken place in various other disciplines, including education, management, marketing and sociology. One of the key components in Boulding's (1953) organization life cycle is the influence which management and leadership decisions have on the growth of any organization (Maddison, 1991).

Figure 8 on the next page illustrates the most known organization life cycle: birth, youth and/or maturity and finally decline (Boulding, 1953). It also shows that management emphasizes different goals during different stages of an organization's life cycle, depending on the main strategic goal of the organization and whether it's achieved or not (Mohapatra,

2013). During the first growth stages of the organization's history, the starter of the organization is mainly focused towards generating profits for the organization as shown in figure 8, rather than the growth and survival of the organization (Wang, 2005).

Once profits are assured, the organization can shift its attention to the growth and sustainability of the organization. Along with the critical shift from being a profit-orientated organization to a growth focused firm. At this stage, the role of management also changes (Mohapatra, 2013). The organization was started by an entrepreneur in the profit-orientated stage, while progressing to the other growth stages, the management changes to a more professional group (Miller, 2007).
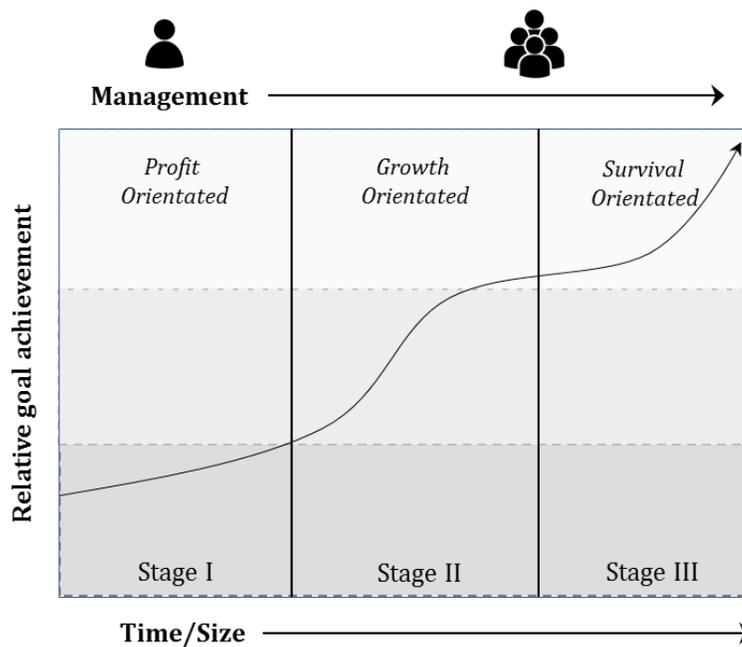
Figure 8: The first development of an organization life cycle by Kenneth Boulding in 1953.

The three main stages, on which Boulding's (1953) organization life cycle is primarily based and are illustrated in the above figure 8, are detailed as follows (Wang, 2005):

1. Stage I ~ Inception: A merger, a new venture or idea, may lead to the start of a new organization. The motive to start a new organization is primarily driven by the desire for profits (Saleh and Davidsen, 2001). A new venture can either be launched by a single person

or an ambitious entrepreneur who assembled a group of people to promote an idea, product or service.

2. Stage II ~ Growth: During this stage, the ultimate strategic goal of the organization shifts from the desire to generating profits, to achieving sustainable growth for the organization (Saleh and Davidsen, 2001). Firstly, the goals of the organization will become less specific. Also, the organization will place increasing emphasis on marketing, hoping that the increase in sales, will justify the expansion of the organization in different departments (Boulding, 1953). The management of the organization has also shifted to a much larger professional group.

3. Stage III ~ Maturity: Once an organization reaches the maturity stage, the growth of the organization starts to decline, causing the strategic goal of the organization to shift from sustainable growth to the desire to survive in an evolving and changing market (Mohapatra, 2013). In final stage organizations differ in many ways in comparison to the organizations in their first stage of an organization life cycle. During this stage organizations are much more complex, their structures are bureaucratic, they are financially orientated, and are greatly affected by market and social factors (Saleh and Davidsen, 2001). Since the organization are so complex and feels endangered, they emphasize the integration of member efforts.

During the final stage, some organizations often tries to reverse the final decline of the organization by investigating the organization's structure and operations, and try to restructure and renew it (Nazzari and Foroughi, 2012). In some cases organizations are able to invest capital in new ventures and ideas in the organization during the final stage, which allow the organization to move to the first stage of the organization life cycle again (Saleh and Davidsen, 2001). This also gives way to new structures and strategies for the organization.

The table 1 on the next page lists the characteristics of organizations in the three different stages as presented by Boulding (1953). As illustrated in the table, an organization moves from inception to maturity. The organization tends to shift from the lack of a formal structure, to a more centralized structure and as the organization becomes bigger it can be decentralized into formal departments or sections (Nazzari and Foroughi, 2012). During the three growth stages and as the organization matures, the leadership and management

within the organization will move from mainly generalists or entrepreneurs, to specialists and lastly to planners (Mohapatra, 2013).

Table 1: Summary of Kenneth Boulding's (1953) life cycle model

Summary of Kenneth Boulding's Life Cycle Model

	Stage I ~ Inception	*Stage II ~ Growth*	*Stage III ~ Maturity*
Type of Structure	No formal structure.	Centralized; formal structure.	Decentralized; formal structure.
Age and Size	Young and small	Older and large	Oldest and largest
Growth rate	Inconsistent but still improving.	Rapid	Slowly and declining
Communication and planning	Informal; face to face. Little planning is also involved.	Moderately formal. Planning is involved.	Very formal. Five year plans. Rules and regulations are also important.
Decision-making method	Individual judgement. Entrepreneurial decision-making.	Professional management. Analytic tools are used for decision making.	Professional management. Bargaining decision-making is implemented.
Top level Management	Generalists (Entrepreneur)	Specialists (larger groups of professionals)	Strategists and planners
Reward System	Personal and subjective.	Impersonal and systematic.	Impersonal, formal and totally objective.

Source: Adapted from Ken G. Smith, Terence R. Mitchell and Charles E. Summer, "Top Level Management Priorities in Different Stages of the Organizational Life Cycle", *Academy of Management Journal 28 (1985)*

Another life cycle model which was formed from the heart of Kenneth Boulding's (1953) model is that of Frank Tuzzolino and Barry Armandi (Ionescu and Negrusa, 2007). They developed an organizational life cycle model which had five life cycle stages, the *Slack-structure model*, where each state was associated with a certain managerial structure. Tuzzolino and Armandi (1982) introduced the slack-structure model with the concept of organizational slack, which can be defined as payments to organizational members in excess of what the organization absolutely must pay them in order to have them function

adequately to maintain the organizational growth (Ionescu and Negrusa, 2007). The five stages are presented as follows:

1) Creation → Entrepreneurial Structure

2) Growth → Organic Structure

3) Stabilization → Bureaucratic Structure

4) Decline → Recentralization Structure

5) Dissolution/Rebirth → Absence of management Structure
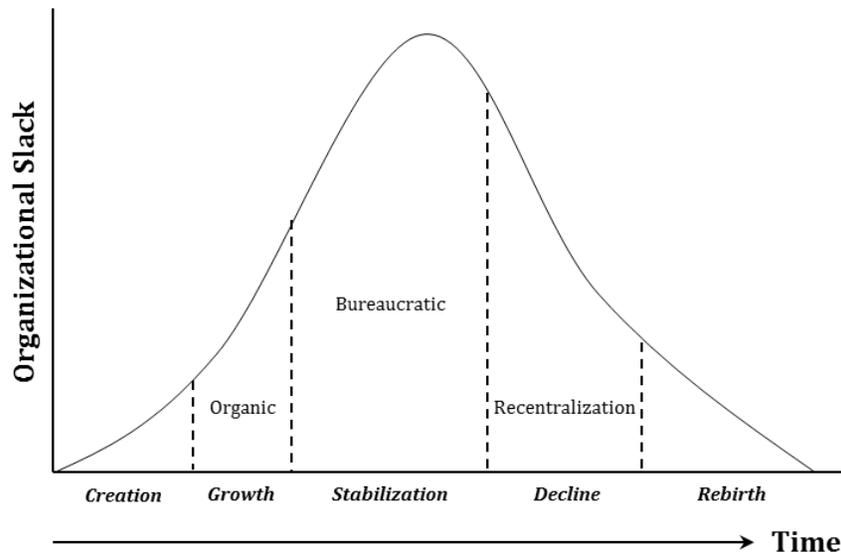
Figure 9: Frank Tuzzolino and Barry Armandi's (1982) Slack-structure model.

Figure 9 above illustrates the slack-structure life cycle model consisting out of five development stages of Tuzzolino and Armandi (1982). The growth of the organization is illustrated by a bell-shaped curve. This illustrates the starting and dissolving stage of the organizations with hardly any slack, while the growing and declining organizations experience some slack and the stable bureaucratic organization has considerable slack in comparison with the other stages of an organization (Diebold and Rudebusch, 1996). Once an organization moves into the dissolution stage, it can be reborn and recreated with an entrepreneurial structure if a new idea or venture is started by the organization (Diebold and Rudebusch, 1996).

4.2 Lippitt and Schmidt's (2012): Critical managerial concerns

Lippitt and Schmidt (2012) created one of the first organization life cycle models, with a focus on the private sector (Gabisch and Lorenz, 1955). This model focuses on three main

stages of development for an organization in the private sector and how the management concerns changes as the organization progresses from one growth stage to the other (Johannsen, 2015). The three main focus stages, includes:

- *Birth:* The very beginning of the organization and how it becomes viable in the market place and creates its own operating system.
- *Youth:* This stage resembles the start of the organization and is emphasized by struggling to maintain stability for future growth. One of the major concerns during this stage is the organization's reputation (Mohapatra, 2013).
- *Maturity***:** The final stage of the organization, where the main focus lies in working towards a domain expansion, while at the same time emphasizing the uniqueness and adaptability of the organization.

Lippitt and Schmidt (2012) are of opinion that an organization's growth stage in its life cycle is not determined by its size, market share, age or by management, but rather by the key issues the organization currently faces and how it confronts them (Johannsen, 2015).   The organization must successfully and with the right leadership handle these critical issues, in order for them to progress onto the next growth stage in the life cycle model.

Table 2 below summarizes the most important characteristics of every growth stage presented by Lippitt and Schmidt (2012), especially focusing on the primarily focus point in every development stage and the management style.

Table 2: Summary of Lippitt and Schmidt's (2012) development life cycle model

Summary of Lippitt and Schmidt's Life Cycle Model

	Stage I ~ Birth	*Stage II ~ Youth*	*Stage III ~ Maturity*
Main Focus	Achieving competitiveness in the market	Maintaining sustainability for future growth.	Staying competitive in the market by introducing new products and services, but still maintaining the existing products and services. Focus on quality and customer satisfaction.

	Stage I ~ Birth	*Stage II ~ Youth*	*Stage III ~ Maturity*
Key issues	Financial and personal risk.	Formal structures and procedures should be implemented. Other competitors in the market can also be a tread.	Be open to change and implementation of new ideas and ventures. Focus should also be maintained on the quality and deliverance of the current product and service to the client.
Management Style	Driven, innovative management.	Management are able to implement structures and enhance a stable organization growth and development for the future.	Management is open to change, but still creative and knows the structures, principles and procedures of the organization which are already in place.

Lippit and Schmidt (2012) was of opinion that organizations decline and fail because of the dramatic changes in the surrounding environment and management not being able to recognize or handle the confronting questions that need to be answered. They emphasized the importance of management to handle the key issues at the right stage and time during the development of the organization (Gabisch and Lorenz, 1955).

Over the past few decades, many variations of the organizational life cycle model have developed from Boulding's (1953), as well as Lippitt and Schmidt's (2012) life cycle model. One specific model which was primarily based on Lippitt and Schmidt's (2012) life cycle model is that of the researcher Arthur Stinchombe during 1965. He also based his model on organizations functioning in the private sector where he made a hypothesis that the era in which an organization is founded, has lasting effects on the overall outcome of the organization's structure (Saleh and Davidsen, 2001).

Stinchombe (1965) specifically emphasized the difference in the textile industry in comparison to the automobile industry. He was of the opinion that the significant difference in the two industries' life cycles was a result of the fact that they were founded during

different time periods (Johannsen, 2015). Another factor which contributed was that many textile organizations were managed and owned by families, which was not the case in the automobile industry (Saleh and Davidsen, 2001).

Most industries founded in the twentieth century also had professionally trained people in structured departments, while organizations founded earlier, tended to have more traditional elaborated staff departments (Saleh and Davidsen, 2001). Stinchombe (1965) also stated that another determining factor of the organization's growth stage is the social resource availability at the start of an organization's life cycle. Unlike some of the organizations today, earlier organizations adapted much faster to the changing conditions in the industry and they took advantage of the economic, technical and environmental conditions in order to ensure sustainable future growth (Johannsen, 2015).

4.3 Larry Greiner (1972): Evolution and revolutionary life cycle

Key shareholders and executives in many organizations are much more contented to hold on to the current organizational structure long after it has served its purpose, since the structure is the only source of their power (Greiner, 1972). Being reluctant to change, the organization then goes into bankruptcy. Another example that illustrates the above statement: a large financial institution disciplines a manager with his own will and mind-set who is blamed for current controlling problems at the organization. While the underlying cause are centralized procedures delaying expansions in other departments and markets (Greiner, 1972).

These identified problems in organizations are much more rooted in past decisions than in the current present events or in dynamic markets, which many people believe are the main cause (Gabisch and Lorenz, 1955). Larry Greiner (1972) stated that in these situations, top management often overlooks such critical development questions, like *"Where has our organization been?", "Where are we currently?" and "Where are we going?",* because they are too focused on the haste to grow and develop (Schumpeter, 1934). Instead, top level managers rather place their focus outward on the market and toward the future, while ignoring the current problems and critical questions on hand.

From many investigations and studies done on the history of organizations, Greiner (1972) argues that the behaviour of individuals is primarily determined by past events and experiences, rather than what most believe might happen in the future (Greiner, 1972). Greiner (1972) then expanded this theory by stating that organizational development shows similar signs and problems. A number of different development stages can be identified through which many organizations tend to pass as they grow and mature (Ionescu and Negrusa, 2007). Greiner's (1972) model suggests that organizations evolve through a number of five different sequential stages, each of which is followed by a '*revolution*' or a transitional stage arising from an organizational problem (Quinn and Cameron, 1983). The solution gained from every organizational problem determines ultimately whether an organization will progress to the next stage or will diminish (Greiner, 1972).

Greiner's presented organizational life cycle model is illustrated in figure 10 below, where both the stages of growth and crisis are showed.During the development of his life cycle model, Greiner (1972) firstly identified some of the core characteristics which he believes are important elements which contributes to the growth of any organization.
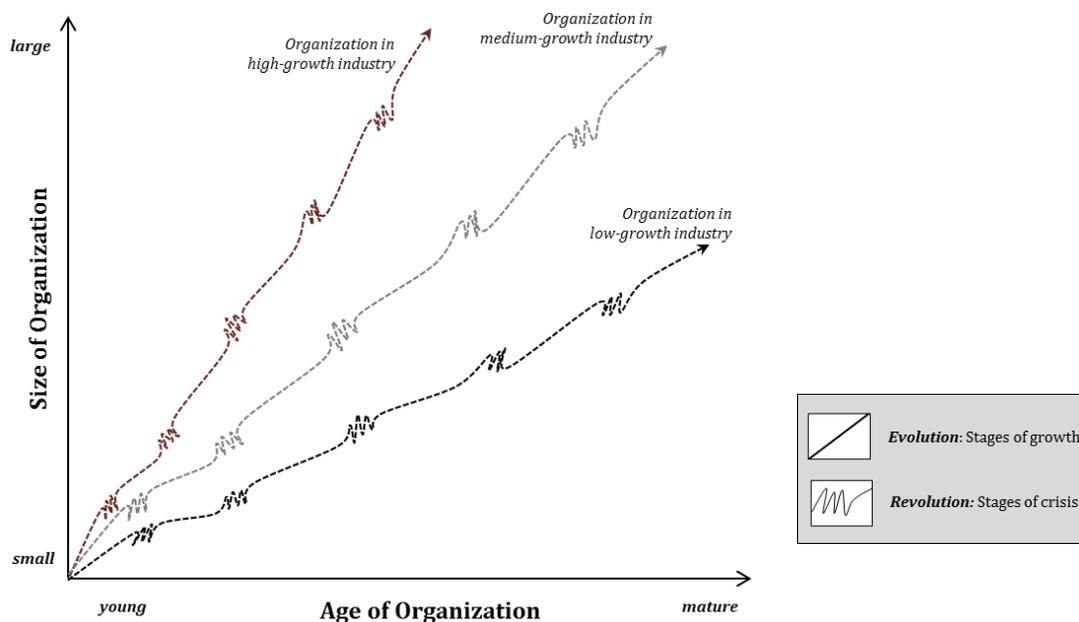
Figure 10: An illustration presented by Larry Greiner (1972) showing how organizations grow and advance through different stages.

He identified the five core characteristics, which formed the fundamental basis of his study and are essentially illustrated in figure 10, as the following:

- ### *The age of the organization:*

Greiner (1972) stated the age of the organization as the most essential dimension of any model of development, and it is represented on the horizontal axis of the graph (Greiner,1972). Management problems and principles are rooted in time since history clearly shows that the same organizational practices and principles are not maintained throughout an organization's life span (Wang, 2005). Greiner (1972) uses decentralization as an example as it can specifically describe corporate practices at one time period during an organization's life span, but then it can also totally lose its descriptive power at another.

Time also contributes to the institutionalization of managerial attitudes (Mohapatra, 2013). Over time these attitudes become rigid and not applicable to the organization and results in unpredictable employee behaviour and the difficulty to change it.

- ### *The Size of the organization:*

The size of the organization as a dimension is presented on the vertical axis of the chart. As the number of employees and an organization's sales volume increase, so do the organization's problems and solutions also tend to change (Greiner, 1972). Examples of such problems include the coordination and communication among different departments within the organization, new functions emerging, levels in the management hierarchy and overall structure of the organization multiplying, and many tasks and jobs become more interrelated. Thus, as previously stated, time is not the only element of organizational structure, but as organizations become much larger, they do not have the necessary methods and principles in place to retain and manage many of the issues and practices over a long period of time (Miller, 2007).

- ### *Stages of Evolution:*

The evolutionary period is described by Greiner (1972) as 'a phenomenon which defines the age and growth of an organization' (Greiner, 1972). Only some organizations manage to survive past the first two years, while other organizations, enjoy four to eight years of

continuous growth without any major economic setback or severe disruption (Saleh and Davidsen, 2001). Greiner (1972) decided on using the term evolution, since only modest adjustments appear to be necessary for maintaining growth under the same management guidelines and decision-making (Wang, 2005).

- ### *Stages of Revolution:*

Smooth evolution, growth or development of an organization is not common in any industry (Ionescu and Negrusa, 2007). One cannot assume that organizational growth is linear. Greiner (1972) terms the difficult times during an organization's development, the *periods of revolution*, since they typically reveal a serious upheaval of management practices. Many organizations make the mistake of using traditional management practices, which they applied during the earlier stages of the organization to solve current problems which the organization experience at a more mature stage during its development stages (Saleh and Davidsen, 2001). This tends to frustrate top-level managers. During these periods of crisis, many organizations fall short. Only the organizations which shows a willingness and openness for change and adaptability, manage to progress to the next evolutionary period (Greiner, 1972).

Greiner (1972) however emphasizes the critical task of the organization's management: to find a new set of organizational practices in each revolutionary period, which will then become the basis for managing the next evolutionary period (Greiner, 1972). This should however become an ongoing task for management at every revolutionary period, since one set of managing practices can be a solution for some problems in one period, but it might also be the downfall for the organization in another evolutionary period (Saleh and Davidsen, 2001).

- ### *The Growth rate of the Industry*

The speed at which an organization experiences its periods of evolution and revolution is closely related to the market environment of its industry (Saleh and Davidsen, 2001). It can be illustrated by large organizations in fluctuating markets, where the organization have to add employees quickly and the need for continuous structural organizational change is of the essence, to accommodate the increasing number of staff members (Ionescu and Negrusa, 2007). It is found that evolutionary periods, as Greiner (1972) points out, are

much shorter in fast-growing and fluctuating industries, while in mature and slow-growing industries, much longer evolutionary periods occur.

With the presented five critical factors that influence the overall development and growth of any organization, Greiner (1972) developed five specific *evolution and revolution phases*, which he believed represents the growth of any organization.
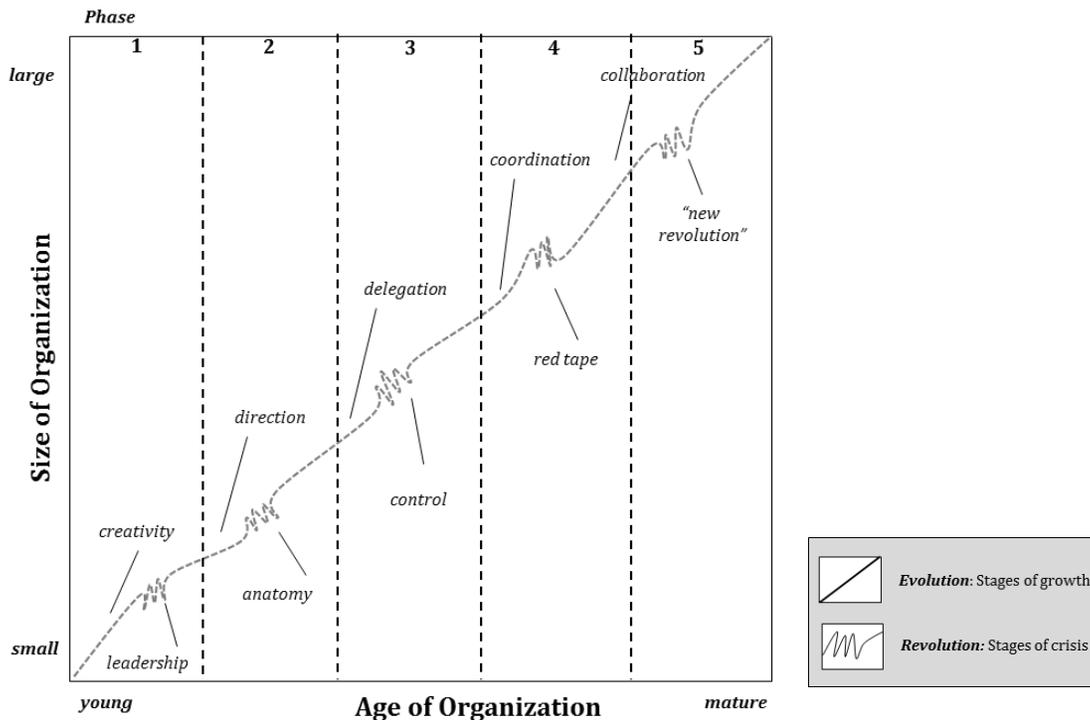
Figure 11: Larry Greiner's (1972) Five phases of growth, which are also known as the evolutionary and revolutionary model.

Greiner's "*Five Phases of Growth*", also known as the evolutionary and revolutionary model, are presented in figure 11 above (Greiner, 1972). As illustrated in the figure, each evolutionary period can be characterized by a specific management style during a growth phase of the organization's development (Saleh and Davidsen, 2001). Every revolutionary period is also characterized by a dominant managerial problem that must be solved in order for the organization to progress to the next revolutionary period (Greiner, 1972). The pattern illustrated in figure 11, focuses primarily on organizations in industries with a moderate growth rate over a long period of time (Ionescu and Negrusa, 2007).

Organizations which find themselves in a fast paced, fluctuating industry tend to develop through the different growth phases much quicker (Saleh and Davidsen, 2001). Some researchers are also of the opinion that many organizations can even progress through smaller phases of growth in one revolutionary period (Ionescu and Negrusa, 2007). Meaning, an organization can develop through a life cycle with different phases within one single growth phase.

It is also important to take note that the result of the previous growth phase is a cause and introduction to the next revolutionary phase in which the organization founds itself (Ionescu and Negrusa, 2007). During each phase, it is of the utmost importance that the necessary managerial training and changes within the organization takes place to ensure sustainable growth for the organization to develop to the next evolutionary phase. Greiner (1972) highlights an example for this specific point: an organization which experiences an autonomy crisis during the second phase of their development growth cycle cannot return to the directive management for a solution. The organization needs to adapt a new managerial style, which in this specific situation would be delegation in order to progress forward to the next evolutionary period (Greiner, 1972).

In the *"Five Phases of Growth"* represented by Greiner (1972), he characterized every revolutionary period with specific managerial styles which are of the essence in any organization during that specific evolutionary period. The different growth phases, together with the associated managerial styles are presented in detail below (Greiner, 1972):

Growth Phase 1: Creativity

During the start or birth phase of any organization, the main focus point is on creating a product or service. The points listed below are specific trends which organizations during the creativity phase of the presented growth model may experience (Ionescu and Negrusa, 2007):

- *Entrepreneurial skills:* The main founders of the organization are usually very technical and they tend to show strong entrepreneurial skills. They often disregard any management activities and most of their energy is entirely focused on making and selling the product or service.

- - ***Communication:*** The communication channels among employees are very frequent and informal – no official communication channel has been developed yet.
  - ***Rewards:*** Long hours and hard work are rewarded by modest salaries and other employee or ownership benefits.
  - ***Customer:*** Decisions and motivation are very sensitive with client feedback. Management will immediately act as customers react and give their feedback on the products.

Creativity and foregoing individualistic activities are essential for any starting organization (Gabisch and Lorenz, 1955). However, as the organization grows and matures, these activities become the problem in many departments. An increase in the number of employees' also results in difficult communication between different departments and new employees are not always as much motivated by the organization's product as the original founders of the organization (Ionescu and Negrusa, 2007). In these cases, additional capital should be secured and new accounting and communication procedures and channels are needed for improved control over various departments. The organization's founders get faced with unwanted management responsibilities and they try to resolve the issues with the same managerial style and solutions as in the past (Greiner, 1972).

Greiner (1972) defines these problems as the "*revolutionary problem*" to the first phase of the growth model, since these problems gives way to the start of the next growth phase of any organization. The revolutionary period during this phase, is called the "*crisis of leadership*", which is the onset of the first revolution (Greiner, 1972). It is of the essence that the organization appoints a strong manager during this phase – one who has the necessary knowledge and skills to introduce new managerial- and business techniques to the organization in order to progress to the next revolutionary period (Ionescu and Negrusa, 2007). This however gives way to a new problem: the founders are not always willing to step aside and let someone else take over their own 'idea'. In these situations, Greiner (1972) suggests that in order for the survival of the organization and to ensure sustainable development, the organization should locate a strong business manager in the organization that is acceptable to the founders, but also strong enough to provide direction and implement the necessary changes in the organization (Saleh and Davidsen, 2001).

Second Growth Phase: Direction

The organizations that are able to appoint a capable business manager to provide the organization with more direction during the first growth phase usually embark on a sustained growing phase under able and directive leadership (Ionescu and Negrusa, 2007). Greiner (1972) highlights the characteristics of the second growth phase as the following:

- ***Organizational Structures:*** Functional organizational structures are introduced to separate the necessary departments from one another, such as manufacturing and marketing. Job and task activities and assignments also become much more specialized during this phase.
- ***New Systems:*** Introduction to accounting systems for inventory and purchasing.
- ***Rewards:*** Incentives for employees, budgets and work standards are put into place.
- ***Communication channels:*** Communication becomes more formal and impersonal, as the hierarchy of titles and positions within the organization grows.
- ***New management:*** The new managers which are appointed to different departments take most of the responsibility and decision-making for initializing direction, while lower-level supervisors are treated more as functional specialists than as autonomous decision-making managers.

Although the new managerial- and directive techniques implemented by new managers, channels the employees' skills more efficiently into the growth of the organization, they eventually become ineffective in the controlling of a much more complex and diverse organization (Greiner, 1972). Lower-level employees find themselves restricted by centralized hierarchy and they have come to possess much more knowledge regarding the markets and machinery than their managers (Ionescu and Negrusa, 2007). This results in employees who feel restricted by structured principles and guidelines, but also uncertain between the following of procedures and taking initiative of their own. This gives way to the second revolution during the second growth phase: "*crisis of autonomy*". Greiner (1972) stated that in many situations like these, organizations often revert to delegation. However, this change in managerial style is often difficult for top-level managers to implement, since many managers struggle to give up responsibility on certain tasks where they previously gave direction to lower-level managers (McMahon, 2001). In hindsight, this may also lead to another problem: many lower-level managers are not able to make important decisions by themselves; resulting in lower-level employees becoming unmotivated and they end up leaving the organization (Saleh and Davidsen, 2001).

Third Growth Phase: Delegation

The next evolution phase is introduced by the successful application of a decentralized organizational structure. Greiner (1972) identified the following characteristics during his investigations:

- ***More responsibility:*** Greater responsibility is given to managers which are involved in the marketing and production departments of the organization.
- ***Rewards***: Incentives and bonuses are used to keep employees motivated.
- ***Management:*** Top-level executives at headquarters limit themselves to managing by exception based on periodic reports from the field.
- ***New ventures:*** During this growth phase, management also focuses on acquiring other ventures or outside enterprises that can be combined with the organization's current decentralized units.
- ***Communication:*** Communication from top-level management is also infrequent.

During this growth phase, organizations tend to expand enormously by means of the heightened motivation from lower-level managers (McMahon, 2001). Managers in these organizations, where the organization mostly consists of decentralized units, have greater authority and incentives for employees. They are much more capable of entering larger markets, respond frequently to customers and they also tend to develop new products to stay competitive in the market (Miller, 2007).

The problem Greiner (1972) identified during this evolutionary phase is that top-level executives and managers sense that they are losing control over a highly diversified group of operations. Autonomous leaders prefer to make their own decisions and operate their own departments without coordinated plans, principles or structures (Greiner, 1972). Too much freedom for managers during this growth phase, results into a narrow mind set and no adaptability to change.

Soon the next revolutionary phase gives way: "*crisis of control*". The revolutionary phase during this time gives way when top-level managers seek to regain control over the organization as a whole (Saleh and Davidsen, 2001). Greiner (1972) also mentions that some top-level managers try to return to the centralized structure of the organization. However, this usually fails because of the organization's vast scope of operations and different departments. The organizations that are able to identify the revolutionary problem

beforehand and are willing to implement new changes in their organization, are able to advance to the next growth phase (McMahon, 2001).

Fourth Growth Phase: Coordination

The coordination phase, which is the fourth evolutionary growth phase in the presented model by Greiner (1972), can be characterized by the use of formal systems and principles for achieving greater coordination and by top-level executives taking responsibility for the initiation and administration of these new systems (Greiner, 1972). Some elements highlighted by Greiner (1972) which are unique from this phase, are the following:

- *Organizational Structure:* The decentralized units in the different departments are merged into product groups.
- *Procedures and processes:* Formal planning procedures in the organization are established and frequently reviewed by upper management.
- *Staff Members:* A number of staff members are employed and located across various branches of the organization.
- *Capital:* Capital expenditures are carefully weighed, budgeting are highly taken into consideration and divided respectively across the different departments within the organization.
- *Departments*: Each department in the organization are handled, treated and managed separately from the rest of the departments in the organization. Important criteria, such as return on invested capital, are used to determine the overall performance of the department, as well as the allocating of funds.
- *Organizational operations:* Daily operations within the organization remains decentralized, but certain technical functions, like data processing are centralized at one main office.
- *Rewards:* Further incentives and employee benefits are also used to encourage employees to stay motivated in their departments. Such incentives include stock options and profit sharing.

During this growth phase the organization have limited resources and although the implementation of new coordinated systems prove useful in achieving growth in the organization, the limited resources needs to be effectively allocated to the different departments (Ionescu and Negrusa, 2007). Although the managers in each department are

still responsible for their own decision making and planning, frequent feedback and departmental goals are requested from headquarters (Saleh and Davidsen, 2001).

The above mentioned results in confidence lost between the managers and their staff members in the different departments, as well as between the headquarters and the various departments (Greiner, 1972). The coordinated systems which were previously introduced at the start of this growth phase are starting to lose their effectiveness and usefulness. Greiner (1972) defines this crisis as the "*red-tape crisis*". He highlights one main example during this phase which frequently comes up in many organizations, where the departmental managers resent direction from other employees and managers which are not familiar with the specific department they are based in (Ionescu and Negrusa, 2007). The staff members are also not satisfied with uncooperative- and uninformed departmental managers. Both the departmental managers and staff members criticize the bureaucratic system in the organization.

This results in the organization becoming too large and complex to be managed through the previously implemented formal programs and rigid systems.

Fifth Growth Phase: Collaboration

The final growth phase in any organization emphasizes the need for strong interpersonal collaboration in an attempt to overcome the red-tape crisis identified in the previous growth phase (Greiner, 1972). Phase four focused on the management of formal systems, procedures and structures in an organization, while the last growth phase focuses on the spontaneity and innovation in management action through the different teams in the various departments (Saleh and Davidsen, 2001). The development to this phase from the previous growth phase is especially difficult for the specialists who created and implemented the coordinated system, as well as for the departmental managers who relied on these formal structures for answers.

This growth phase especially focuses on a much more flexible and behavioural approach to management than the previous phases. Greiner (1972) highlights the following characteristics of the final growth phase:

- **Main focus:** The main focus during this growth phase is on solving problems much faster through the help of departmental teams.
- **Departmental teams:** Departmental teams are collaborated with one another to handle specific actions and tasks.
- **Collaboration of teams:** Staff specialists at the organization's main office are combined into interdisciplinary teams that consult with the various different departments and field units.
- **Organizational structure:** In order to assemble and assign the right teams to the different problems, a matrix-type structure is used.
- **Systems:** Previously formal control systems are simplified and combined into a single multiple purpose and functional system.
- **Discussion of problems:** Key managers in various departments frequently meet to discuss major problems.
- **Training:** Departmental managers frequently undergo training in order to focus on their behavioural skills to achieve better teamwork and conflict resolution.
- **Information systems and processes**: Real-time information systems and data-handling processing systems are implemented into daily decision-making processes.
- **Rewards:** Organizational rewards are more focused on the overall team performance, than the individual performance.
- **Innovation:** Experimenting with new ideas and practices are encouraged throughout the organization.

The most significant change in this growth phase occurs when the previous growth phase's staff members and systems are replaced by a much smaller number of consulting specialists who help to facilitate decisions in various departments (Saleh and Davidsen, 2001).

The next phase after this revolutionary phase is still unanswered. Although there is little evidence or studies done on organizations after last growth phase, Greiner (1972) is of the impression that the next growth phase will focus around the psychological saturation of employees who grow emotionally and physically exhausted from the intense amount of teamwork and the constant pressure from the different departments for new innovative ideas and solutions (Greiner, 1972). Instead, other experts believe that the next evolutionary crisis will evolve when the organization realizes that there is no internal solution, such as new products or opportunities in other markets to ensure future growth

(Saleh and Davidsen, 2001). The only solution for any organization in these situations is to look outside the organization for other partners, opportunities to sell the organization or for the organization to split into various smaller units which can function and operate on their own.

Table 3 below summarises the main points of Greiner's (1972) represented "Five Phases of Growth" model, or better known as the revolutionary and evolutionary life cycle model.

Table 3: Summary of the "Five Growth Phase" model presented by Larry Greiner (1972), or better known as the revolutionary and evolutionary life cycle model of organizations.

Summary of Larry Greiner's Life Cycle Model

	Growth Phase 1: Creativity	*Growth Phase 2: Direction*	*Growth Phase 3: Delegation*	*Growth Phase 4: Coordination*	*Growth Phase 5: Collaboration*
Revolutionary Crisis	Leadership	Autonomy	Control	Red-tape crisis	Psychological saturation
Management Focus	Make and sell	Efficiency of operations	Expansion of market	Consolidation of organization	Problem solving and innovation
Organizational Structure	Informal	Centralized and functional	Decentralized and geographical	Line staff and product groups	Matrix of teams
Top Management Style	Individualistic and entrepreneurial	Directive	Delegate	'Watchdog'	Participative
Control System	Market results	Standards and cost centres	Reports and profit centres	Plans and investment centres	Mutual goal setting
Management Reward	Ownership	Salary and merit increases	Individual bonus	Profit sharing and stock options	Team bonus

4.4 Churchill and Lewis (1983): Development model

Churchill and Lewis (1983) expanded on Greiner's (1972) life cycle model by focusing primarily on small to medium entrepreneurial organizational situations. Their life cycle model differs from the one presented by Greiner (1972) in the sense that Churchill and Lewis's (1983) life cycle model places the attention on small to medium organizations, where the organization is managed by only one person. While Greiner's (1972) model focused on medium to large organizations. By doing so, they developed a five stage development model as seen in figure 12 below.
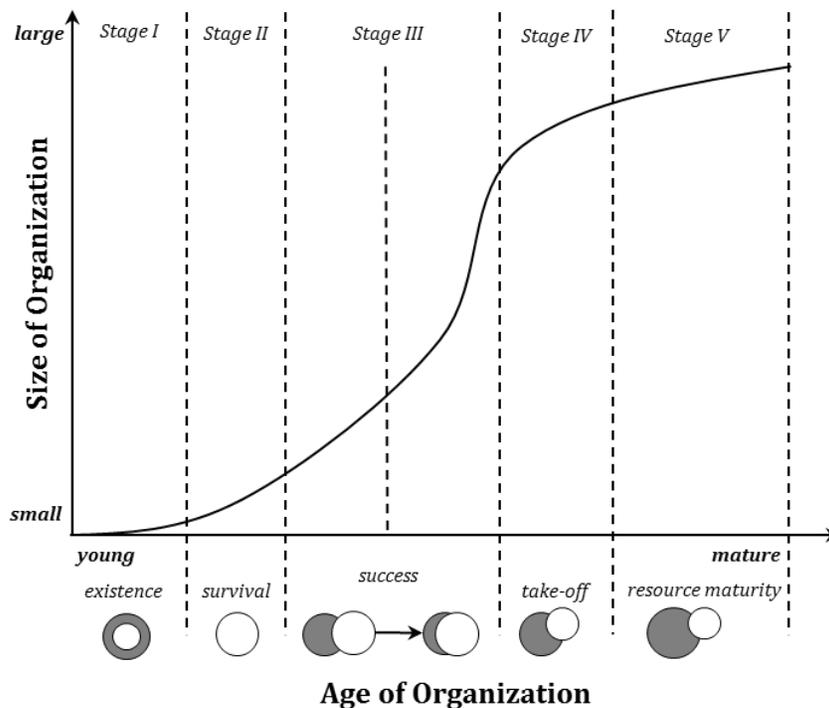
Figure 12: Illustration of Churchill and Lewis's Life Cycle Model developed in 1983.

Churchill and Lewis (1983) defined the first stage in their model as *existence*, where this stage can be seen as the first step of the entrepreneurial venture. During this stage, the founder or entrepreneur struggles to establish the correct processes and procedures without any formal structure in place. Even though there might not be any formalities in place, the owner of the organization still takes close supervision of each activity taking place in the organization (Miller, 2007).

The second stage is known as the *survival* stage. At this stage, the organization has grown significantly and the entrepreneur feels the need to get additional capital to expand on the

organization (Gupta, 2013). To expand the organization and to keep up with the development of the organizational activities, the entrepreneur prefers to add family members or known people as partners of the organization. The main goal of the organization is to reach the breakeven point to ensure a sustainable cash flow in order to maintain the day-to-day operations of the organization (Churchill and Lewis, 1983).

During the third stage of Churchill and Lewis's (1983) model, the organization develops to the *success* stage. At this stage, the organization starts to earn profits. This enables the organization to have enough capital to either invest in other business opportunities which are presented in the market or to continue to the same pace of growth (O'Rand and Krecker, 1990). It is of importance that management invests in team building activities and development training for the organization's employees to ensure sustainable growth and motivation.

In the fourth stage of Churchill and Lewis's (1983) organizational life cycle model, the main focus of the organization is on further growth, expansion and seeking new opportunities in the existing market space, as well as in other markets (Churchill and Lewis, 1983). This stage is known as the t*ake-off* stage. Churchill and Lewis (1983) stated that during this stage, the organization becomes much more formal in nature and structure. The work activities are also much more defined and delegated to employees.

In the last stage of the development model, the *resource maturity* stage, the organization can no longer be categorized as a small organization. At this stage, the organization's focus changes to quality control, financial control and being competitive in the market (O'Rand and Krecker, 1990).

While Churchill and Lewis 's (1983) life cycle model do not focus on the managerial factor of the organization as Greiner's (1972) model, it emphasizes the factors management must focuses on, since in small to medium entrepreneurial organizations, the amount of staff members and managers are limited in comparison with larger organizations. Table 4 on the next page summarizes the five development stages of Churchill and Lewis's (1983) life cycle model according to different categories in each stage.

Table 4: Summary of the presented five stage development life cycle model by Churchill and Lewis (1983).

Summary of Churchill and Lewis Life Cycle Model

	Stage I: Existence	*Stage II: Survival*	*Stage III: Success*	*Stage IV: Take-off*	*Stage V: Resource Maturity*
Management and employees	Owner, founder or entrepreneur	Family members or other partners join	Organization expands with employment of other staff members	Organization becomes much more formal and is expanding.	Cannot qualify as a small organization
Organizational Structure	No formal structure	No formal structure, but management increases	Decentralized	More formal	Structured, formal decentralized unit with set structures and processes.
Management Style	Owner takes close supervision of every activity	Owner supervises daily operations	No 'one man show'. Managers are assigned to different tasks.	Formation of different groups and departments	Structured departments with different managers
Capital/Funds	Own capital, but founder still struggles	Receives extra capital from family members or friends.	Invests in other opportunities in the market	Capital gained can be invested in other market opportunities.	Organization looks for other investments opportunities and staying competitive.
Main focus	Only existence	Gain break-even point and have a sustainable cash flow.	Sustainable growth of the organization.	Further growth, expansion and seeking new opportunities and ventures	Quality control, financial control and being competitive in

				in other markets spaces.	the market

4.5 Hanks's (1993): Organizational cycle

Hanks (1993) are of the opinion that a healthy organization is one that can maintain a balance between organizational growth and control within the organization (Jansen, 2004). Hanks, Jansen and Chandler are some of the first researchers which developed a four-stage life cycle model which are still applicable to many organizations today. The four stages of their model, consists of a start-up -, expansion -, maturity - and a diversification stage (Sabol, Sander and Fuckan, 2013).

Although Hanks' (1993) organizational cycle model might only consist of a four stage model, most organizational life cycle models are multi-stage in nature, varying from a three stage model, to a ten stage model where each describes a similar pattern of development of an organization (Mohapatra, 2013).

Apart from Hanks (1993), a number of researchers have developed and expanded on several organizational life stages throughout history. However, not all agree on the activities and reasons associated with every stage in which an organization can find itself. Although there are differences in the existing models with regard to the number of stages of each model and the activities within each stage, there are commonalities as well. Figure 13 on the next page illustrates a detailed outlook of the presented organizational life cycle model by Hanks (1993).
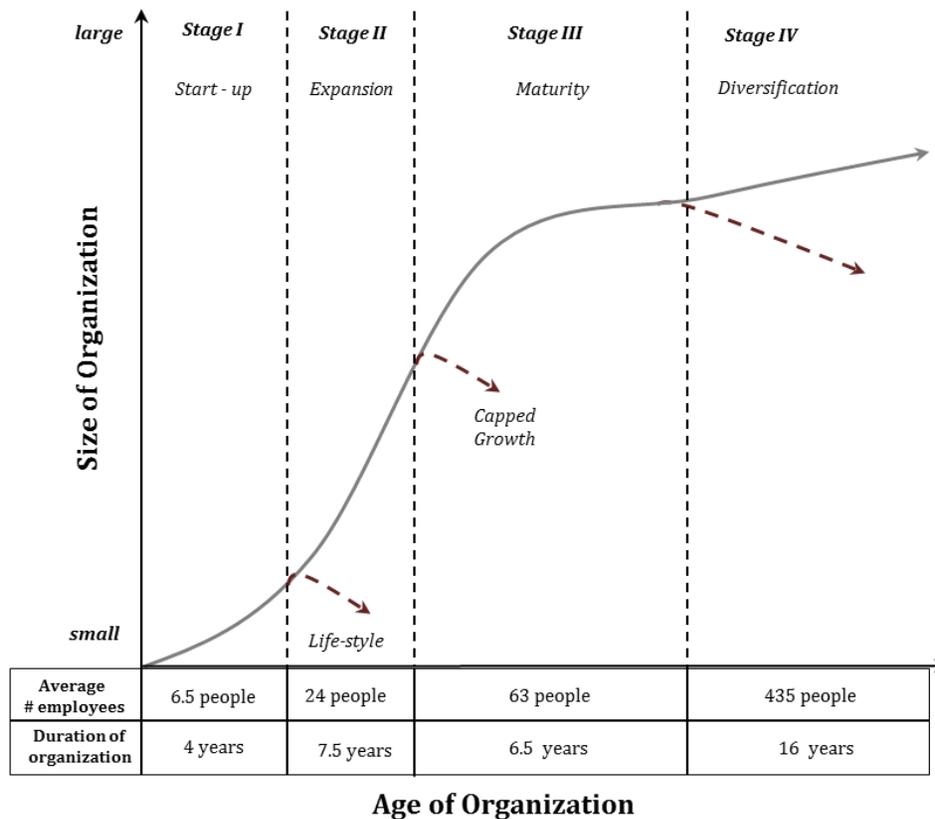
Figure 13: Hanks (1993) presented organizational life cycle model.

Further empirical research of Hanks's (1993) model showed the average number of employees an organization will have when it operates in a specific stage, as well as the expected duration an organization will function in a stage before progressing onto the next stage. These findings are presented in figure 13 above. Hanks (1993) also noted the possibility of an organization not surviving the first stage – this he stated as a l*ife-style* occurrence, where the organization failed to successfully progress to the next stage. Whereas, when an organization reached its peak after stage two, then it can be considered as reaching its c*apped growth* point, since no further growth is possible for the organization.

Downs's (2013) life cycle model is also an expansion on the presented life cycle model of Hanks (1993). However, Downs's (2013) model is primarily motivational based where the organizations considered in his life cycle model, are government bureaus (Sabol, Sander and Fuckan, 2013). The life cycle is not focused on generating revenues by delivering a service

or producing products to a specific market, but on the outcome of a specific stage during the government bureaus process.

Downs (2013) developed a model specifically for government organizations, which he believes follows the following main stages of development:

- ***First stage:*** During the first stage of government life cycles, government bureaus struggle for autonomy and independence, therefor the main focus during this stage is on building legitimacy. This stage is typified by attempts to obtain legitimacy and needed resources from the environment to achieve a 'survival threshold'.
- ***Second stage:*** The second stage is regarded as the stage of rapid and fast expansion, since the organization dramatically grows in staff members, departments develop and structures improve.
- ***Final stage*:** The final stage is symbolised by the development of the formalization of rules, procedures and structures within the government bureau. Predictability and coordination are mostly emphasized during this stage.

In summary, Downs's (2013) model views government organizations as moving from the establishing of legitimacy, to innovation and expansion and then finally, to the formalization of control within the bureaus structures. One of the main reasons why Downs's (2013) model is an expansion on Hanks (1993) life cycle model, is because Downs (2013) was of the impression that any government entity also follows the same development cycle of any living organism, which is what Hanks's model is fundamentally based upon (Jansen, 2004).

4.6 Miller and Friesen (1988): Five stage organizational life cycle model

Throughout history, many organization life cycle researchers have synthesized and incorporated prior organizational models into their own work. The organizational life cycle model represented by Hanks (1993) stated that organizations are theorized to evolve through four main stages throughout their organizational life cycle: start-up, expansion, maturity, and diversification (Jansen, 2004).

Strong theoretical support for a five-stage organizational life cycle model can be seen in the findings of Greiner (1972). The little empirical support there is to be found for life cycle models tends to support either four –or five-stage models (Miller, 2007). As should be noted, not one of the different organization life cycle stages have a prescribed length of time.

Some organizations pass through the stages much more rapidly than others, while other stages are prolonged for an extended period of time (Saleh and Davidsen, 2001).

Miller and Friesen (1988) are of the impression that every organization progresses through a five-stage life cycle model. Although many of the organizational researchers which are investigated during this study, have models primarily based on either small to medium or large organizations, Miller and Friesen's (1988) model is relevant for all organizations. The model gains its relevance by incorporating the best features from several other organizational life cycle models presented throughout history. Their development model aims to incorporate and combine different life cycle models of a various group of organizational researchers, some of which were investigated in this study.

Miller and Friesen's (1988) model follows a similar pattern as Greiner's (1972) model, where the model identifies 'hurdles' or problems which the organization might face during a specific growth stage (Ionescu and Negrusa, 2007). However, Miller and Friesen's (1988) model is not primarily focused on management and managerial activities, they take the entire organization into account.

The five-stage model is described in detail below and illustrated in figure 14 on the next page, showing the growth and obstacles at every stage in the life cycle.

~ Stage 1: Existence
Existence is also known as the entrepreneurial or birth stage of any organization and marks the beginning or start-up of its development (Miller, 2007). The main focus during this stage is on capability or simply identifying the market or customers to support the existence of the organization. Decision-making and management are in the hands of only one or a few people in the organization. Organizations in this stage also tend to create their own environment in which they grow and mature (Saleh and Davidsen, 2001).

~ Stage 2: Survival
From the existence stage, organizations progress onto the survival stage in which they grow and develop some form of organizational structure and establish their own distinctive competencies. Strategies and objectives are also formulated during this stage, with the main

goal being the generation of enough revenue to continue operations and finance sufficient growth to stay competitive in the market (Ionescu and Negrusa, 2007). This stage delivers very interesting results for some organizations: some prosper and grow large enough to move to the next stage, others "hit and miss", only earning marginal returns during the stage, while others fail to generate sufficient revenue to survive (Saleh and Davidsen, 2001).
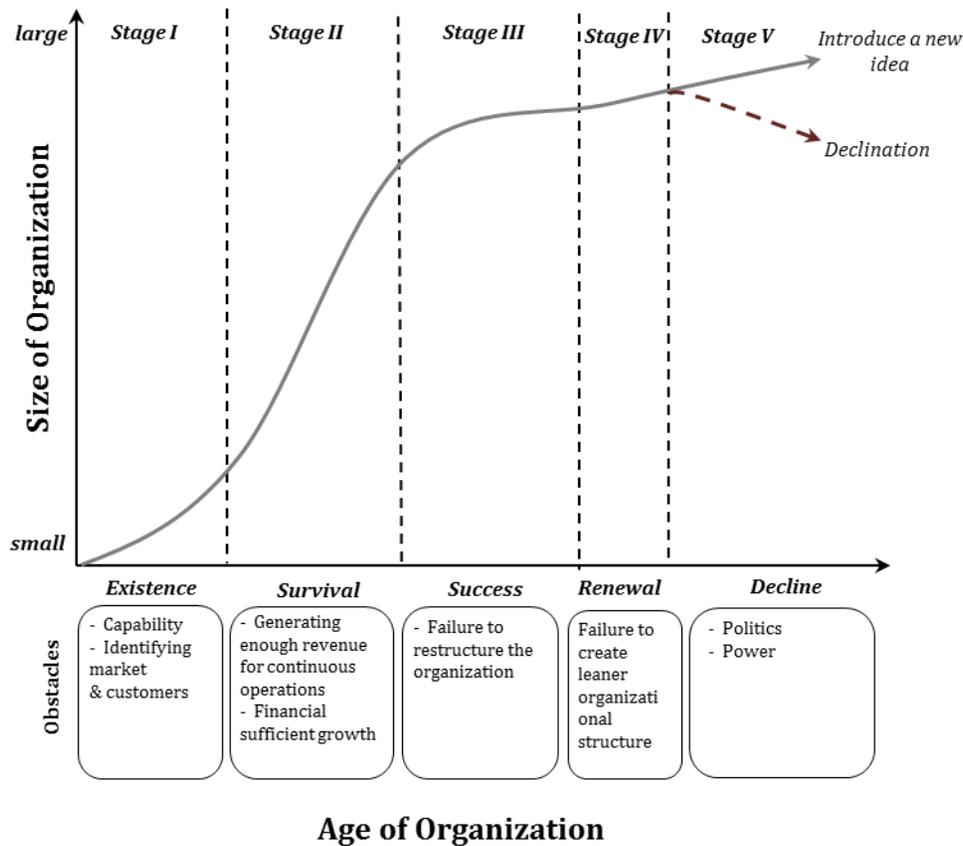
Figure 14: Miller & Friesen's organizational life cycle model indicating five growth stages and the obstacles present at every stage (1988).

~ Stage 3: Success

This stage is known as the success stage as it represents an organizational form where formalization and control through bureaucracy is the norm (Ionescu and Negrusa, 2007). A problem that usually occurs during this stage is referred to by American businesses as the 'red tape' crisis. Management in an organization goes through the layers of organizational structure in the hope to restructure the organization, but fail to accomplish anything. The

red-tape crisis is especially emphasised in Greiner's (1972) evolutionary and revolutionary development model.

During this stage, job descriptions, policies and procedures in the organization, and hierarchical reporting relationships have become much more formal (Miller, 2007). At this stage in an organization's life cycle, they have survived the toughest two stages and have grown to a point where they seek to protect what they have gained instead of looking for new opportunities in other markets. The upper management team focuses on the planning and strategy of the organization, while middle managers tend to the daily operations of the organization (Ionescu and Negrusa, 2007).

~ Stage 4: Renewal

During the renewal stage of any organization, the management teams display a desire to focus on creating a much leaner organizational structure (Ionescu and Negrusa, 2007). Collaboration and teamwork foster creativity and decision-making is mainly decentralized at this point in time (Miller, 2007). Although the organization is still very large and bureaucratic, members of the organization are still encouraged to work within the bureaucracy. The needs of the customers are also placed above those of the members of the organization.

~ Stage 5: Decline

Many organizations exit at any stage during their organizational life cycle, but there are only few which reach the final stage in the life cycle presented by Miller and Friesen (1988). Two of the most important problems experienced during this stage, are politics and power (Saleh and Davidsen, 2001). Organizational members become much more focused on their own personal goals, causing them to lose interest in furthering the development and growth of the organization. Some organizations fail to meet the external demands set at previous stages during the organization's life cycle, which leads to a period of decline where they experience a lack of profit and a loss in market share (Miller, 2007). Control and decision-making tend to return to only a few people in the organization.

Other organization tends to turn the declining stage around and foster a new idea into the current market or explore new markets which cause the organization to return to the first

stage of the organization life cycle, namely *existence*. This brings the organization back to the first stage of its organizational life cycle, but since the organization have matured in a number of aspects, the characteristics presented earlier, may differ in the second life cycle.

Table 5 below summarizes the main factors of Miller and Friesen's (1988) presented life cycle model. As seen through the classification factors and the identified stages, some of the organizational researchers' findings are also reflected in the life cycle model of Miller and Friesen (1988).

Table 5: A summary of Miller and Friesen (1988) presented development life cycle model

Summary of Miller and Friesen's Life Cycle Model					
	Stage I: Existence	*Stage II: Survival*	*Stage III: Success*	*Stage IV: Renewal*	*Stage V: Decline*
Main Focus	Identifying the market or customers	Generating enough revenue to continue daily operations and to stay competitive	Planning and strategizing for the future.	Creating a much leaner organizational structure.	Competitiveness in the market and exploring new markets for other opportunities.
Management	Decision making process are only in the hands of one person (founder/ entrepreneur)	Some decisions are shared among others managers, but main decision making still lies with the founder of the organization	A bureaucracy is formed	Decision making during this stage is mainly decentralized.	Decision making are limited to only a few upper managers in the organization.

	Stage I: Existence	*Stage II: Survival*	*Stage III: Success*	*Stage IV: Renewal*	*Stage V: Decline*
Organizational Structure	No formal structure	Informal structure starts to develop	The organizational structure develops to a formal structure with set processes and systems in place.	Organization becomes very large and more processes are set into place to uphold the organization's current performance.	Much more structured and formal.
'Obstacles' to overcome	- Capability - Identifying market & customers	-Generating enough revenue for continuous operations -Financial sufficient growth	Failure to restructure the organization	Failure to create leaner organizational structure	Politics and power

4.7 Organizational life cycle models with no barriers

Many researchers and organizational theorists believe that all organizations progress through a number of development stages. However, Bridge (2003) suggested that it is not necessary that an organization develops through discrete stages with clear boundaries between each stage. Bridge (2003) further emphasized that to 'separate the development process into different stages is rather like dividing the spectrum of visible light into colours' (McCraw, 2003). Some agrees with Bridge's (2003) view, while others argue that although the stages of development of an organization can be indicated, it is very difficult to say when the organization moves from one stage to the other. It is not always possible for organizations to move through all of the indicated stages. No organization follows a linear growth path model. Some organizations might start-off in the second stage and decline much quicker than others, while other organizations might experience the different development stages in reverse (Schumpeter, 1939).

Researchers suggest that the growth of any organization is the result of many discrete efforts and opportunities in the market. Blundel and Walker (1986) reckon that the growth of an organization might happen very quickly, slowly, or not even at all. The pace of an organization's growth depends solemnly on the strength of the growth aspirations and growth-enabling factors of an organization (Blundel and Walker, 1986). Hence, many researchers have shown a modern view over organizational life cycle development, where it is of the belief that it is not possible to consider growth as a norm or an even progression, since many external factors influence the overall outcome of the organization (Festre, 2002).

Levie and Lichtenstein (2010) have suggested that the life cycle development model consisting of a number of stages do not provide sufficient evidence of the organization's growth and development. During their studies of organizational growth of the past 40 years, they have found that there is no agreement on defining the life cycle stages of organizational growth (Nazzart and Foroughi, 2012). Levie and Lichtenstein (2010) also mentioned that previous researchers' findings do not provide any sustainable evidence on what is the path of progression and the different development stages an organization progress through. They are also of opinion that no researcher can provide sustainable reasons for organizations to move from one stage to the other (Levie and Lichtenstein, 2010).

Levie and Lichtenstein (2010) suggested a new dynamic theory which is not based on the traditional living organism growth path. They argued that organizations are not like organisms, rather, the main driving factor of an organization's growth, is the shifting of external and internal environmental factors (Nazzart and Foroughi, 2012). The very essence of dynamic stages is that an organization can survive and be sustainable by being flexible and adapting continuously to the changing environment. They are of opinion that an organization should rather implement a sustainable growing path, than following a set of stages which were set out for them. Although many researchers suggest that organizations rather implement the dynamic theory of Levie and Lichtenstein (2010), an empirical research of the theory is firstly required to determine whether it is valid (Festre, 2002).

Furthermore, Levie and Lichtenstein (2010) stated that there are a need to properly understand the growth and development phenomenon of organizations and its importance

to the various industries. He believes there is a lack of shared knowledge, understanding, causes and effects of the phenomenon. In Churchill and Lewis's (1983) development model it indicates that the growth path is a social construct, since there are a lot of diversity involved. Furthermore, the heterogeneity of the organization and the founder's context add further challenges to the study and the understanding of the growth path.

One particular researcher, Penrose (1959), is of impression that an organization consists out of a number of internal and external resources, which if applied and used correctly, can provide the organization to achieve a competitive advantage in the market space and furthers growth of the organization (Ionescu and Negrusa, 2007). She also added to her studies that an organization can only grow to a certain extent, but the amount of employees and overall size of the organization, will always increase.

As mentioned earlier, the growth of an organization is of crucial importance to any organization. It is mainly determined by the rate at which experienced managerial staff can plan and execute on the decided goals and strategies of the organization (O'Rand and Krecker, 1990). Penrose (1959) further explained that the external environment and factors of an organization, is an image in the mind of the entrepreneur.

Van der Erve (2013) also contributed to this view by stating that at certain stages during the course of an organization's life cycle the organization should focus on the external factors, while in other stages, the internal factors of the organization is of more importance for the organization to ensure a sustainable growth to the next stage. His view on the importance of internal and external factors during the specific stages can be illustrated by figure 15 on the next page. Every transition of the organization into a next stage represents a turning point where the organization should shift its focus to either the internal organizational factors or external environmental factors.

Organizational activities and patterns are directed by productive opportunities, which are dynamic interactions between the external and internal environmental factors. The interaction between these factors results in productive opportunities which the entrepreneur should take advantage of.
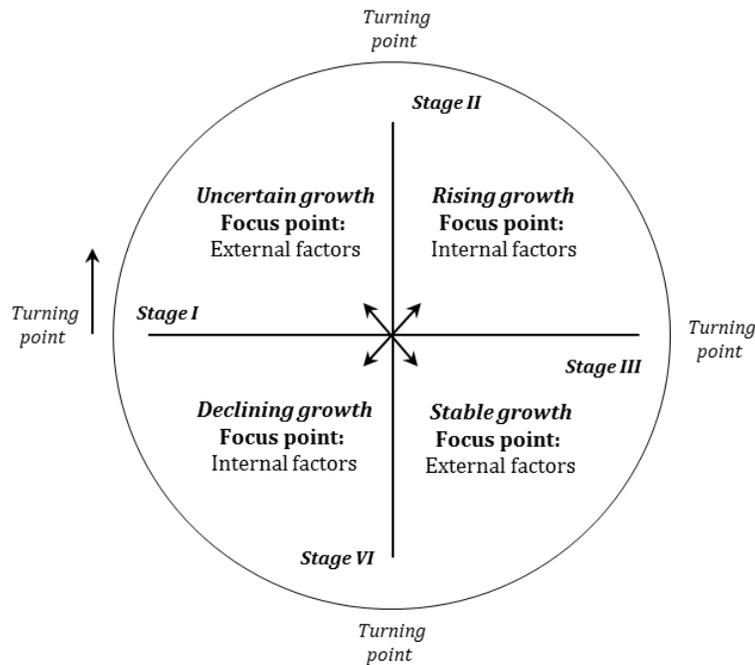
Figure 15: Marc van der Erve's (2013) illustration on the importance of
internal and external factors.

Penrose (1959) also believes that organizational growth is natural and normal; a productive process which will be favourable if the leadership takes advantage of the presented opportunities (Nazzart and Foroughi, 2012). The size of the organization is dependent on the growth of the organization, where Penrose (1959) defines an organization as 'a coherent administrative unit that provides administration coordination and authoritative communication'. Penrose (1959) is also of opinion that the future growth of an organization is limited by the scope of managerial resources, especially the ability of management to coordinate the organization's capabilities into the right direction and introduce new people to the organization (Quinn and Cameron, 1983).

In his book, *Entrepreneurial Management in Small Firms*, Ian Chaston (2010) suggested that as part of the life cycle concept of organizations, they are required to cross over a certain gap in the stage before the next stage in the life cycle can commence. He argued that organizations do not develop through a certain discrete development path; rather they are faced with growth gaps which differ from every organization and which each one should overcome (Chaston, 2010). Chaston (2010) identified five growth gaps which he believes every organization should achieve: launch capacity, expansion, organizational formalization,

succession, and long-term growth. The growth gaps which he identified are also known as '*chasms*'. The five defined chasms can be seen in figure 16 below.
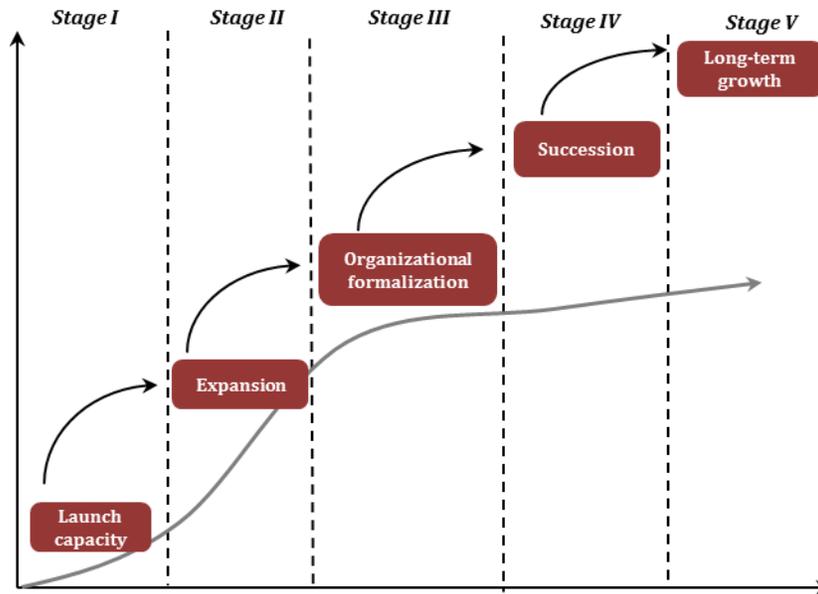
Figure 16: Illustration of the five 'growth gaps' as identified by Ian Chaston (2010) which every organization should overcome to commence to the next stage.

Overcoming each gap at every stage will require management to acquire new skills and prioritize managerial tasks inside the organization. Chaston (2010) also mentioned that for some organizations it might take longer to overcome the growth gap than others. Dunn and Cheatham (1993) also had similar growth gaps in their studies of life cycles. Together with their research, Chaston (2010) could identify reasons for organizations not to be able to cross the different growth gaps they face at the various stages (Gupta, 2013). These are:

- *Growth gap 1 ~ Launch capacity*: Lack of financial funds or non-viable means to new technology.
- *Growth gap 2 ~ Expansion:* Management were unable to generate demand or increase the organization's sales.
- *Growth gap 3 ~ Organizational formalizations:* The organization cannot keep up with the capacity expansion of the employees. Management needs to match the demand to the appropriate supply.
- *Growth gap 4 ~ Succession*: Failure to implement and sustain a formal organizational structure with professional management.

- *Growth gap 5 ~ Long-term Growth*: A well-structured and successful organization will require a skilled successor. To enable the successful sustainable growth of the organization, the founder may decide to appoint someone within the organization to take his place or bring a new chief executive in the organization. An ineffective replacement might result in the final growth gap.

4.8 Organizational growth patterns: Two sets of frameworks

To summarize the above mentioned organizational life cycles, there are primarily two frameworks which organizational life cycles can be classified as, either having a clear set of discrete stages of which an organization progresses through, or growth pattern frameworks where no barriers are important. Both these frameworks are summarized in table 6 below.

Table 6: Table summarizing the two different sets of life cycle frameworks discussed in the chapter

Two sets of Organizational Life Cycle Frameworks		
	Framework 1: *Discrete Stages*	*Framework 2:* *Non-Stages*
Known Researchers	Kenneth Boulding (1953) Larry Greiner (1973) Churchill and Lewis (1983) Miller and Friesen (1988) Hanks (1993) Lippitt and Schmidt (2012)	Penrose (1959) Phelps (2007) Rutherford (2003) Stubbart and Stanley (1999) Levie and Lichtenstein (2010)
Reason for Framework	Organizational life cycle models with discrete set of stages in which an organization progresses through are based upon the life cycle of a living organism or proven from historic empirical data sets.	Modernized research shows that abrupt internal and external environmental and organizational changes in the markets and industries today, cause organizations to follow their own growth path.
Driving Growth Force	o Management and Leadership o Time and Age o Overcoming specific 'hurdles', obstacles	o Rate at which employees and managers can action on plans, decisions and strategies

	and crisis in every organizational stage o External and internal environmental and organizational factors *Mainly resource- and configuration based*	o Opportunities presented in the market o Founder's vision of the organization, management and leadership style o Shifting of external and internal factors *Mainly strategic and motivation based*
Path	o Linear o Sequential o Deterministic o Variant	o Unpredictable o Non-deterministic o Flexible o Natural
Cycle Structure	Bell-shaped Continuous growth:	No specific cycle structure. Penrose (1959) indicated in her findings that the structure of an organization is 'natural, normal and without any discrete organizational stages'.
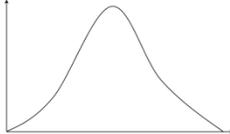
According to many organizational researchers, Churchill and Lewis (1983), Greiner (1972), Adizes (2012), Kimberley and Hanks (1993), the predictable framework defines that the growth path of an organization can be linear, sequential, deterministic or variant. There are different thoughts and models which were presented over the past few years, which define the growth path of an organization in a predictable manner starting from existence, survival, success, take-off, maturity and finally reinvention or death.

The organization's competitiveness in the market place, as well as among similar organizations, continuously increases from the start-up stage to the maturity stage of an organization (Anderson, 2005). However, during the decline stage, the competitiveness of an organization weakens, which is an indication of either organizational success or failure.

Chen (2008) suggests that the organization should focus on strengthening its capabilities during the various different life cycles.

While the other group of researchers suggests that there can be an abrupt pattern of changes throughout the growth path of an organization, especially in the early stages of an organization (Mohapatra, 2013). To add to their findings, studies have shown that due to unpredictable intervening factors like knowledge and technology, engaging capabilities, appropriateness of the founder's judgement, and a competitive environment, the sequence and progress of the suggested stages may be diverse in smaller organizations. Penrose (1959), Phelps (2007), Rutherford (2003) and Stubbart and Stanley (1999) have argued that the developed life cycle approach by so many researchers and the deterministic manner behind it, are not relevant to organizations. These researchers are of the impression that to describe the growth path of an organization through a number of stages is to compare an organization to a living organism. Majumdar (2008) points out that the growth and development of an organization, depends on the founder and management's vision for the organization. He also added to his findings that a developing organization is not only about maintaining a status quo, but also on putting the necessary capabilities and structures in place in order to ensure a sustainable growth (Cusumano, Suarez and Kahl, 2007).

As seen from the studies done from various researchers, organizational growth depends on the vision and motivation of management. The environment and market space in which the organization is operational is also an influential factor (Ionescu and Negrusa, 2007). Summarizing the study and research done on organizational life cycles and taking into account the various investigations done by organizational researchers, historical studies have shown that organizations develops through a number of discrete set of stages. Modern findings have shown that organizations tend to progress through their own set of development stages or path, since the technologies and competitive environments of today causes unpredictable, unforeseen changes and disturbances in the industries.

5. *Marc van der Erve's Developing Stage Theory*

"Uncovering the History"
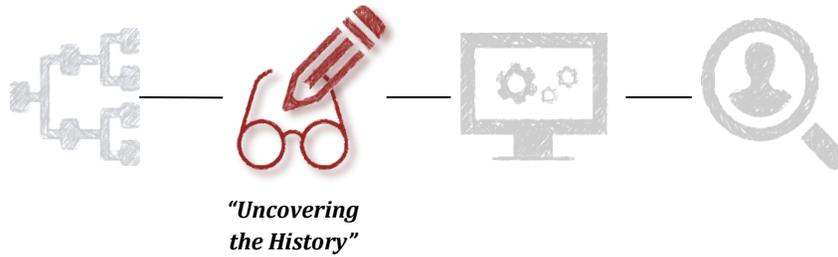
The previous chapter examined the origin, purpose and different stages of organizational life cycle models and theories in detail, while literature was also provided on the modernized outlook of organizational growth patterns and the paths followed by organizations today.

Chapter 5 examines Marc van der Erve's Development Stage Theory. The chapter aims to elaborate on: the origin of his theory, the specific stages it consists of and the corresponding applicable leadership role of each development stage. Different examples from the natural sciences and thermodynamics are also discussed to display the origin and thoughts behind the Development Stage Theory.

5.1 The new organizational revolution?

After a lengthy path of research and development that involved numerous publications, Van der Erve (2013) developed a model which describes the emergence and growth of organizations universally. He defines organizations as a 'pattern or group of behavioural patterns emerging into one' (Erve, 2013).

By lining up the various findings in the different sciences, including natural sciences (particularly in thermodynamics) and sociology, a four-stage developing growth model was introduced. Although his model is solemnly based on findings in the natural and sociology sciences, he is of opinion that the developing stage model can be applied in various other industries, including politics and the financial sector (Erve, 2013). His research and studies not only introduced a developing stage theory and framework, but it also combines a leadership role with each developing stage.

Van der Erve's main purpose of his developing stage theory is for an organization to appoint the most effective leadership at a specific growth stage during its developing path, resulting in added value for the organization. The future of the organization can thus be anticipated and acted upon timely and appropriately (Erve, 2013).

5.1.1   Origin of Marc van der Erve's Theory

5.1.1.1   Foundation of Van der Erve's Development Stage Theory

Van der Erve's evolved his theory from a social perspective before succeeding to natural sciences. As stated in his numerous publications, his developing theory grew 'at the crossroads of the natural sciences' (Van der Erve, 2013).

Van der Erve's (2013) th started off with an inductive research approach where he first explored the observations of organizations in '*Dynamisch Ondernemen'* (1986) that either moved towards entrepreneurship as a whole, or towards operational control (Van der Erve, 1986). One of his publications, '*In the Power of Tomorrow's Management'* (1989), reveals a pattern of corporate development on a curve which is universally known as the S-curve, or curve of *Natural Growth*, and is illustrated in figure 17 below.
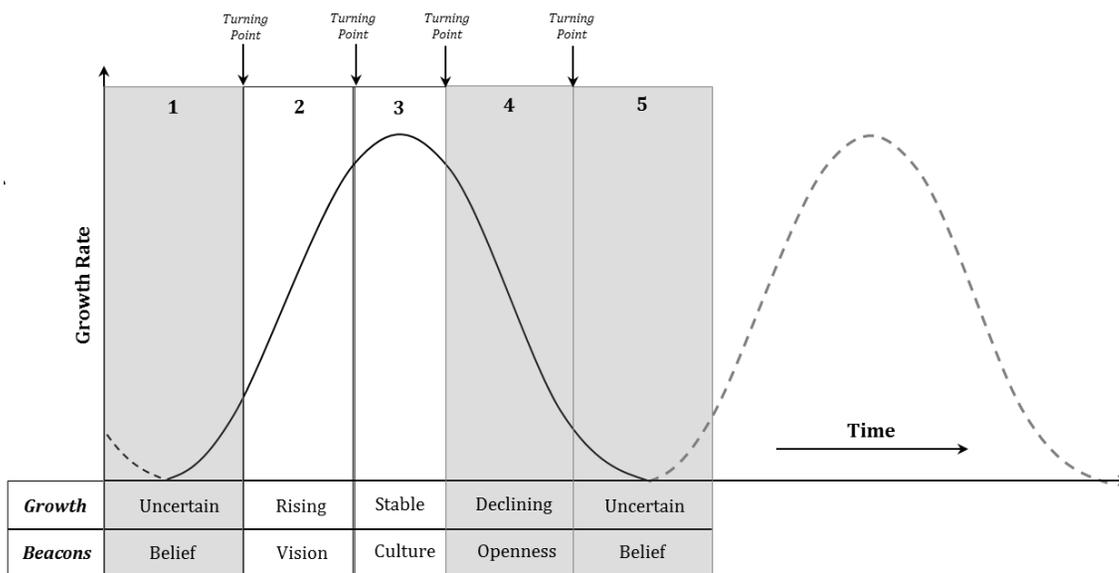
Figure 17: The curve of Natural Growth indicating the pattern between organizational development and cumulative revenue growth of an organization.

The cumulative revenue growth rate, as shown in figure 17 above, typically traces the shape of a bell as it increases, peaks and declines. As the revenue growth path changes, so does the attitudes of the organization – both variables are in sync. As the growth rate increases, as indicated in the first grey area, an organization is more open to external influences. The links and connections inside the organization are loosely coupled which allows it to adapt easily to the environment (Van der Erve, 2009).

Once the organization enjoys a rising growth pattern, as shown in the second area, it becomes more inward focused as it organizes itself to sustain its climbing path (Van der Erve, 2009). A sustainable frame of reference is starting to form and this causes the links inside an organization to become more tightly coupled and integrated; this state of stability is shown in the third area showing in figure 17 on the previous page.

Where the founder of the organization's vision inspired the attitudes of the organization at first, the organizational culture determines the way forward. This clearly shows the much needed change in leadership roles within an organization and how the organization's attitude is influenced. The growth stage continues until the cumulative revenue growth rate starts declining, as indicated in the fourth grey area in figure 17. Adverse developments and self-satisfaction of the organization can be the result of the declination (Erve, 2013). Established procedures are re-evaluated and simpler ones implemented. During this process links are cut and the organization fragments.

In the final grey area, stages 4 and 5, when the organization seeks external compensation from the market in the form of profit, it is too late. By this time, the organization's shareholders have lost interest in the organization and are contemplating selling their shareholding. In 1998 Van der Erve (2013) identified four distinct growth stages of organizational development based on the organization's revenue growth rate and from his findings above.

5.1.1.2 Leadership roles

Van der Erve (2009) continued his research into the predictable evolution of organizational attitudes. He broaden his pursuit for *patterns* within an organization by determining how

sociological characteristics change when organization exploit their revenue curve (Van der Erve, 2009). He specifically included the following characteristics in his study:

- ***Coherence:*** Integration versus fragmentation.
- ***Coupling:*** Loose versus tight, as well as organizational closure versus openness to change.
- ***Self-organization***: Autonomy versus interdependence.
- ***Attitudes:*** Risk-adverse versus consolidating.
- ***Evolution:*** Mutation versus diffusion.
- ***Social force***: Organizational vision of the original founder versus the organizational culture.

Van der Erve evaluated the idea that organizations are finite phenomena from a sociological viewpoint (Van der Erve, 2009). He showed that an organization grows to achieve something after which it might disintegrate and even self-destruct. He noted that the term 'achievement' resembles 'the fulfilment of certain needs of a customer group' in an organization (Erve, 2013). Van der Erve (2013) then went further and defined social elasticity as follows (Erve, 2013):

> *'A company [organization] resembles an elastic band in that it becomes brittle when it ages. As it traverses successive stages of growth is guided by distinctive beacons (or organizational attitudes) such as belief, vision, culture and open-mindedness. However, when links inside the organization multiply and become more tightly coupled, it becomes less elastic, even brittle up to a point where it may disintegrate or break when the environmental conditions force it to turn itself from the inside out. The beacons evolve likewise. They are elastic at the outset then become inelastic once they have become better defined. Inelastic beacons leave less room for exploration and initiative and, as a result, produce various growth-stage-specific turning points. Only rarely, companies [organizations] manage to regain elasticity by remixing and adding corporate components when trying to climb the revenue growth-rate curve again.'*

Van der Erve (2013) then eventually assumed the term *'organization'*, as a word that can also be used to present the recurring or reproducing patterns of behaviour. He defines recurring patterns of behaviour from a thermodynamic point of view, as patterns of behaviour that are typically those that are the least-energy fitting; the patterns that follows the paths of least resistance (Erve, 2013). To example his assumption, he presents a number of simple examples out of nature which resembles a *natural organization* where one can see the influence patterns of behaviour has on the overall development and growth. Van der

Erve's book, *'The next scientific revolution'*, introduced a new 'theory of natural organizations' by looking at the below examples, which can be seen as any entity or organization where a natural form of recurring patterns of behaviour are involved.

Some of the examples Van der Erve (2013) specifically focused on in his book, includes a heating of a jam jar, flock of geese, and a snowflake. All of these examples are thoroughly described below and the main principle of every example is captured in figure 18 below.
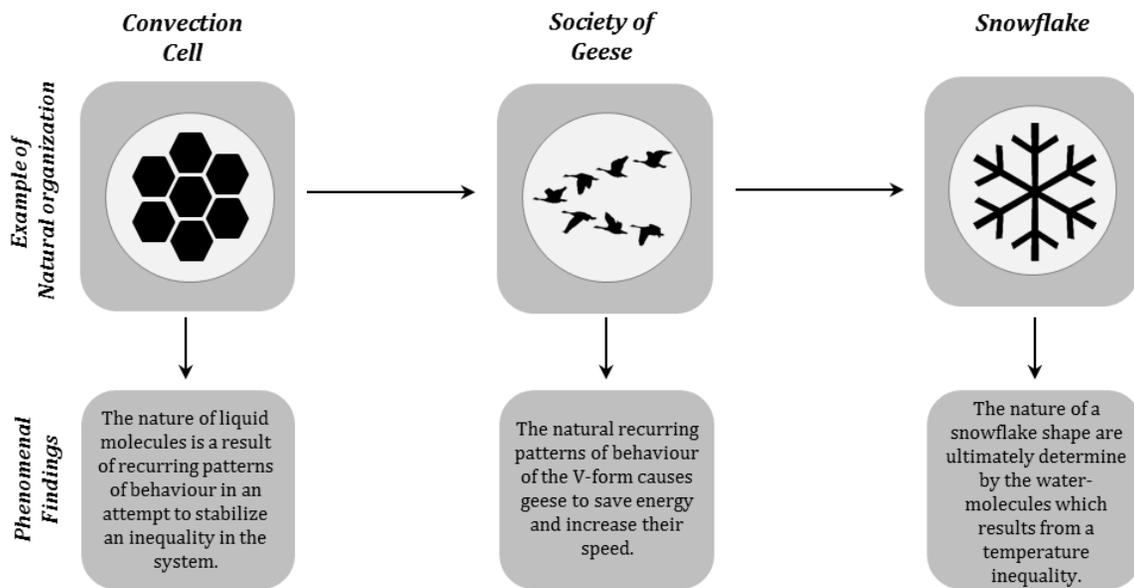
Figure 18: Examples of Natural organizations illustrating recurring patterns of behaviour as found in the research done by Marc van der Erve (2013).

~ Example 1: Convectional Cell (Heating a jam jar)

One specific example Van der Erve (2013) uses to illustrate the effect behavioural patterns has on the development of nature, is that of heating up a thin layer of liquid (Erve, 2013). At first the molecules shows no effect and continues with their normal disordered behaviour. Molecule behaviour drastically changes when the temperature between the bottom and the surface of the liquid reaches a certain level (Erve, 2013). Once this temperature level is reached, convection cells starts to form on the surface of the lid, which can resemble an orderly organization. These honeycomb-like cells are produced by 'recurring patterns of behaviour' which involves the molecules repeating the same path to transport the energy more efficiently from the bottom to the surface. These cells however lose their heat as they travel from the bottom to the surface of the cell. Rod Swenson (1992), American

evolutionary and systems theorist, sums up this phenomenon by emphasizing that this is nature's way of minimizing the temperature difference between the bottom and the surface so much 'as the local conditions allows it'. These molecules hinge on the path of the least resistance, that is, the least possible resistance given to the local conditions for the molecules to overcome (Erve, 2013).

This behaviour pattern of the molecules repeats itself as long as the temperature difference between the bottom and the surface is maintained by heating the liquid in the lid. Once no more heat enters the system, the behavioural pattern breaks up when the lowest temperature point is reached. Thus, from the example presented, a recurring pattern of behaviour does not emerge randomly; it exists to minimize the inequality in a system. Once a pattern is repeated, an 'organization' is shaped, just like the honeycomb-like cells which were shaped at the surface of the lid. Van der Erve (2013) therefore came to the conclusion that different forms of an organization are the outcomes of recurring patterns of behaviour which exists to minimize an inequality in a system (Erve, 2013).

The following pattern can be drawn from the conclusion which was presented with the example of the convection cells:

Inequality → Recurring pattern of behaviour → Formation of an organization

The true nature of a society of liquid molecules is not in its form of organization, but rather in the habit of recurring behavioural patterns in an attempt to stabilize an inequality in a system (Erve, 2013). This specific habit occurs at every level; both micro – and macro levels in a system are affected.

~ Example 2: Flock of geese

Van der Erve (2013) also uses the example of the flock of geese to emphasise the effect recurring patterns of behaviour has on organizations (Erve, 2013). Geese migrate to warmer regions once the days are shorter and the temperature drops. As geese fly from one region to the next as part of the migration process, they usually fly in a V-formation (Erve, 2013). Many theorists believe that this specific formation saves energy and increase their speed. Thus, a pattern exists until an inequality between the two factors has been reached.

~ Example 3: Formation of a Snowflake

The last example Van der Erve (2013) uses to illustrate the natural occurrence of recurring behavioural patterns, are the formation of a snowflake (Erve, 2013). He observed in his research that if snowflakes, grown in a process chamber where the conditions had been kept in a narrow range, all grew with a distinctive shape. Thus, in his findings, he found that under stable conditions, the temperature level determines the shape of the snowflake (Erve, 2013). He translated the temperature into the oscillation behaviour of the water molecules that have settled, assuming that most of the water molecules must have had the same such behaviour because of the temperature being kept stable. Hence, Van der Erve (2013) came to the conclusion that the relation between temperature and the snowflake's shape could effectively be compared to the link between the oscillation behaviour and the snowflake's shape. Thus, stating that the cause of the temperature inequality results in different water-molecules vibrating, which causes different snowflake shapes to form (Erve, 2013).

The stated connection, of which one only observes the final state, can be translated as follows:

Temperature inequality → Water-molecule vibrations → Snowflake shape

As shown in the above examples presented by Van der Erve (2013) in his studies and investigations, the sequence of behavioural habits comes across a wide variety of natural societies. All of the examples introduce another perspective on organizations. For one, like Van der Erve (2013) proofed in the above example, if a snowflake is an organization that involves the behaviour patterns of frozen water-molecules, then a corporate organization can be seen as an organization that involves the behaviour patterns of employees. He makes the statement that both are thermodynamic phenomena that convert energy more efficiently by adopting orderly behaviour. Van der Erve (2013) then goes further by stating that while the temperature inequality triggers and sustains the behaviour patterns of frozen water molecules (which shape the snowflake), an inequality triggers and sustains the behaviour patterns of people within an organization as well, which in essences shapes an organization.

John-Odling Smee, who presented the '*Niche Construction*', also showed in his research through the example of using termites that behaviour patterns creates environments that in

turn either sustains an organization or functions as a stepping stone for other behavioural patterns to occur (Odling-Smee, Laland and Feldman, 2003). As a result, repeated behaviour patterns 'forms' the shape of any organization. Thus, Van der Erve (2013) presents the transition from cause to symptom in a simple universal equation presented in figure 19 below.
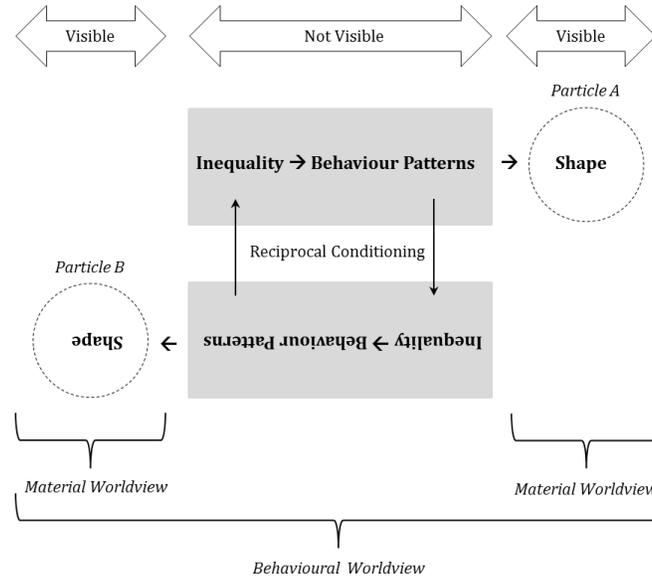
Figure 19: The simple universal equation Marc van der Erve (2013) concluded from his findings from several natural organizations examples.

Van der Erve (2013) specifically points out that these examples might emphasize specific nature behavioural patterns, but it does not necessarily mean that human societies do not show some similar patterns or abide by different laws. His statement can specifically be identified by the first example where the recurring patterns of behaviour simply disappear when the macro-level inequality becomes dominant in the system. With these various examples, Van der Erve (2013) stated that the insight in our world is not made up of components or shapes, but rather behaviour patterns triggered by a certain variable (Van der Erve, 2009).

People also have the ability to create conditions and circumstances that fosters certain behavioural patterns in societies and organizations. These behavioural patterns normally exist from the inequalities and complexities of micro-level factors, such as internal and external influences from the market, new ideas or innovations. Other micro-level factors

which also plays a crucial role in the behavioural state of people in an organization and society, includes constitutional values, laws, organizational objectives and even employee rewards and benefits (Van der Erve, 2009). However, both negative and positive internal and external influences trigger behavioural patterns within an organization.

One important factor which is emphasized in the examples illustrated in Van der Erve's (2013) research is that energy is needed for a recurrence of behavioural pattern to exist. Energy, in the form of heat is needed to convert the orderly movement of molecules for convection cells to form in the lid of the jar (Erve, 2013). Such an energy transfer is also needed in an organization to foster new ideas or inventions for the existence of new products or services. These findings resulted in Van der Erve being able to identify four leadership roles critical to a specific developing stage in his presented Developing Stage Theory (2013). These leadership roles ensure and provides the 'energy' needed for an organization to be most effective in the specific developing stage.

5.1.1.3 Validation of Van der Erve's theory and leadership roles

In order to justify the developing growth stages and leadership roles, Van der Erve (2013) surveyed and reported the outcome of 120 European executives and their evolving attitudes in each developing stage of organizational growth.

Van der Erve's (2009) findings were revealing, not only because the results deep-rooted his conclusions, but it also brought to light a misconception regarding the way organizations evolve (Van der Erve, 2009). The executives were under the impression that most corporate growth-related issues only exist in the 'rising' and 'stable' growth stages of an organization. This pointed to a narrow, growth-biased perspective of organizational existence, and showed that the other growth stages, together with the different issues and solutions it manifested, were ignored. This resulted in leaders and management ignoring the 'declining' and 'uncertain' growth stages, whereas it should actually be seen as stages of revival, creativity and reinvention of the organization (Schumpeter, 1951).

The survey participants assumed that they could bring back the initial organizational growth at the starting stages of the organization's life cycle by restoring the conditions of the 'stable' growth stage (Van der Erve, 2009). In other words, organizations believe they

can turn the growth pattern of their organization around by turning back the clock of organizational evolution.

Van der Erve (2009) noted the advantage of adopting revenue growth rate, rather than using revenue growth to determine the stage of organizational growth. Organizations with a slow rise or declining growth pattern can now be compared to organizations with a rapid rise or declining growth (Van der Erve, 2009). This allows one to compare the stages of slowly growing organizations in non-fluctuating markets with rapid growing organizations in highly fluctuating and evolving markets.

Van der Erve (2009) identified a predominant leadership role for each of the four growth-rate inspired stages. During this time, he acted as an advisor for many top-level executives where he focused on both organizational challenges and leadership needs. It did not take him long before he started relating the executives' careers and comfort zones to the identified stages of organizational growth. He also gained the knowledge that an evolving organization often forces leaders to function in a role that may not be their natural role; causing the leader to adapt and change accordingly. However, some organizational leaders resisted the idea that their reign might ideally have to become limited to one stage of organizational growth only. This left a largely unused opportunity to identify leaders whose comfort zone would better fit the needs of an evolving organization (Van der Erve, 2009).

He then put his four identified leadership roles to the test in his publication, which documents the findings, '*A new Leadership Ethos'* (2009). In this book he further explores the role of leaders during the developing stages of historical, corporate and national cases such as GE, GM, Toyota, the United States of America and even South Africa. The consistency in his findings and the leadership roles in subsequent stages of historical, corporate, and national development lead him to predict the election of an unlikely outcome at that time, US Presidential candidate, Barack Obama, more than eight months before the election took place (Van der Erve, 2009). According to Van der Erve's analysis, the United States of America entered a developing stage of exploration and discovery, and would need a transformer-type leader; a typified leader that characterized Barack Obama perfectly.

5.1.2 Marc van der Erve's Developing Stage Model (2013)

The organizational developing stage model presented by Van der Erve (2013) is not based on historical experiences or situations, rather it might be used to explain the past and act as

a guide for the future. His research focused on the development and design of a model that would sufficiently allow people to analyse and state the stage of development in an organization, in order to appoint the most effective leadership role at a specific developing stage, and for the organization to progress from one developing stage to the other (Erve, 2013).

Van der Erve (2013) states that in the presented developing stage model each stage present a quarter on a universal clock showing how societal expressions and behaviour emerge in an environment and in nature (Erve, 2013). This provides any organization with the knowledge of what might happen in the future and what can be learnt from the past. The behavioural expressions and actions of organizations are evaluated according to specific criteria, such as operational openness, rate of growth, social force, inspiration and main focus point in the organization (Erve, 2013). From here, the organization can then be classified into a developing growth stage, while also indicating the significant leadership role which is needed at that specific developing growth stage.

Van der Erve (2013) terms this universal clock as 'Nature's clock of corporate emergence', which are shown in figure 20 on the next page.
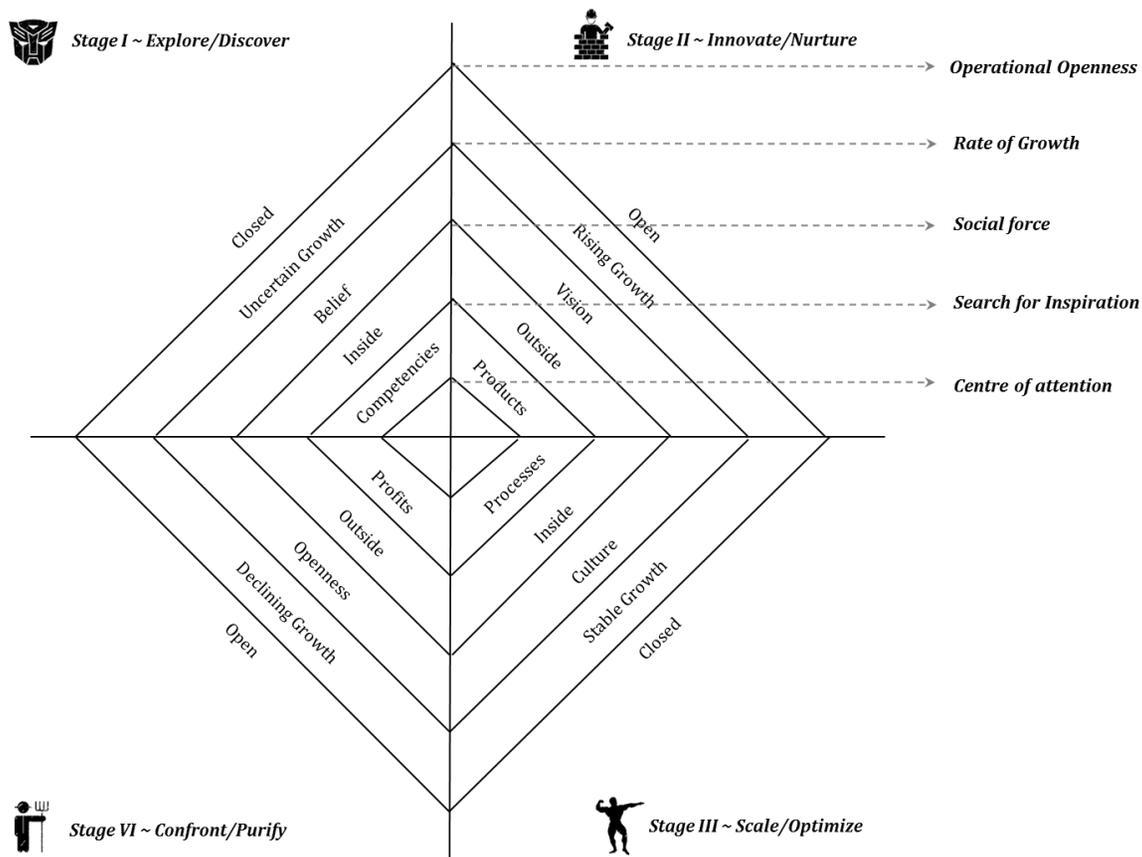
Figure 20: Marc van der Erve's 'Nature's Clock of Corporate Emergence' (2013).

These four developing growth stages, together with specific leadership role characteristics at each developing stage, are explained below (Erve, 2013).

~ Stage I: Explore and discover (Transformer leadership role)

Shown in figure 20 above, the first growth stage, '*explore and discover*', emerges when an inequality of different factors arises (Erve, 2013). Specifically in a society, this stage arises when an inequality is discovered which are worth minimizing, such as a need or a problem that needs to be solved. Once a 'gap' or micro-level inequality has been found, the stage then gives way to the next growth stage. During the first stage a *transformer* type of leadership role is needed. In this developing stage, there is no operational openness in the organization and management puts their trust in the internal factors within the organization to gather inspiration, while placing their main focus on the organization's competencies (Erve, 2013).

~ Stage II: Innovate and Nurture (Builder leadership role)

The second stage in the developing stage theory which Van der Erve (2013) presents concerns the early starting stages of the recurrence of behavioural patterns. This stage specifically involves a trial and error situation where different products and services, known as macro-level inequalities and which can possibly solve some problems, are introduced in the market to determine whether these products or services satisfies the market niche (Erve, 2013). Thus, the main objective of this stage is to discover a product or service which best satisfies the macro-level inequality in a specific market group. Behavioural patterns are contributors to the minimization of the macro-level inequality in the market. As a result, the most efficient patterns are nurtured and repeated to ensure a successful outcome (Erve, 2013). The '*innovate and nurture*' growth stage also triggers important questions in the organization, such as: 'which product prototype best satisfies the customer's needs?'. The most important factor the organization should also keep in mind is how they are going to sustain the solution in the future.

The innovate and nurture stage is also a rising growth stage where the organization is open to new operations as the main focus is on providing new innovative products and services for its customers. Van der Erve's (2013) research showed that the best leadership role fitted for this stage is that of a grower type of leader; a person nurturing the organization's vision and looking for external factors to improve the current products and services (Erve, 2013).

~ Stage III: Scale and Optimize (Grower leadership role)

During the third stage, which can be defined as the 's*cale and optimize*' growth stage, the behavioural patterns which became prominent during the second stage are repeated and emphasized (Erve, 2013). However, although these recurring behavioural patterns do balance out some of the macro-level inequalities found in the system, new inequalities arises which requires attention and needs to be minimized.

The same resemblance can be found in organizations, however, during this stage management is mainly focused on improving the behavioural patterns within the organization by the specialization and optimization of various systems and procedures in the organization (Erve, 2013). In this stage the organization's perception is shifted towards the inner inequalities that exist within the organization (Erve, 2013). Over time, the

behavioural patterns and responses from the organization's staff members is often standardized to solve the internal and external problems. Although these responses may be flexible, at some time during the third stage a point is reached where these responses or solutions become incapable of solving problems or satisfying both the staff members and customers' needs. As the market, technology and customer's needs change, so does the inequalities within a system and new solutions are needed to retrieve a balance. Moreover, the recalibration and solutions for the newly emerging macro-level inequalities in an organization can then not necessarily be solved by the current management in the organization.

Van der Erve (2013) identified a grower type of leadership role to be best-fitted for this developing growth stage, as this leader focuses on the internal processes and structures of the organization to ensure optimal optimization (Erve, 2013). Furthermore, the organization is closed for any operations and the attention shifts to the processes and culture of the organization.

~ Stage VI: Confront and Purify (Reformer leadership role)

In the '*confront and purify*' growth stage the structures and procedures that were put into place in the previous stages, are starting to crumble as the external macro-level inequalities change (Erve, 2013). In organizations, the fourth growth stage resembles a period of confrontation and purification. The overall perspective of the organization now shifts to the external factors of the market again. This is done to reassess the external macro-level inequalities in the market and environment, before re-standardizing the behavioural patterns of the organization (Erve, 2013). Generally, the complexity of the recurrence of behavioural patterns in an organization are simplified in order to improve the performance of the organization and to ensure that objectives are still met.

During this growth stage, people who have a different and more adaptable perspective are appointed. Appointing new staff members bring along both negative and positive factors. Although new staff members are open to change and bring new innovative ideas to the organization, they might find it difficult to buy into the objectives and overall goal of the organization because they were not part of the organization from the start.

As a result, this growth stage produces a more simplified outlook on the recurrence of behavioural patterns, which are aligned with the identified macro-level inequalities in the market (Erve, 2013). The performance of the organization improves dramatically during this stage, since most structures and procedures are in place and many solutions to the identified problems are already implemented. However, the growth potential and development of the organization usually diminishes during this stage. This is also the main reason why many organizations prefer to fragment the organization.

Van der Erve (2013) noted a reformer type of leadership role to be most significant in the final growth stage of his developing stage theory, since although the organization faces a declining growth, the person is focused on attaining profits for the organization by shifting to external factors and purifying the structures, operations, products and services of the organization (Erve, 2013).

5.1.3 The new future of developing organizations

In both public and private organizations, management seem to be unaware of the opposing side effects that behavioural patterns and actions have on an organization as it progresses from one developing growth stage to the next (Miller, 2007). Many organizations stay in their stage-perspective outlook and are not open for changes. In these cases, Van der Erve (2013) is of opinion that a new 'leadership ethos' is also needed.

Both Van der Erve (2013) and Miller (2007) emphasize the crucial awareness and ability management should have to distinguish between the different developing growth stages and to determine the specific growth stages of organizations. This will allow management to identify the behavioural patterns which are necessary in the organization, as well as the strategies which should be in place in order for the organization to progress to the next growth stage. Management's awareness and understanding of the developing stages of the organization will help the rest of the organization to effectively progress to the next stage without any unplanned misfortunes and events. Being able to provide the organization with a broader view of the future will also empower staff members to overcome their mental perspectives and concepts (Miller, 2007).

Van der Erve (2013) is of opinion that the development model represents an objective framework that could inspire many organizations to be more efficient and improve their performance in the future. He concludes his research by stating that if an organization follows the developing stage theory and appoints the correct leadership role within the corresponding developing growth stage, the performance of the organization will be successful.

6.   *Evaluation of 'history'*

*"Uncovering
the History"*
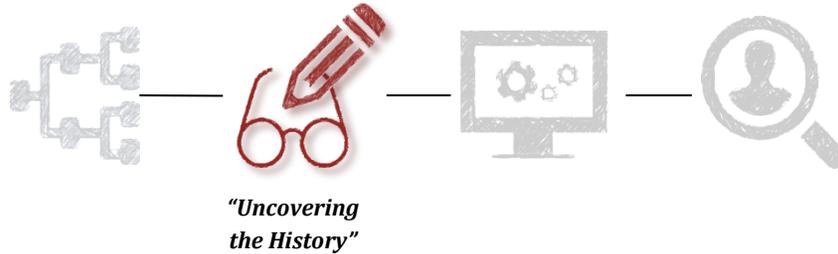
*The second phase concludes with **chapter six** where the feasibility of the development and introduction of the idea in the market is determined.*

The chapter considers, by exploring historic developed organizational life cycle models and investigating the newly developing stage theory of Van der Erve (2013) , whether there are any similarities or discrepancies amongst the different organizational life cycle models and theories; and if Van der Erve's theory can be related to any of the previous models. Each criterion will be discussed in detail, emphasizing the conclusions found in every identified organizational life cycle model and Van der Erve's theory.

Chapter six concludes the second phase of the presented project with a thoroughly summary of the findings when each chosen life cycle model or theory is evaluated against the specific criterion.

6.1 *Evaluating the organizational life cycle models*

Every growth stage which an organization progresses through focuses on its own unique structure, systems and leadership (Gabisch and Lorenz, 1955). Although some experts believe that the entire growth period for any organization can last between 3 to 15 years, Greiner (1972) is of opinion that the industry in which the organization founds itself, determines each growth stage's time period.

Another conclusion which Greiner (1972) observed is that no transition from one growth stage to the other, is a smooth and natural transition (Greiner, 1972). Management needs training and sometimes even external advice to advance from one growth stage to the next.

He also highlights the fact that the greatest resistance to change exists at the top management levels, since revolution often means that units or departments under a senior executive must be eliminated or transformed (Greiner, 1972). This can be regarded as one of the reasons why most organizations often appoint new chief executives and why some senior managers frequently leave the organization. Other managers leave the organization, because they stopped believing in the goals and strategy set out for the organization (Ionescu and Negrusa, 2007).

In the following chapter, the identified life cycles from the various organizational researchers, will be evaluated against the following criteria:

- *The organizational researcher's definition of an organization*
- *Purpose of the life cycle model/theory*
- *Number of stages*
- *Origin of the life cycle*
- *Principle field of interest*
- *Rationale behind the life cycle model*

This evaluation will aid in the identification of research gaps in life cycle models and will also be used to evaluate Van der Erve's (2013) developing stage theory to determine whether his theory is applicable to modern organization's growth today.

6.2 Criterion 1: *The definition of an 'organization'*

6.2.1 What is an 'organization'?

An organization can be defined as 'a consciously coordinated social entity, with a relatively identifiable boundary, which functions on a relatively continuous basis to achieve a common goal or a set of goals' (Ionescu and Negrusa, 2007). By discussing an organization and the definition thereof, one must firstly begin by defining the *'system'* to which the organization adheres to. Ludwig von Bertalanffy (1950) was one of the very first theoreticians who formulated the basic principles of the general theory of open systems. Ludwig (1950) defined a system as 'a total sum of elements that are interacting'. Kast and Rosenzweig (1987), on the other hand, were of opinion that an open system is 'an organized unitary whole composed of two or more interdependent parts, components, or subsystems

and delineated by identifiable boundaries' (Tripon and Dodu, 1987). Thus, in summary, the concept of a 'system' can be indicated by the following:

- Interdependence
- Interconnectedness
- Interrelation between the elements of a set that is seen as a whole or an identifiable *gestalt*.

In the findings of Katz, Kahn and Hanna (1987), all systems are similar to mechanisms that transform an input in a certain output by using an internal factor, power or mechanisms that differs from one system to another (O'Rand and Krecker, 1990). The *input* is represented by energy, matter or information and it guarantees the system's survival. The power or mechanisms used to convert the input into a specified output, refers to the internal and external activities of an organization (von Bertalanffy, 1950). Figure 21 below illustrates a system which represents the inputs, mechanisms used and the ultimate outcome of the system when a system is in interaction with its environment (O'Rand and Krecker, 1990).
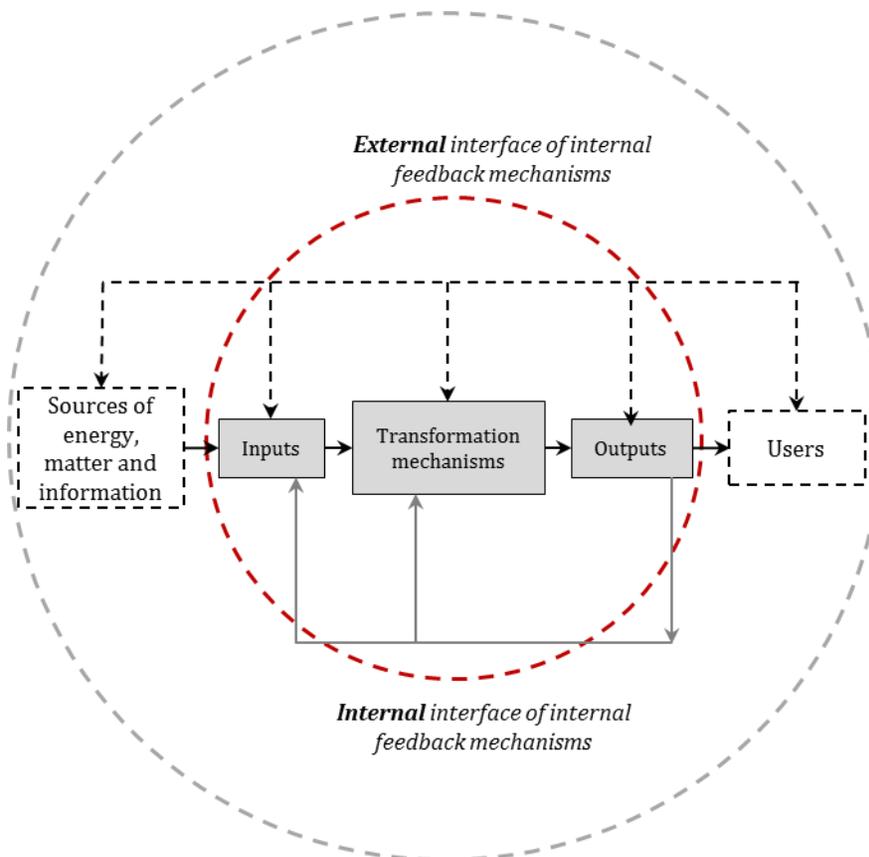
Figure 21: The interaction an open system has with the environment.

Every system has identifiable boundaries that represent the interface between that system and its environment (von Bertalanffy, 1950). These boundaries are absorptive, however most changes and activities in an organization takes place internally (Tripon and Dodu, 1987). These changes and activities are much more controllable than the external factors and activities which take place in the outside environment of an organization's industry. The external activities also have a direct effect on the performance and development of an organization. In summary, a system's activities are mostly internal and can in most cases be controlled, while its relations to the environment are only a small fraction of the processes and activities that connected to it (von Bertalanffy, 1950).

An open system is a system that can be influenced by both internal and external environmental factors. The entity's goals and objectives cannot exist independently from the values and requirements of their external environment. Each system also displays a certain degree of autonomy and authority in order to survive the internal and external factors. However, the autonomy and leadership differs from one system to another depending on the system's features, the type of environment the system functions in and system-environment relations (von Bertalanffy, 1950). The autonomy or leadership in every system will have a direct influence on the main purpose of the system. For example, one aspect where the purposes of leadership are directly shown, is in the outputs of a system which may or may not be accepted by the environment in which the system functions.

Another significant aspect of systems, which were also implicitly shown in the studies done on life cycle models, is that systems can disintegrate at any stage in time. However, many systems manage to keep this under control by implementing various mechanisms and processes to preserve the unity of the system.

Any system, but also any organization, needs valuable information to survive and perform successfully (Sabol, Sander and Fuckan, 2013). Information can also be seen as the feedback the system receives regarding its output from the environment. There are mainly two types of feedback: positive or negative. Hanna (1987) refers to negative feedback as 'the feedback that measures the extent to which the output corresponds to the goals and objectives'. This type of feedback is also known as the correcting deviation in the system (O'Rand and

Krecker, 1990). Positive feedback from the environment refers to the measurement and extent to which the goals and objectives corresponds to the requirements of the environment. Positive feedback is also better known for amplifying deviation.

Systems are also continuously overwhelmed with information and feedback from the environment. Part of the information is useful and the activities and mechanisms which produce the output can be adjusted to accommodate the valuable information. Only the information that is relevant to the specific environment in which the system functions are used to change the activities and mechanisms in place. The other information or data points are ignored (O'Rand and Krecker, 1990).

Another important feature of an open system is its dynamic ability to ensure balance between all the elements in the system (Sabol, Sander and Fuckan, 2013). The system reaches a certain state of balance and tends to maintain it, even though internal or external factors might attempt to change or modify it. Any system has the tendency to preserve its own status-quo or its own state of equilibrium. Nevertheless, over time, systems tend to become much more specialized and complex. The more complex and specialized the system gets, the greater the need develops to integrate and coordinate sub-systems within the system. Specifically in the case of an organization, a need for management and leadership within the organization develops.

Finally, one last feature of a system which is in correspondence with the study of organizational life cycles; is that there is no way of attaining a certain goal or stage within a system (Sabol, Sander and Fuckan, 2013). However, any system may reach the same stage or position through various ways, but no system can have the same goal or objective. In this case, management styles and perspectives play a role.

There are various different definitions of organizations, some only relate to profitable entities, while others mainly focus on non-profitable entities. Literature shows that different researchers are of the opinion that different factors are important when defining an organization. However, some important points in viewing an organization and how it can be defined are listed below (Sabol, Sander and Fuckan, 2013):

1. ***Organizations are rationale entities that pursue attaining certain goals*** – Organizations exist mainly to reach a set of goals, which can either be classified as profitable or non-profitable, but the behaviour of the members of an organization may be described as a rationale attempt of reaching the goals set out for an organization.

2. ***Organizations are combinations of groups of power*** – Some organizations consist of a number of groups which are only interested in their own future. These groups often use their power to direct the resources within the organization in the direction that the specific groups want to progress ~~to.~~

3. ***Organizations are open systems*** – Organizations need a certain type of input to deliver an expected output. In order for an organisation to survive, they depend solemnly on the internal and external factors of their environment.

4. ***Organizations are systems with a signifier*** – An organization's goal and objectives are conceived symbolically and are supported, driven and preserved by management. Thus, it can be stated that organizations are entities which are designed artificially.

5. ***Organizations are fragmented systems*** – Organizations consists of a number of smaller groups or departments which are independent units and have their own goals and objectives. These goals and objectives might be in line with the goals of the organization or it might be in conflict.

6. ***Organizations are political systems*** – Organizations also consist of groups that are the decision makers within the organization, in order to consolidate their own positions.

7. ***Organizations are instruments of dominance*** – Some organizations tend to utilize their employees in departments where their freedom to innovate or interact socially are restricted. Moreover, these employees might have a superior that has a certain amount of authority over them which restricts their own decision making in certain situations in the working environment.

8. ***Organizations are units of processing information*** – Organizations have structures, processes and systems in place which evaluates the current environment, coordinates the activities that takes place and facilitate the decision-making procedure by processing information by way of a hierarchical structure.

9. ***Organizations tend to limit their employees*** – Some organizations tend to limit their employees by creating job-descriptions, dividing their employees into departments and by setting standards of acceptable and unacceptable behaviour. Once these elements and factors are implemented it automatically limits the employees' decisions, choices and innovation.

10. ***Organizations are social contracts –*** Organizations consist of a set of unwritten agreements by which members commit themselves to completing certain tasks and to behave in a certain way in exchange for certain compensations.

6.2.2 Chosen organizational researchers' view of an 'organization'

In order to fully comprehend a life cycle theory or model, one must understand the view the organizational researcher has on the term 'organization'. One adheres to the paradigm where an organization can be defined as an open system, engaged in exchanges of matter, energy and information of the environment (Francois and Lolyd-Ellis, 2010). Organizations can also be of a more biological type where it is 'born', progresses from moments in time, and later being able to adapt to the specific environment it finds itself in (O'Rand and Krekcer, 1990). This definition of an 'organization' is especially adapted by Boulding (1953) in his development of a life cycle model.

Boulding (1953), one of the very first researchers to develop a life cycle theory for organizations, compared an organization to a living organism (Boulding, 1953). The development of Boulding's theory originated from looking at the life cycle and growth stages of a living organism. He used these findings to base his studies on profitable organizations (Wang, 2005). In theory, Boulding (1953) was of opinion that an organization is a group of people, similar to a living organism, which are driven towards one main goal: to generate profits.

As known by many, organizations can either be classified as profitable or non-profitable. However, many of the life cycles investigated, are specifically based on organizations which main goal is to generate sustainable revenue (Boulding, 1953).

Lippitt and Schmidt (2012) based their findings of organizational life cycle growth on the most-known definition of organizations. Their life cycle focuses mainly on the private

sector. An organization in the private sector's main goal is to generate profit for the organization. All of the other organizational life cycle experts, which models have been discussed, follow the same view as that of Lippitt and Schmidt (2012). All of them are of opinion that organizations consist of a group of people who shares a common goal, although this goal is not similar in every life cycle model discussed.

Downs (2013) are the only organizational researcher who viewed and based his life cycle findings on government organizations (Jansen, 2004). Although the organizational structure which his life cycle is based upon are a non-profitable organization, he is still of opinion that an organization is a system or entity which are driven by a certain goal.

However, van der Erve (2013) viewed an 'organization' as a different entity. Van der Erve (2013) sees an organization as a phenomenon which appears both in the social sciences and in natural sciences. He specifically refers to Huntington's (1996) definition of organizations and reasoned that it can be defined as 'stable, recurring patterns of behaviour'. Interestingly, in his definition Huntington (1996) did not refer to any form of human components or interactions as many others have done before him.

Considering Van der Erve's (2013) investigations in the natural sciences, one arrives at a more profound insight into the emergence of organizations and how they can be defined, since no form of management examples exist in nature. Management and their managerial perspectives are the main drivers for the development of an organization in the most known definition of organizations.

By comparing the emergence of organizations in the world of social sciences to the emergence of organizations in the leaderless world of the natural sciences, the focus point of leaders and management comes into question (Erve, 2013). Van der Erve (2013) illustrated his findings by looking at peculiar examples in nature. For instance, when looking at the successful migration of a flock of geese in a V-formation, it can be stated that harmonious actions determines organizations. Van der Erve (2013) also shows how forms of organizations emerge spontaneously to minimize inequalities in nature by looking at temperature, different markets and human inequalities.

However, it can also be said, by looking at the above identified examples in nature, that although inequalities are formed from temperature, human behaviours and different formations, the particles and molecules all move towards one particular goal or point. Although Van der Erve (2013) defines an organization as 'recurring patterns of behaviour', it can show correspondence to Lippitt and Schmidt's definition of an organization, as well as many others, where an organization progresses towards one particular goal. However, where Van der Erve (2013) saw the *'goal'* or particular point that needed to be attained as a natural formation, Lippitt and Schmidt saw is as a financial benefit for the future.
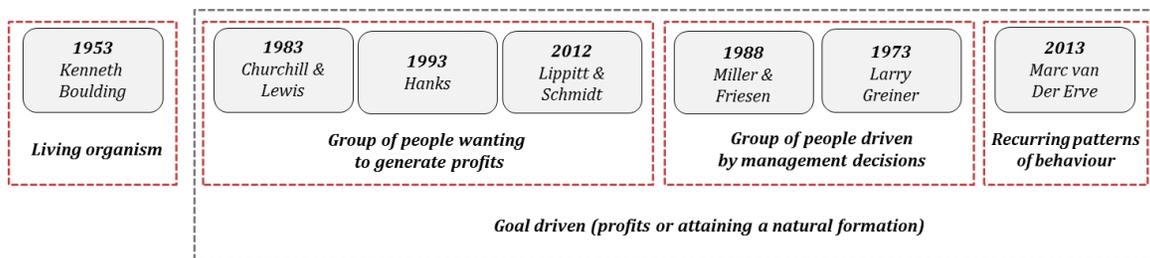
Figure 22: Illustration indicating the differences and similarities between the chosen life cycle models and the the first criterion.

The main difference between the various life cycle models investigated and Van der Erve's (2013) definition of organization, is that the main driving factor in the emergence of organizations are not based on management or leadership, but according to Van der Erve's (2013) theory on behavioural patterns to ultimately attain a specific natural formation, or 'goal'. However, Van der Erve (2013) does not believe that leadership does not play a role in the rise of organizations; rather he states that the role of a leader is to create awareness within the organization in order for the organization to continue to develop. The main focus point, differences and similarities between the life cycle models' definition of an organization, and Van der Erve's definition, can be seen in figure 22 above.

6.3 Criterion 2: *Purpose of the chosen life cycle models/theories*

The main purpose of the development of a life cycle model of an organization is to determine beforehand what will be the possible discrete stages or phases of growth that an organization might progress to. Many organizational researchers relied on historical information and data to develop discrete growth stages which they believed any organization will follow throughout their life cycle. This gave organizations the ability and opportunity to predict their development before it might occur (Schumpeter, 1934). With

this knowledge, it enabled them to put the necessary structures, processes and risk mitigation structures in place to ensure a sustainable development for the future.

The main purpose of the represented life cycle models differ from one another, even though the researchers might see an organization as a similar entity with similar set of goals and objectives. Hanks (1993) and Boulding's (1953) life cycle model's main purpose shifts from one stage to another. At the start of the life cycle model, the main purpose of the life cycle is to generate profits (Boulding, 1953). The growth and survival of the organization only comes into focus when the organization has reached the next growth stage in its life cycle. However, Hanks's (1993) main outlook of his model might be similar to that of Boulding (1953), but Hanks (1993) also believed that an organization should maintain a balance between organizational growth and controllability. For this reason, Hanks's (1993) model also focuses on the external environmental factors which might affect the organizational growth and cause imbalance in the overall performance of the organization (Saleh and Davidsen, 2001).

Churchill and Lewis (1983) support Boulding's (1953) model's purpose when they developed their presented life cycle model. However, in Churchill and Lews's (1983) model the main focus at the start of the venture, is to ensure the existence of the organization. Generating revenue for the organization only starts in the third growth stage of the life cycle (Festre, 2002). Since the model is designed for small to medium organizations the amount of staff members are limited and the amount of managers are also restricted in comparison to larger organizations. The focus point is not on the managerial aspect of the organization, rather the life cycle model emphasizes the important factors management should pay attention to in order for the organization to be a success.

Boulding's (1953) model is one of the main models which focus on revenue growth, while Lippit and Schmidt's (2012) model are not concerned with an organization's size, market share, age or management. The main purpose of their model is to determine the key issues faced by the organization and how the organization will overcome these problems (Lippitt and Schmidt, 2012). Whether it is a combination of management, internal factors or the help of external consultants, Lippit and Schmidt's (2012) model sets out to assist management by

asking the right questions at the right time to overcome certain hurdles in the organization, before progressing to the next stage.

Similar to Lippit and Schmidt's (2012) purpose for their life cycle model, Greiner's (1972) *Evolution and Revolution* life cycle model identifies revolutionary problems which any organization experiences progressing through its life cycle. These identified problems gives way to the start of the next growth stage in any organization. The purpose of Greiner's (1972) model is for organizations, especially management, to identify these revolutionary problems and combined with the characteristics Greiner (1972) identifies in every growth stage, organizations will be able to overcome the revolutionary problem and progress to the next evolutionary stage (Greiner, 1972).

Miller and Friesen's (1988) model follows a similar path and purpose as Greiner's (1972) model. The two researchers' model sets out to identify the hurdles which an organization might face during a growth stage, either being external or internal. Their main focus point is not necessarily based upon management perspective, but rather on both internal and external environmental factors of the organization, as well as the industry in which the organization functions (Saleh and Davidsen, 2001).

Van der Erve's (2013) developing stage theory focuses primarily on recurring patterns of behaviour, as he is of opinion that the behavioural patterns of any natural organism, will determine the future growth path. The main focus of his model also portrays the purpose of his developing stage theory: by investigating the recurring patterns of behaviour in an organization, the specific developing growth stage of the organization can be determined. Having knowledge of the specific developing stage in which the organization finds itself, will enable the organization to appoint the correct leadership at the right time in order for the organization to attain successful performance in the particular developing growth stage (Van der Erve, 2013). This illustrates the purpose and contribution Van der Erve's (2013) developing model can make in many organizations: by identifying the specific development growth stage, any organization will know which leadership role is needed at any specific time period in order to be successful (Van der Erve, 2013).

Figure 23 below compares the different chosen life cycle models' purpose, as well as Van der Erve's (2013) developing stage theory's purpose. As shown, Boulding (1953), Churchill and Lewis (1983) and Hanks' (1993) life cycle models' purpose are profit driven, while the other life cycle models are all centred around management and the problems management needs to overcome at every growth stage.
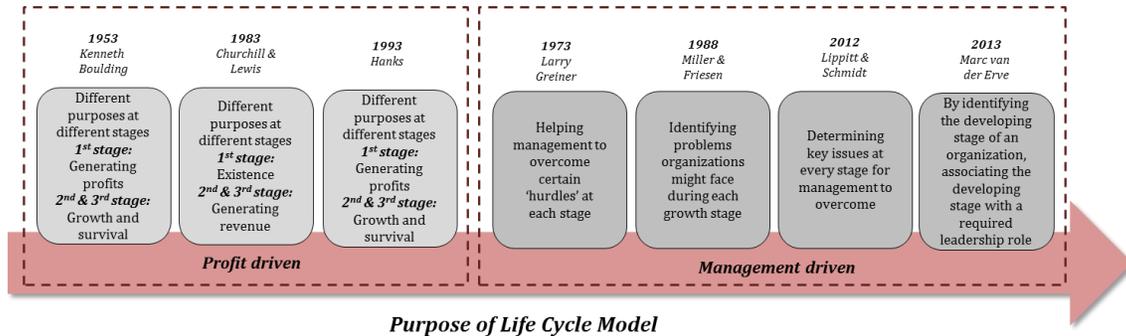
Figure 23: Purpose of every identified life cycle model or theory.

The overall purpose of Van der Erve's (2013) developing stage theory model is similar to Greiner (1972) and Miller and Friesen's (1988) model. All three life cycle models or theories aim to make a contribution towards the managerial perspective and leadership roles of an organization by either evaluating the current position of the organization in its life cycle, or by identifying the internal and external problems the organization faces during that time.

6.4 **Criterion 3:** *Origin of the chosen life cycle models/theories*

The life cycle concept originated in the bio-physiological science field and has ever since been widely applied in various areas, including the social sciences for its adaptation to the issues concerning the development and growth of civilizations, cultures and languages (Wang, 2005). Over the years, many organizational researchers and experts based their findings and research on the biological metaphor from which life cycle models originally originated from, namely birth, youth and maturity and overall decline (Schumpeter, 1939). Researchers applied the concept of life cycle theory as either metaphorically or heuristically to initiate a form of analysis (Wang, 2005). While others expanded their studies by using life cycle models and theories as the core assumptions of a research program in a development process (Wang, 2000).

Boulding (1953), Lippitt and Schmidt (2012), Churchill and Lewis (1983) and Hanks (1993) based their life cycle models on the traditional biological outlook of life cycle models. By

combining biological sciences with the patterns of strategy, structure, management and decision-making found in different organizations, they were able to develop different life cycle models. Each life cycle model has a different purpose in an organization, but originates from the same biological tradition of a living organism. The organizational elements in every life cycle model might differ, but the overall theme of the model or theory is similar and connected.

However, of all the various life cycle models proposed over the years, only two investigated in this study are based upon empirical tests and historical measures. Hanks (1993) presented a model based on empirical data used. Both studies performed by Miller and Friesen (1988) and Greiner (1972) aim to establish a typology that could be used to predict the differences between organizational- and environmental characteristics in different organizational development stages (Nazzart and Foroughi, 2012). Both researchers also highlighted the different problems or 'hurdles' an organization needs to overcome when they are in a specific development stage during their life cycle. Longitudinal studies provided evidence of the growth stage problems and evolutionary sequences between life stages were done in order to develop the presented life cycle models by Miller and Friesen (1988) and Greiner (1972).

A different outlook was presented by Van der Erve (2013) when he based his developing stage theory on both natural and social sciences. The presented model is also consistent with the universal laws founded in thermodynamics that rule the unfolding of nature (Van der Erve, 2013). This can specifically be seen in the examples Van der Erve (2013) uses to illustrate his development stage model.

By identifying the parallels and differences between the two sciences, he was able to develop various life cycle stages and combine leadership roles to every stage accordingly. One of the major parallels he found in his studies, was the influence recurring patterns of behaviour has on the outcome of a *natural organization* (Van der Erve, 2013*)*. A natural organization can be defined as the natural order of creation.

As highlighted previously, Van der Erve (2013) refers to organizations as "the emergence of recurring patterns of behaviour". He emphasized throughout his studies that organizations

emerge from behavioural patterns, and not from any form of influence of human components (Van der Erve, 2013). In society, recurring patterns of behaviour create and sustain the forms in which human organizations manifest themselves, from the products they sell to the services they provide. Van der Erve (2013) is of opinion that the same rules apply in nature as well. He illustrates his theory by highlighting various examples of natural organizations where the recurring patterns of behaviour determine the shape of the organization. Using examples of natural organizations, Van der Erve (2013) proves that parallels can be drawn from both natural and social sciences, where his developing stage theory originally originated from.

Figure 24 below illustrates the origins of the chosen life cycle models:
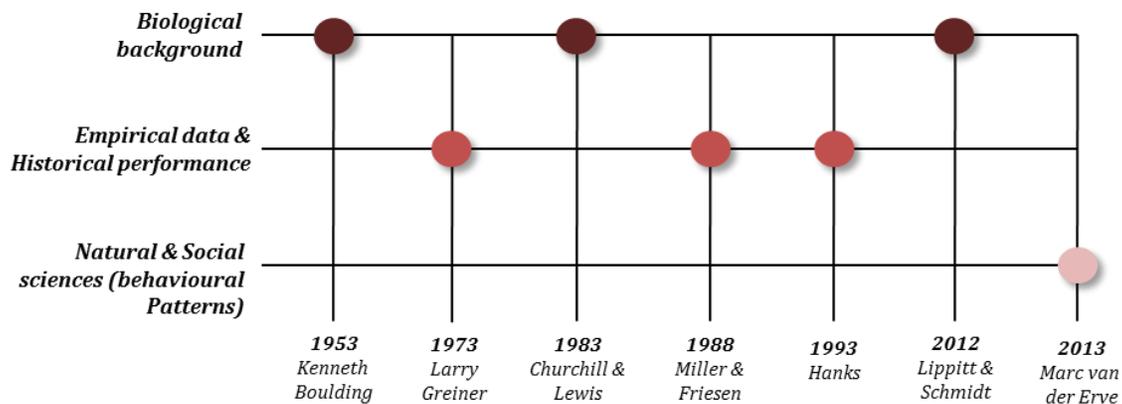
Figure 24: Origin of the specific life cycle models under investigation.

6.5 Criterion 4: *Number of stages in the chosen life cycle models/theories*

Many researchers will argue on the number of stages which can be found in a life cycle model and are of opinion that organizations only progress through either four or five growth stages (Gabisch and Lorenz, 1955). The most-known stages are: birth, youth and/or maturity and finally decline (Boulding, 1953). Both Boulding (1953) and Lippitt and Schmidt (2012), illustrates these specific development stages. Hanks's (1993) model is also one of the early development models which also supported the four-stage life cycle model structure.

However, Greiner (1972), Miller and Friesen (1988) and Churchill and Lewis (1983) were all of opinion that an organization develops through more than four or five stages throughout their life cycles. Greiner (1972) stated that although there are the main growth stages through which an organization progresses throughout its life, there are also mini growth stages between each presented evolutionary stage. Greiner (1972) specifically takes the delegation growth stage in his presented life cycle model as an example, where this stage does not typically begin with the decentralization of the entire organization into multiple different departments (Greiner, 1972). The addition of multiple products or geographical departments takes much more time and a sophisticated level of involvement from top management in order for them to review the strategies, evaluate the results and communicate the organization's values and goals to the rest of the teams (Gabisch and Lorenz, 1955).

Miller and Friesen's (1988) presented life cycle model can be distinguished from the rest of the various life cycle models proposed, since this model is one of the very first where the declining stage in an organization was considered. Miller and Friesen (1988) also proved that the sequence in which organizations develops throughout its life cycle stages does not exactly follow the models presented throughout history (Jansen, 2004). They found that the progression stages of a life cycle cannot be defined as deterministic; rather it stays in the same stage with the influence of internal and external factors (Walton, 2010). Over time the duration of each stage varies considerably. According to Miller's (1988) investigations a historical sequence exists between imperatives. Thus, for each organizational life cycle stage there is an element that has predominant influence. How an organization handles and react to the predominant elements in each stage, will determine how successfully the organization progresses to the next growth stage (Ionescu and Negrusa, 2007).

Miller and Friesen (1988) and Greiner (1972) are of opinion that organizations have the ability to re-enter its *birth stage* (Festre, 2002). This occurs when an organization takes on a new venture or implements a new idea into the competitive market, resulting in the organization re-entering the birth stage of its life cycle model. This also proves that although some researchers illustrated a discrete set of stages in their presented life cycles, sub-stages between the transitioning stages also exist (Ionescu and Negrusa, 2007).

Many researchers are of opinion that no organization develops through a discrete set of stages presented by so many organizational experts. Bridge (2013) and Penrose (1959) believe that no organization develops in distinct stages with clear boundaries between each stage. Rather, their studies indicate that the internal and external environmental factors, the market structure and the resources used to overcome various presented problems, ultimately determines in which stage of development the organization finds itself (Diebold and Rudebosch, 1996).
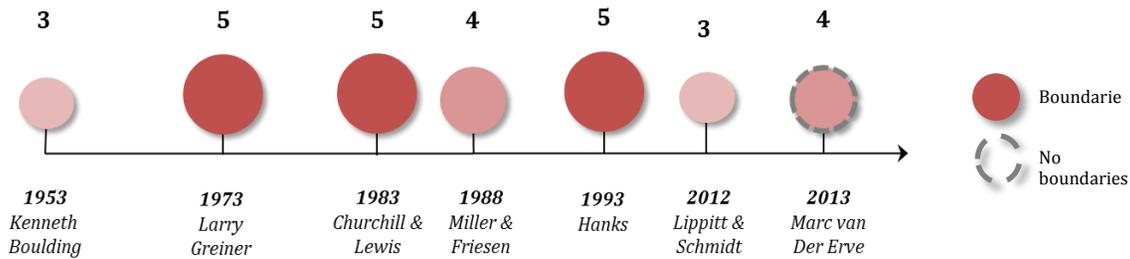
Figure 25: Timeline illustrating the chosen life cycles indicating the number of stages in each model, either with or without boundaries.

Van der Erve (2013) presents four stages through which an organization can progress, but similar to Penrose (1959) and Bridge (2013), his stages show no boundaries, as shown in figure 25 above. As Miller and Friesen (1988) he also stated that smaller stages exist in the different life cycle stages through which the organization progresses. He also contributed to Penrose's (1959) view by stating that during the course of an organization's life cycle, at certain growth stages, the organization should focus on external factors, while in other stages, the internal factors of the organization is of more importance to ensure a sustainable growth to the next stage (Van der Erve, 2013). The internal and external factors influence the behavioural patterns of the organization, which in return determines the developing stage of the organization at a certain time period.

6.6 Criterion 5: *Inspiration of the stages within the chosen life cycle models/theories*

The next criterion evaluates the different life cycles according to the main driving motivator which causes the organization to progress from one growth stage to the next. These driving motivators can be regarded as the influencing factors which inspire the organization to progress from one stage to the other.

The first life cycle models presented by Boulding (1953) and Lippitt and Schmidt (2012), illustrate that the desire for generating profits and revenue in an organization inspires management and other employees within the organization to progress from one stage to another (McCraw, 2003). Churchill and Lewis's (1983) model shows a similar driving motivator for their presented life cycle model. However, Boulding (1953) and Lippitt and Schmidt (2012) focus mainly on larger organizations, showing that the driving force is growing profit.

Greiner's (1972) model represents the continuous involvement and contribution of management, with subsequent rewards, as motivator for the organization to progress from the initial development stage to the next one.

Miller and Friesen (1988) conducted a study where they identified the main characteristics which determine the development stage an organization finds itself (Johannsen, 2015). As soon as the organization exceeds the limits of the stated characteristics it is an indication that the organization has progressed onto the next growth stage. According to Miller and Friesen (1988) the motivators for an organization, are (Miller, 2007):

- The *size or age* of the organization
- The *structure* of the organization
- The style of *decision-making* within the organization and the influence management has on the performance of the organization
- The *market*, industry or environment in which the organization functions

How each of these attributes contributes to the—organization to progress from one development stage to the next, are described in detail in the table 7 below (Miller, 1988).

Table 7: The attributes which Miller and Friesen (1988) believe acts as motivators in the progression of an organization.

Attribute	Why considered as a motivator
Size/Age	The change in size and age of an organization will influence an organization to move from one growth stage to the next. Some organizational researchers are of opinion that organizations stay about two to five years in the start-up stage and then progresses to the next growth stage. There are no set time period by which an organization can be measured before it progresses to the next growth stage, but a

	mature organization with developed structures and processes are more likely to be classified in a stage further along in its life cycle, than the starting stages.
Organizational Structure	The organizational structure is another attribute which influences an organization's movement from one growth stage to the next. A formal, well-organized organizational structure can be found in organizations which are in the late growth stages of their life cycles, but organizations with no organizational structure or hierarchy are examples of organizations in their earlier growth stages.
Decision-making and Leadership	The most important influencer identified by Miller and Friesen (1988) is the management style and decision-making process. Van der Erve (2013) also supports their view by stating that during each specific growth stage, a particular leadership role is needed for the organization to progress from one stage to the next. It is also crucial to understand the importance of a leadership role during a specific growth period as well as the understanding that the wrong leadership role in a specific growth stage can result in the organization's failure in a growth stage
Market	The change in the market or environment in which the organization operates also influences the progression of the organisation. Customer's needs change causing changes in products and services and new innovative products and services being introduced in the market. Industries depending on technology, research and innovation are known for having fluctuating markets and are the most susceptible to mature and decline as a result of product changes. Furthermore, products and services also have their own separate life cycles which also have an influence on the progression of the organization as they progress from one growth stage to the next. The life cycles of products and services are similar to that of organizations: start-up, growth, maturity and decline.

Miller and Friesen (1988), are of opinion that various attributes or characteristics of a life cycle model contribute towards the progression of an organization from one development stage to another, and not only one inspiring factor, as seen in the models of Boulding (1953), Lippitt and Schmidt (2012) and Hanks (1993).

However, while all of the investigated life cycle models indicate different influential factors contributing to the progress of an organization throughout its growth path, Van der Erve (2013) is of opinion that there is only main motivator in his developing stage theory. He believes that the rise and decline of recurring behavioural patterns in organizations are the dominant motivating factor which enables an organization to progress from one developing stage to the next (Van der Erve, 2013). Internal and external environmental changes which also cause change in the behavioural patterns of an organization also have an influence on the organization's progression to the next developing stage or failure to develop in its life cycle.

6.7 **Criterion 6:** *Rationale behind the chosen life cycle models/theories*

The last criterion on which the presented life cycle models will be evaluated on, is to discover the main drive behind each life cycle model. This can also be defined as the fundamental reasons and principles upon which the life cycle is based. Similar to their origin, both Boulding (1953) and Lippitt and Schmidt's (2012) life cycle models, are based upon the growth path of a living organism, while other life cycle models, including Churchill and Lewis (1983) and Hanks (1993), are based upon the history of organizations.

However, Greiner (1972) and Miller and Friesen (1988) expanded their studies further by looking at historical data and the performance of organizations to develop their life cycle models based on empirical data findings (Maddison, 1991). Miller and Friesen (1988) are two of the researchers who specifically completed empirical tests on more than 160 organizations to come to their concluding life cycle models (Quinn and Cameron, 1983).

Van der Erve (2013) used a new perspective in his study and focused on the rise and decline of recurring patterns throughout the growth path of an organization. He focused primarily on the changes in natural and social phenomenon and based his developing stage theory on natural organizations and the existence thereof (Van der Erve, 2013).

This is one of the major differences between the life cycle models as developed by previous organizational experts and the newly developing stage theory as shown by Van der Erve (2013). Whether the newly developing stage theory of Van der Erve (2013) is applicable to organizations today or whether they still follow the growth path as shown by previous

researchers can only be determined by further studies using current organizations' growth path.

6.8 Summary of life cycle models evaluation

Table 8 below summarizes the different life cycle theories with the specified criteria discussed in detail in the previous sections of chapter 6. Key phrases and words were identified during each criterion and are shown in the table below, highlighting the differences and comparisons between the various life cycles. The table 8 below also evaluates Van der Erve's (2013) development stage theory against the other presented life cycle models.

Table 8: Summary of the different findings when evaluating each life cycle model to the chosen criteria.

Criteria	Kenneth Boulding (1953)	Larry Greiner (1973)	Churchill and Lewis (1983)	Miller and Friesen (1988)	Hanks (1993)	Lippitt and Schmidt (2012)	Marc van der Erve (2013)
Definition of an organization	Living organism	Group of people (management driven)	Group of people (profit driven)	Group of people (management driven)	Group of people (profit driven)	Group of people (profit driven)	Recurring patterns of behaviour
Purpose of life Cycle model	Generate profits and growth	Identifying 'hurdles'	Generate profits and survival	Identifying problems	Generate profits and growth	Identifying key issues	Theory to determine future success
Origin of the life Cycle model	Biological	Empirical data and historical performance	Biological	Empirical data and historical performance	Biological	Biological	Behavioural patterns (natural and social sciences)
Number of stages	3	5	5	4	5	3	4
Inspiration of growth stages	Growing profits	Management involvement	Growing profits and growth in size	Growth in structure, decision-making and size/age	Growing profits	Growing profits	Rise and decline of behavioural patterns

Criteria	*Kenneth Boulding (1953)*	*Larry Greiner (1973)*	*Churchill and Lewis (1983)*	*Miller and Friesen (1988)*	*Hanks (1993)*	*Lippitt and Schmidt (2012)*	*Marc van der Erve (2013)*
Rationale behind each stage	Growth path of living organism	Empirical findings	Growth path of living organism	Empirical findings	Empirical findings	Growth path of living organism	Behavioural patterns

Figure 26 below illustrates the growth and development of the life cycle models evaluated. Some life cycle models are an expansion from another researcher's model, while others emphasized and highlighted different aspects in other researchers' models thereby developing their own.
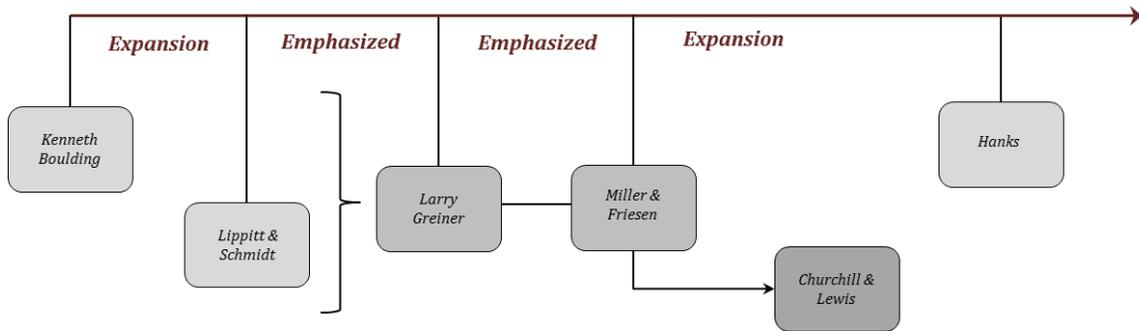
Figure 26: An illustration showing the development and expansion of the life cycle models and theories.

A full detailed summary of each criterion's findings can be seen in Appendix A.

6.8.1 Comparison between the different life cycle models and theories

The literature review revealed that the organizational growth and development has been an area of interest for policy makers, practitioners and many organizational researchers (Schumpeter, 1939). The majority of the literature under investigation emphasized the growth of an organization which is on a predetermined path developing through a number of stages (Greiner 1973; Hanks 1993). However, over the past decade researchers have shown that organization do not necessarily follow the growth path that so many life cycle models suggest (Penrose, 1959). They are of opinion that the sequence of growth stages of an organization can be diverse due to the intervening of internal and external factors as well as the vision and influence of management (Greiner, 1972). The literature on the alternative

growth path of organization, are not very insightful and the alternative way of defining the different stages are also not very profound.

Since the structure and view of many organizational researchers on life cycle models have changed over the past decade, the question can be raised whether these theories are still of relevance for organizations today. As shown in the detailed summary of the various life cycle theories above, Hanks (1993), Boulding (1953) and Lippitt and Schmidt's (2012) models of life cycles are not that significant to many organizations today. Organizations are described to develop through a birth stage, moving into a growth stage and final declination, contrarily to organization's life cycles today which are much more modernized and dependant on the market.

The life cycle models illustrated by Hanks (1993), Boulding (1953) and Lippitt and Schmidt (2012) are driven by the need for organizations to generate profits. Miller (1988) however, questions the sustainability of an organization with its only focus to generate wealth throughout its life cycle (Gabisch and Lorenz, 1955). The relative wealth curve of an organization through its life cycle to illustrate Miller's (1988) opinion is shown below in figure 27.
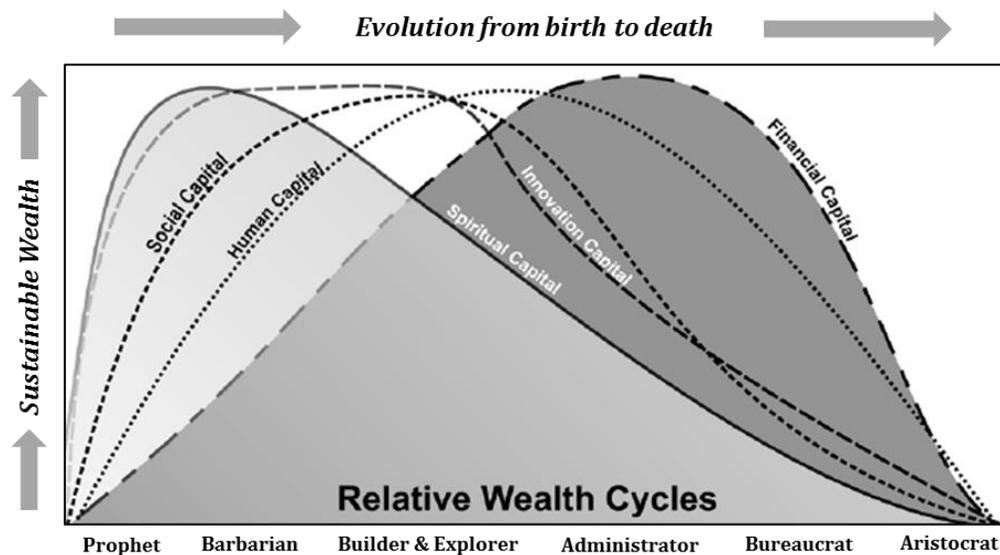
Figure 27: The relative wealth curve which Miller (1988) believes an organization undergoes throughout its life cycle.

In the above figure, Miller (1988) illustrates his view on life cycles which is mainly based on generating growth throughout the organization's life cycle (Cusumano, Saurez and Kahl, 2007). He states that, like animals and humans, organizations are also extremely divers and function differently from one another. Some organizations are started with a great deal of capital, still searching for a great idea to launch in a specific market (Knell and Robertson, 2004). Other organizations, on the other hand, are born from an inspirational idea which can be competitive in the market, leaving the founders of the organization in search for capital and human resources to ensure the growth of their marketable idea (Jansen, 2004).

Figure 27 on the previous page illustrates the differences and similarities of these two types of organizations. As can be seen on the graph in figure 27, spiritual and innovation capital tend to be profound at the start of the organization. This type of capital however, diminishes quickly as the organization progresses through its life cycle (Miller, 2007). While social capital starts to build and decline as the organization develops and grows in size, both internal and external sociability and trust vary a great deal in their relationship to other forms of capital (Francois and Lloyd-Ellis, 2010). Financial capital indicates a normal gradual growing path, although it only shows a rise in capital at the end of an organization life cycle (Anderson, 2005).

Nevertheless, as shown by many organizations today, innovation is a key factor at the start of an organization. No organization has shown extraordinary success by only focusing on generating profits throughout its entire life cycle (Johannsen, 2015). The ideal curve for any organization would be for financial wealth to reach some theoretical peak and then maintain that same level for a long period of time. This will only occur when the organization has reached a balance between generating sustainable wealth for the future, as well as focusing on innovation and launching new products and services in the market to ensure competitiveness (Francois and Lloyd-Ellis, 2010).

The evolution and revolution growth model represented by Greiner (1972) proved to show significant success in many organizations; however it is not a flawless model which every organization should strive to implement. Although Greiner (1972) and Miller and Friesen's (1988) models are the only two models based upon empirical data and historical performance from various organizations, it still proved that the rate of development and

growth of the organization as well as the performance of the organization within the growth stages, fundamentally depends on skilful leadership, an excellent strategy which all employees can buy into, highly motivated staff members and a deep concern for customers (Gabisch and Lorenz, 2015). Greiner (1972) is one organizational researcher who specifically focused on the managerial styles needed in every growth stage.

Greiner's (1972) and Miller and Friesen's (1988) models differ from the rest of the presented models in that it is the only model that recognizes the importance of the decline of an organization as a set of organizational activities and structures (Festre, 2002). Previous organization life cycle models did not include the final decline stage of an organizational life cycle. Historical evidence proved that the decline stage can give way to the start of a new organizational life cycle in an organization. No information is given on the final stages of any organization as not all organizations progress through the entire life cycle. In most cases, the organizations either take on a new venture in another market or the organization splits up into various smaller organizations, resulting in the start of a new life cycle.

However, both Greiner (1972) and Miller and Friesen's (1988) models fails to capture the various sub-stages that smaller organizations experience mainly because of the set life cycle framework for all organizations (Ionescu and Negrusa, 2007). Some organizational life cycle models accommodate smaller organizations and provide models with detailed sub-stages. This organizational life cycle model puts smaller organizations in the first two stages, but does not show any research on other stages (Ionescu and Negrusa, 2007).

Van der Erve's (2013) development stage model brings a new view to the overall organizational life cycle models and theories. He brought different sciences together and by studying the differences and similarities between them enabled him to develop a theory that is sustainable for the future and that can be used in any organization in any industry. Supporting Greiner's (1972) view on the importance of taking into account the management style at a specific stage during the organization's growth path, Van der Erve (2013) identified the leadership roles needed at every growth stage to enable the organization to progress from one stage to the next and maintain sustainable performance.

6.9 Introduction to the next phase

However, as can be seen in the summary in table 8 above, there are many influential factors that play a role in the motivation of an organization to progress from one stage to the other. The generation of profit is definitely a key factor, although Miller and Friesen (1988) is of opinion that external and internal factors also play a role in determining the key measurement factors which enable an organization to progress through its life cycle. Greiner (1972) and Van der Erve (2013), however have a strong belief that the managerial perspective and leadership role plays the most significant part. Many studies and investigations were conducted on every growth stage of organization's life cycle models, but limited research is available on the growth pattern of organizations when influenced by external and internal environmental factors as well as the leadership roles (Ionescu and Negrusa, 2007).

In the preceding section the most influential and significant measurement in the different life cycle stages was investigated: the leadership role involved at a certain life cycle stage as well as external and internal factors which might play a role. A hypothesis determining whether an organization is successful if its growth stages are aligned with the specified leadership roles, as indicated by Van der Erve (2013) in his developing stage theory will be tested. The question whether the successful growth path of an organization can be based on other factors, such as changes in the market, competitors and internal factors will also be considered.

The hypothesis will specifically be tested on the developing stage theory of Marc van der Erve (2013) for further investigation and expansion purposes of his theory.

3

PHASE THREE

"Unveiling the Present"

"Setting the Framework"	"Uncovering the History"	*"Unveiling the Present"*	"Looking at the Future"
Chapter 1 & 2	Chapter 3, 4, 5 & 6	*Chapter 7 & 8*	Chapter 9

The next step in the exploitation of a new venture, and the **third phase** of the project, is associated with determining whether there exists a need for the idea in the current market space.

Phase three focuses on the next set of research questions and the second objective of the project: to formulate a hypothesis, testing it and determining whether it should be accepted or not. Specific organizations operating in the same industry are investigated and analysed to determine whether they meet the formulated hypothesis set out at the beginning of phase three. This will determine whether the developing stage theory of Van der Erve (2013) can be accepted or not.

7.   *Formulating the possible 'future'*

"Unveiling the
Present"
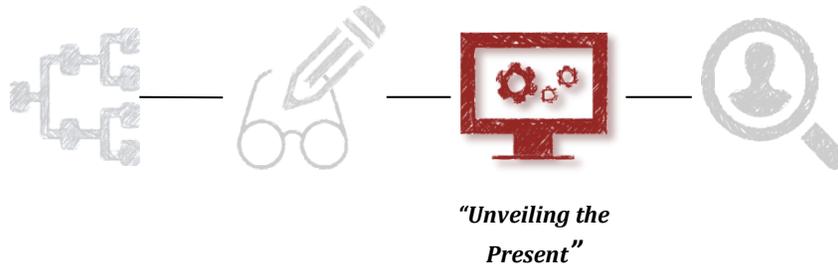
The following chapter shows resemblance in the exploitation of an idea by setting up a market survey or research campaign to determine whether there is any indication of desirability for the new idea in the current market space (Wax, 2015).

Chapter 7 represents a similarity: Formulating a hypothesis by which various organizations from the technology industry can be evaluated and analysed accordingly. The hypothesis is set out specifically to measure the identified organizations against various variables in order to determine whether Van der Erve's development stage theory is acceptable in organizations today.

In order to fully accomplish the second objective, the chapter also highlights the internal and external factors which should be taken into consideration when the hypothesis for the project is expressed. The external and internal factors applicable to the hypothesis testing are elaborated in detail.

7.1 Introduction to the next phase

During the first section of the study, various organizational life cycle models were investigated in order to identify similarities and differences between the several life cycle models. Some of the most known traditional organizational life cycles were chosen for the study; while a detailed examination of modernized life cycle theories were also given.

Many organizational experts believe that no organization follows a discrete set of growth stages as can be seen by the traditional life cycles. Penrose (1959) are of opinion that the development path of any organization depends on the internal and external factors that

influence the organization and its industry at that specific time period, while other experts, including Van der Erve (2013), believe that apart from the internal and external factors which play a role in the organizational growth path, the leadership roles in the growth stage of the organization's life cycle also have an impact on its development (Erve, 2013).

In the presented phase, the main factor which determines the development of an organization throughout its life cycle will be identified. The challenges faced by the chosen organizations during their life cycle will also be highlighted. A deductive research approach will be used where a hypothesis will be formulated and various data will be investigated. This will determine whether the hypothesis should be accepted or not.

A hypothesis can be defined as 'a tentative statement about the relationship between two or more variables' (Wilson, 2000). In the preceding chapter, it will be determined whether the successful performance of an organization has any connection with the alignment of the associated leadership role with the developing growth stage in which the organization operates in.

7.2 Formulating the hypothesis

The third section of the project is set out to address the main project statement, as well as the second objective of the project which is to determine:

> *Whether an organization is successful if its organizational life stage is aligned*
> *with the specific leadership role, according to Van der Erve.*

The final outcome will then determine whether a solution can be found for the project statement which was set out at the start of the project. In order to answer the project statement, the formulated hypothesis will be tested. The final hypothesis is stated as follows:

> *If the correct leadership role, as identified by Van der Erve (2013) in his*
> *developing stage theory, is aligned with the specific organizational growth*
> *stage, then the organization will achieve a successful performance.*

Therefore, the specific leadership role the management of an organization have at a certain growth stage in an organization's life cycle, can be regarded as one of the influential factors

which determines the future growth path of an organization. In addition, the internal and external factors in the environment will also have an influence in the growth path of the organization (Saleh and Davidsen, 2001). Both these factors will be tested in the preceding chapter to determine whether the hypothesis can be accepted or not.

7.2.1 Internal and external factors

It is important to understand what can be defined as internal and external environmental factors within an organization before the formulated hypothesis can be tested.

Organizational environment can be defined as an 'aggregate of all conditions, events and influences that surround and affect it' (Wang, 2005). Penrose (1959) and Ardishvivli (1998) believed that both internal and external environmental factors influence the growth path of an organization (Anderson, 2012).

The internal and external factors which influence the organization's growing path can be defined as follows:

- *Internal factors:* These factors are controllable and comprise of the organization's staff members, its strategy, as well as its functional, operational, marketing, financial and technical capabilities (Ionescu and Negrusa, 2007).
- *External factors:* The external factors are beyond the control of the organization and consist of economical, sociocultural, political, financial, trade, technological and demographics factors (Ionescu and Negrusa, 2007).

In order to provide a thorough analysis, the factors (internal and external) connected with the growth of an organization, are given below.

1. *External factors*:

External factors can be classified either as opportunities or threats to an organization in the environment the organization functions (Ionescu and Negrusa, 2007). External factors encompass various factors.

- *Demographic environment:* This type of environment can be defined by factors like the size, age and gender of the customer market. The diverse demographics of the market in terms of taste, preferences, different beliefs and cultures affect the overall demand of the customers. It is crucial for an organization to align its strategies and

future plans accordingly to ensure organizational growth and development. Organizational growth depends on social environmental factors, such as human relationships and its effect on the society.

- *Cultural environment:* It is also important for an organization to understand and predict the *cultural environment* in which the organization operates. Understanding the particular culture of the market space in which the organization functions, will provide opportunities for the organization to ensure sustainable growth in the future and enable the organization to align their capabilities accordingly (Festre, 2002).

- *Political environment:* Another environment which is also of importance for organizations to take note of is the *political environment*. The political environment refers to the factors related to the management of public affairs and their impact on the development of the organization.

- *Economic environment:* Five-year plans, organizational budgets, as well as monetary, fiscal and industrial policies are all included in the *economic environment*. The economic environment is a very good indication to determine the growth of an organization, if not the most important factor.

2. *Internal factors:*

The resources, synergy and distinctive competencies and strategies of the organization, can all be regarded as the internal factors of the organization (Ionescu and Negrusa, 2007).All of these factors determine the overall strengths and weaknesses of the organization in the various departments, such as marketing, operations, personnel, financial and technical. It is important that management monitors the impact of possible opportunities and threats on the organization (Miller, 2007). It is also essential to understand that the internal environment is influenced by the external environment.

The overall strategy of an organization provides the necessary course of action and direction for any organization to achieve the set of objectives set out by them (Anderson, 2012). When constructing a strategy, management should keep both external and internal factors in mind, as well as the different environmental factors which can either be presented as an opportunity or threat. The size of the organization, the nature of the organization, the diversity, the characteristics of the market, characteristics of the strategy, as well as the

future plans for the organization, all affects the organizational structure (Quinn and Cameron, 1983).

A flexible organizational structure is much more adaptable to change and can effectively manage and respond to any changes within the market space (Greiner, 1972). For an organization to keep up with the evolving changes in the market space, emphasis should be placed on the technical capabilities of the organization (Quinn and Cameron, 1983). The technical capabilities include the productivity and quality of the organization. The technical objective can be met through continuous improvement in the organization's work structure, procedure and technologies.

Since the external factors cannot be controlled or determined when analysing and investigating the organizational growth path of the identified organizations, only internal factors will be partially considered.

7.2.2 Leadership roles at every growth stage

The second variable which will be tested in the formulated hypothesis is the leadership roles presented by an organization in the different development growth stages as it progresses through its life cycle. The leadership roles which will be considered will be based upon the styles identified by Van der Erve's (2013) Van der Erve (2013) is of opinion that if the identified leadership role for each developing growth stage is in collaboration with one another, it will result in the most beneficial performance outcome for the organization.

The four leadership roles identified by Van der Erve (2013) are the following:
- *Stage 1: Explore and Discover* ~ The Transformer leadership role
- *Stage 2: Innovate and Nurture ~* The Builder leadership role
- *Stage 3: Scale and Optimize ~* The Grower leadership role
- *Stage 4: Confront and Purify ~* The Reformer leadership role

7.2.2.1 Explore and discover ~ The transformer leadership

| **Transformer-type leader** | **Builder-type leader** | **Grower-type leader** | **Reformer-type leader** |
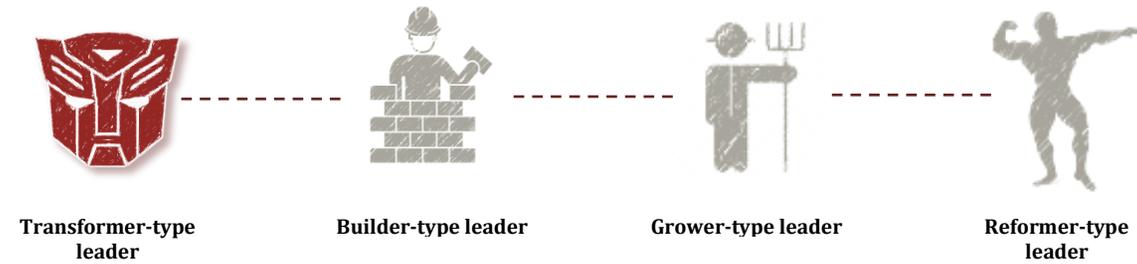
"Because the people who are crazy enough to think they can change the world, are the ones who actually do."
~ Steve Jobs (founder of Apple)

The type of leadership role and leader required during the first stage of Van der Erve's (2013) developing stage theory is a leader who is willing to ask the right questions. By asking the right questions, a person can determine a need or a gap in the market (Erve, 2013). It is important to have a group of individuals in this stage that are driven to make a difference in the market. Most importantly, it is crucial to have a leader in charge of a group of people who are willing to take risks and responds correctly to failures and new opportunities (Miller, 2007). Miller (2007) supports Van der Erve's (2013) argument by stating that most organizations are formed by a creative personality who sees and discover a need in a specific market and are willing to take on the challenge and respond in a creative way.

A creative personality is needed at the start of an organization (Miller, 2007). This creative personality is seldom a great manager or administrator (Erve, 2013). The start of any organization is also a period of disorder and having an administrator as a leader during these times, who values order and stability, will result in failure. The early days of an organization is driven by strong personalities which develop as the organization progresses through its life cycle.

Miller (2007) explains this by using the example of Apple and General Electric where the founders of these organizations were visionaries devoted to discovering new ways and possibilities to expand their research and technologies to create new products. However,

order is needed as the organization develops and progresses through its life cycle. The transformer-type leader is inherently disorderly, bad communicators and is known for disturbing order and creating 'noise' in the competitive market (Erve, 2013).

Most transformer-type of leaders live in a world of ideas, ideas are brought forth by tangible fruition and practical application (Erve, 2013). However, the practical application thereof is not possible without the help of more practical personalities. This can be seen by the leadership roles of two of the greatest inventors of our time: Thomas Edison and Steve Jobs. Thomas Edison was known for his bad communication skills living in a world with his own ideas' (Miller, 2007). Steve Jobs on the other hand was impossible to work with. He treated his employees and the rest of the Apple staff members is such a way that it resulted in the board voting against him being CEO of Apple, even though he was the main reason of Apple's success (Ernst and Stockhammer, 2006).

Miller (2007) states that it often happens that the transformer-type of leader becomes the technology leader, where he has no knowledge of brand equity or financial management (Ernst and Stockhammer, 2006). However, if the leader devotes himself to these aspects of the organization, he will weaken the very reason of the existence of the organization. Thus, the biggest challenge the transformer-type of leader has is to develop internal partnerships in the organization and reliance on the specific employees who balances his or her qualities

The transformer-type of leader possesses the following significances (Erve, 2013):
- Bold ideas and actions are needed to transform an industry – qualities which the transformer-type of leader holds.
- A person who has a long range and visionary ideas.
- A clear direct vision and goal for the organization.
- Comfortable in making their own decisions. However, they tend to not consult others in their decision-making process; they follow their own rules and decisions.
- It is a person who is very action-orientated and has little patience with planning and administration.
- It is a person who is willing to take the risk and make great sacrifices to see their ideas being realized.
- He withdraws from team work in order to work through his own ideas.

- They see challenges, ideas and new ventures which others don't necessarily see.
- Transformer-type of leaders is also not very well organized, impatient with details and is not a good administrator.
- The transformer-type of leader has a very clear understanding of how the organization works and understands what matters most and what is most needed when the organization is in a crisis.
- They do not thrive in the complexity of mature organizations when reaching consensus in decisions across organizational lines is essential.
- Together with their desire to expand the organization, they are also curious and are continuously looking for new opportunities in the market.

The transformer-type leader in an organization often makes two appearances in the life cycle of an organization: at the start of the organization and again during the times of renewal when the organization is at a low and in need of a new idea or venture (Ernst and Stockhammer, 2006). The transformer-type of leader is most needed at the start of an organization, since their strength lies in their ability to rapidly react to the market and exploit opportunities (Van der Erve, 2013).

During times when organizations are in a desperate fight for survival and faced with a highly competitive market, the best leader to ensure ultimate success and the person who will be most able to strengthen the organization's culture is a transformer-type of leader.

7.2.2.2   Innovate and nurture ~ The builder leadership role

| Transformer-type leader | Builder-type leader | Grower-type leader | Reformer-type leader |
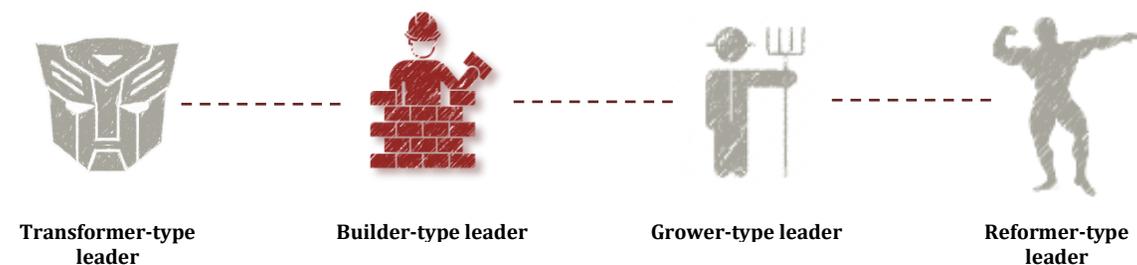
"Whenever an individual or a business decides that success has been attained, progress stops.
Innovation should be a continuous process."
~ Thomas Watson (founder of IBM)

The builder-type of leader focuses typically on bringing order to the chaos, putting together teams and assigning the right manager to the right teams (Erve, 2013). Counting and recording, systems and structures are now important and needed in an organization. For an organization to initially grow it is in need of innovation and creativity, however as it matures, administration and structures becomes vital (Ernst and Stockhammer, 2006). The main focus of the organization now shifts from external to internal challenges.

This type of leader's aim is to bring the right people together and ensuring that the most important competencies are in the right teams (Miller, 2007). Thus, the builder-type of leader brings order into the organization, he assigns roles and responsibilities; he directs action toward goals and he rewards and corrects (Ernst and Stockhammer, 2006). They have a strong communication sense and have regular interaction with customers to understand their needs. For this very reason, they are part of the development and testing of multiple product versions until something is finally selected as having potential for the competitive market.

A builder-type of leader should evoke delegation and collaboration within the organization but still possess a sense of innovation, be fast-moving and drive creativity (Miller, 2007). If the right leader can establish this in the organization, the organization will last for centuries in their industry.

The builder-type of leader should possess two important characteristics: they must be able to construct internal capacity for efficient production, while at the same time, push outward and expand the boundaries of the organization (Ernst and Stockhammer, 2006). Although their focus should be internally, they should still be exploring and launching new products in the market; network with other customers and seek new ways to dominate their competition.

Miller (2007) stated that this type of leader illustrates the combination of personal courage and competence, as well as the ability to communicate and cooperate. It is also important for this leader to gain the support, approval and trust of the employees in the organization, since efficient organizational processes are set in place by this leader which might change the overall objective and way of thinking of the organization (Miller, 2007).

The builder-type of leader shows the following significant characteristics (Erve, 2013):

- They have a driving force for development and the potential to predict what the customers in the market are looking for.
- The builder-type of leader shows similar traits of an engineer and scientist.
- This type of leader enjoys the 'real work' in an organization: making the product or delivering the service to the customer.
- They are also convincing and enthusiastic communicators. For this very reason they place a high priority on expanding the organization and serving the customers with the products and services they want.
- They are experts in the procedures, processes and systems of management. Orderly and smooth operations are key priorities for these leaders.
- A builder-type of leader is also more focused on the past performance of the organization, than focusing on the future growth in products and services for the organization.
- They are continuously devoted to streamlining and improving the current procedures and processes in place in an organization.

One of the weaknesses of a builder-type of leader is that they are not visionaries for the future; they only focus on delivering either the product or service (Ernst and Stockhammer, 2006). Therefor is it very important that although the organization does not have an innovative leader at the fore front, it must still promote innovation and creativity in the organization to ensure that the organization progresses in its life cycle. If both administration and innovation are not managed correctly by the leader in an organization during this stage of the organization's life cycle, the organization will ultimately decline (Erve, 2013).

7.2.2.3 Scale and optimize ~ The grower leadership role

Transformer-type leader   **Builder-type leader**   **Grower-type leader**   **Reformer-type leader**
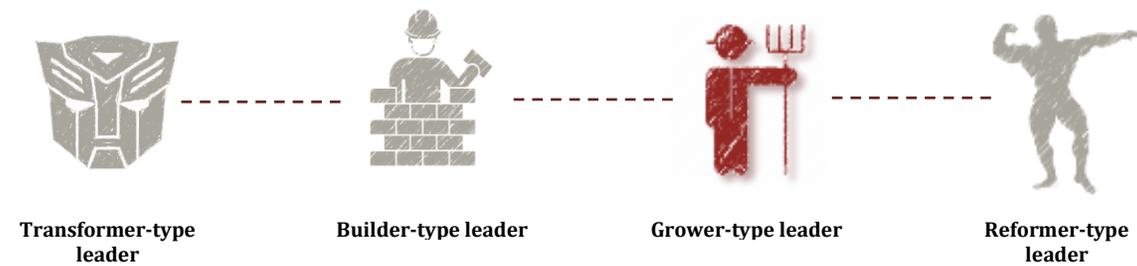
"Sometimes when you innovate, you make mistakes. It is best to admit them quickly and get on with improving your other innovations."
~ Steve Jobs (founder of Apple)

The organization's focus changed from innovation to producing and generating sustainable wealth. This is also the main objective of a grower-type of leader.

As shown in Van der Erve's (2013) developing stage theory diagram, the focus of the leader as a grower-type of leadership should be on the external environment. While the builder-type of leader were attentive to putting organized systems and structures in place, the grower- type of leader emphasizes the growth of the organization providing security to its customers (Ernst and Stockhammer, 2006). The main focus of this leader is to sense change in the market and adapt the organization's structures, processes and procedures accordingly, in order for the organization to survive. Their focus is also on cost, quality, predictability and volume.

This type of leader do not commit to any form of innovation or creativity, which in many cases are much needed in organizations at the particular time when this leader are at the fore front of the organization (Erve, 2013). Miller (2007) is of opinion that a grower-type of leader is money driven and is not passionate to uphold the order within the organization nor to drive innovation and enter a new market (Miller, 2007). For this reason, the employees of the organization start to doubt the value of the leader's dedication towards the main goal of the organization (Ernst and Stockhammer, 2006).

The grower-type of leader shows the following significant characteristics (Erve, 2013):

- This type of leader has the ability to foresee opportunities and threats in the market and act accordingly in the best interest of the organization. However, the leader can also be blinded by the realities of the marketplace and in their organization, which can lead to the decline of the organization.

- The grower-type of leader emphasises specialization in the organization.

- A person who is not detailed or customer-orientated but rather focused on the financial aspect of the organization.

- Have a tight and firm control over the organization and what is happening. They tend to devote most of their time managing and controlling systems and structures; not paying much attention to selling and producing.

- Their main focus is on the growth of the organization for more acquisitions as they find reward in the acquisition of wealth, rather than the development of new products and services.

- This type of leader can also be very self-observed and self-centred, only focusing on their own needs and not the needs of the customers or the employees.

The grower-type of leader holds great risk for the organization, since the leader's need to increase the wealth of the organization increasingly drives out the potential of innovation and expansion that created the organization's brand in the first place (Ernst and Stockhammer, 2006). During this time the organization is also at risk to other competitors in the market since innovation are not prioritized. Maintaining the organization's culture is a key issue with this type of leader at the main front, since a well-established culture will ensure successful progression of the organization (Miller, 2007).

7.2.2.4 Confront and purify ~ The reformer leadership role

| Transformer-type leader | Builder-type leader | Grower-type leader | Reformer-type leader |
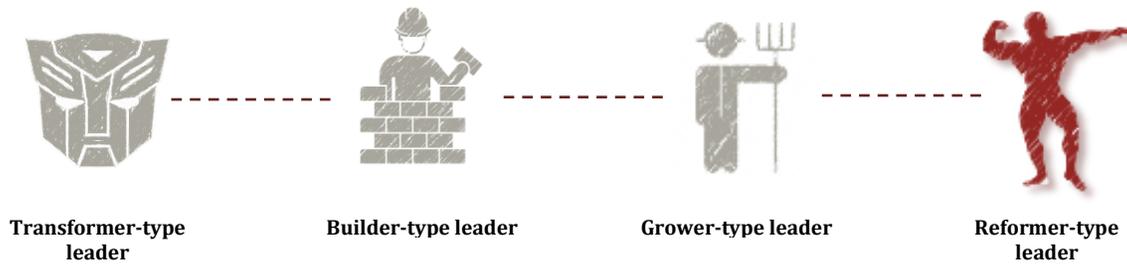
"If I would to ask people what they wanted, they would have said faster horses."
~ Henry Ford (1863 – 1947)

The reformer-type of leader is the type of leader which is needed when the market changes dramatically with the introduction of new technologies, new competitors and new market niches (Ernst and Stockhammer, 2006). As Van der Erve's (2013) model suggests, at this stage the organization's focus should shift back to the external environment of the industry in which the organization functions. Re-evaluation of the organization and the organization's customers' needs should be established, before the organization can further its growth (Erve, 2013).

This type of leader strips down the organization's structures and procedures and simplifies every process (Ernst and Stockhammer, 2006). At this point, change management should take place in the organization, as new ideas and ventures which can be developed into products and services are needed in order for the organization to survive in the evolving industry (Miller, 2007). The focus is also more on performance figures, rather than the growth of the organization. The reformer-type of leader shares the same qualities as the transformer-type of leader, since this leader should bring back innovation and creativity to the organization to ensure that the organization stays competitive in the marketplace (Ernst and Stockhammer, 2006).

A reformer-type of leader possesses the following qualities (Erve, 2013):
-    A person who is open for change and does not necessarily follow the status quo.

- The reformer-type of leader is innovative and aspires to re-invent the organization by motivating the organization's employees to push the boundaries and invent new products and services.
- They challenge the boundaries of the industry in which the organization functions and are willing to take the risk to enter a new marketplace.

This is also a type of leader who is able to make the difficult decision in either entering a new market with a new venture, or breaking up the organization into smaller departments which can prove to be much more successful (Ernst and Stockhammer, 2006).

8.   *Technology Industry*

"Unveiling the Present"
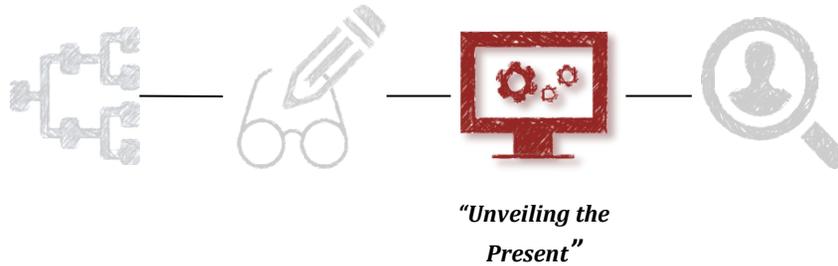
Chapter 8 *represents the nest step in taking the idea to market; where the actual conducting of the market survey is implemented to determine if the new idea should be exploited in the market and whether it will be sustainable in the future.*

This step in the exploitation of an idea can be associated with the analysing and evaluation of the identified organizations against the specific chosen variables in chapter 7 in the project. The main aim and outcome of this chapter is to determine whether the formulated hypothesis can be accepted or not accepted when investigating the specific organizations in the technology industry.

The chapter and phase will thus conclude with the findings of the undertaken hypothesis to ultimately determine whether the hypothesis can be accepted or not.

8.1 *Testing the formulated hypothesis*

The technology industry was chosen to test the formulated hypothesis, since it is an innovative, continuously evolving industry and the market is constantly changing. It is also a very unpredictable market where no organization can predict the arrival of another organization in the industry (Baer, 2014). For this reason, all organizations chosen for the testing of the hypothesis would have experienced the same external and internal environmental factors than the rest of the industry. For testing purposes, all other factors which will not be considered in the testing of the hypothesis, is isolated since it affects all of the organizations in this industry.

Outside representatives and experts in their field, were asked to assist and give their knowledge on the particular variables being tested in the formulated hypothesis. Marc van der Erve (2013) was asked to indicate the particular growth stage of every organization under investigation. While, Marike Sieberhagen, human resource manager and expert in the field of leadership roles, were asked to classify the particular leaders involved at every growth stage of the chosen organizations, into Van der Erve's (2013) leadership roles. In doing so all findings from the hypothesis are objective and not biased.

Organizations from the technology industry are chosen which are specifically focused on the manufacturing of electronics, the creation of software, computers or products and services relating to information technology (Baer, 2014). The following organizations were chosen, either providing a product or service to their customers, to test the hypothesis on:

Organizations in the Product Technology Industry:

- Apple Inc.
- Microsoft
- Samsung Electronics
- Dell
- IBM
-

Organizations in the Service Technology Industry:

- eBay
- Amazon.com
- Yahoo!
- Google Inc.

Organizational success is often believed to be an appropriate measurement of successful organizational performance. Whetten (1980) remarked that organizational growth is an implicit assumption, since it is generally assumed that "organizational growth is synonymous for effectiveness", that "bigger is better" and that there is a "positive correlation between size and age" (Fleck, 2009). While some definitions focus on effectiveness or profit, other definitions of success emphasize the time dimension. According to Miller and Friesen (1988), success is related to "the degree to which the firms are able to achieve their objectives subject to the constraints of long run viability" (Miller, 2007). Another notion which was highlighted by Chandler in 1977 is organizational self-perpetuation or rather the firm's ability to survive its members (Chaston, 2010).

Success in the technology industry depends on organizations which are able to manage the change and development in the architecture of systems, their interfaces with customers, as well as their relationships and the influence they have on the external environment (Olanoff, 2013). It is also critically dependent on the ability of an organization to successfully convert information into valuable knowledge which can be used to develop products and services which will improve the lives of their customers (Baer, 2014). Ideally, this conversion of information into valuable knowledge, are accomplished through the critical attention of the organization and the customers' needs in the internal and external environment.

However, the above mentioned points are not the only factors that need to be considered when an organization in the technology industry can be seen as successful. Apart from the external environmental factors that influence the organization's successful growth path, there are also other factors that need to be considered (Greiner, 1972). In the preceding chapter, both groups, the organizations who specialises in providing a product to its customers while the others provides a service, are going to be investigated and the presented hypothesis will be tested upon the various organizations. When testing the formulized hypothesis on these various organizations, 'success' will be measured and illustrated according to the revenue growth performance of the organization.

Furthermore, to ensure that the hypothesis is tested under the correct conditions in order to prove whether Van der Erve's (2013) development theory is applicable to the organizations today, his identified development stages and leadership roles are used to classify the various organizations into growth stages and the corresponding leadership roles.

8.2 Technology Industry: Product-focused customer

In a recent article by Thomas Casey and Henning Hagen (2012), *'Technology Industry Trends: Value and Innovation'*, stated that the technology industry have shown more rapid fluctuating changes in the past two years, than the past decade. They are of opinion that the changing of customer's needs and frequent new products and innovation define and redefine the industry's constantly shifting landscape (Casey and Hagen, 2012).

However, this volatility in the market is beginning to have a serious effect on the architecture and structures of the hardware and software of the organizations in the industry themselves. To keep up with the changing industry, these organizations are pushing innovation and are re-examining the organizational structure to squeeze out better financial and organizational performance (Baer, 2012). They are putting these measurements in place, since their profit margins and market share are under danger from other competitors which might enter the market at any stage. The greater effect comes in, when a new competitor enters the market, which causes the customers to become more demanding and their needs change. The customers are now seeking greater performance products and services with better improved features at the lowest price possible (Casey and Hagen, 2012).

The unpredictability in the technology industry causes organizations to act upon potential mergers, acquisitions and divestitures in order to full fill the need of their customers and still stay competitive in the market (Olanoff, 2013).

The graph 1 below indicates the cumulative revenue growth (as shown in billion $) of the specific product-focused organizations in the technology industry over the time period from 2000 to 2014.
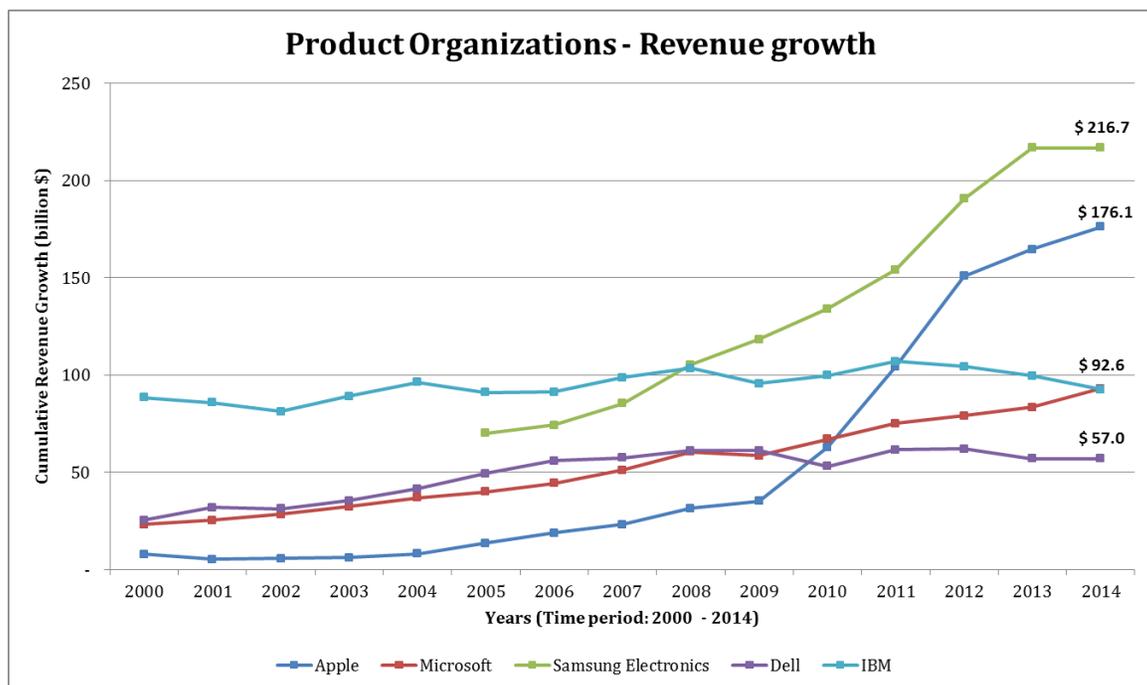
Graph 1: Graph illustrating the cumulative revenue growth (shown in billion $) of the product-focused organizations in the technology industry.

As indicated in the graph 1 above, two growth patterns can be seen between the various product-focused organizations. Both Samsung Electronics and Apple shows a similar cumulative growth path, while IBM, Microsoft and Dell resembles similarities in their revenue growth over the time period shown.

The reason for Samsung Electronics and Apple having a similar trend might be adhered to both organizations functioning and operating in the same section of the technology industry. Both organizations show an increase in their revenue growth in the years of 2008 and 2012, while indicating a slight downfall in revenue growth during 2009.

Only Microsoft have achieved in successfully increasing their revenue growth percentage after their downfall in 2009, while IBM and Dell have still shown no improvement. A very good correlation can be seen between these organizations and although operating in the same industry might be the reason, there might be other factors also influencing the similar growth path of the organizations.

Although Microsoft, IBM and Dell show similar correlation, no particular change can be seen over the investigated time period. Determining whether external and internal factors or the leadership roles of these organizations are the main influencers of the organizations' growth path, will not be possible. Thus, these organizations will not be the best chosen organizations to use to test the presented hypothesis on.

However, the two organizations who are significant in their revenue growth path and are both serious competitors against one another are Apple and Samsung Electronics. Since the launch of Samsung's latest smart phone, it has continuously shown an improvement in their revenue growth. Not only can Samsung now be seen as the number one competitor for the world's most innovative organization, Apple, its currently setting the pace for new products in the technology industry. For these very reasons, Samsung Electronics and Apple will be the two organizations which the formulated hypothesis will be tested on.

In the preceding chapter, a brief history of both the organizations is given; from which a comparative summary on both of the organizations will follow. In the summary of each organization, the performance given in cumulative revenue growth of the organization will

be shown, as well as the specific growth stage in which the organization found itself in at a specific time. The leadership role applicable in each growth stage, according to Van der Erve's (2013) studies, will also be identified.

Since revenue growth data could only be gathered for Samsung from 2005, the specified investigation will only focus on the years from 2005 up and till 2014, however any other organizational changes and factors that might have influenced their growth path will still be taken into consideration when testing the hypothesis.

The growth stages, by which the organizations will be evaluated on, are based on Van der Erve's (2013) development theory, as discussed in Chapter 6. These growth developing stages are as follows:

- *Stage 1:* Explore and discover
- *Stage 2:* Innovate and Nurture
- *Stage 3:* Scale and Optimize
- *Stage 4:* Confront and Purify

Finally, it will then be determined whether the presented hypothesis can be accepted for organizations in the technology industry that provides a product or service for its customers, or whether the hypothesis cannot be accepted.

8.2.1 Deeper Investigation: Apple

A detailed overview of the start and history of Apple since 1976 can be seen in Appendix B.

Apple's revenue growth, growth stages and leadership roles, as assigned by Van der Erve and Sieberhagen, can be seen on graph 2 on page 131. The time period under investigation dates from 2000 to 2014.

Summary of Apple's Growth Path

Growth Investigation: Apple

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Revenue Growth	7.7	5.2	5.5	6.0	8.0	13.4	18.6	23.1	31.3	35.2	62.8	104.2	150.7	164.6	176.1
Development Stage	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3
Leadership Role	Transformer	Transformer	Transformer	Transformer	Transformer	Transformer	Transformer	Transformer	Transformer	Transformer	Transformer	Transformer	Grower	Grower	Grower

Graph 2: Summary illustrating Apple's growth path (2000 - 2014). Source: Marketwatch.com

8.2.1.1 Cumulative revenue growth (billion $)

The cumulative revenue growth (billion $) of Apple indicated in the summary graph 2 above, shows an increasing growth path. The organization's revenue growth showed a stable path between 2000 and 2004, but showed a significant success during the years of 2009 to 2011.

Since then Apple has shown noteworthy increases in their revenue growth. A number of factors, which are described in detail in Appendix B, can account for this fluctuation in revenue growth:

- At the end of 2001, Apple announced the launch of their very first iPod (ITCandor, 2010). After the release of the new product, the organization showed a slight increase in its revenue growth. As mentioned in the history of Apple in Appendix B, during this time in the market, the launch of Apple's first iPod could not have come at a better time, since Napster, the free music sharing platform, hit a downfall in July of that same year (Sanford, 2015).

- Over the course of two years, it would seem that Apple's revenue growth was at a standstill up to 2003, where Jobs announced that Apple will launch their very first music store: iTunes (ITCandor, 2010). This announcement was very advantageous for Apple's customers, since now they could connect their products to iTunes and operate their products from a web-platform. The success in the launch of iTunes can be seen by the revenue growth of the organization from 2003 up to 2005.

- Even though Jobs had to undergo a number of surgeries during 2004, while in that time Tim Cooks took over as CEO, the organization's revenue growth seem to show no effect to this change in management (Sanford, 2015).

- However, even though Jobs returned to its original position as CEO in 2005, the operations at Apple was at a standstill up to 2007, when no new products was launched to the market. Although the revenue kept increasing over this period, it was with a lower percentage value than previous years. The revenue growth percentage dropped to a significant 24% from 68% in 2005. Speculation grew in 2007 whether Apple will enter the smart phone market and by middle 2007 the organization launched its very first smart phone (ITCandor, 2010). This increased the revenue growth of Apple in 2008, but many customers complained about the

high price of the iPhone and felt it unnecessary to buy the product went it first launched to the market, if the price of the product will decrease in the future. For this reason, Apple's revenue growth dropped in 2009 and lower revenue than expected was achieved.

- During 2009 Apple experienced a number of factors which might explain the drastic increase in revenue growth for the organization:

  o Firstly, after news broke that Job's failing health forced him to take medical leave, the organization's share price fell almost 10% (Sanford, 2015). Ever since Apple's existence, they have been pioneers in the technology industry and have launched new innovative products to the market. When Jobs stepped down as CEO, the industry lost trust in the ability of Apple to introduce the same innovative products to the market, as when Jobs were CEO (ITCandor, 2010). However, although many customers saw Apple's future path as unpredictable and unstable, the revenue growth of the organization grew enormously when the iPhone 3S were even more reduced before it was finally discontinued at the end of 2010 (ITCandor, 2010).

  o During 2009 Steve Jobs, before he partially stepped down as CEO, unveiled the next product which he believed will revolutionize the world: the iPad (ITCandor, 2010). Although some critics were first against the new product, it turned out to be a hit in the market. So much so, that many other organizations jumped to the opportunity to also launch their own tablet, but none showed so much success in their revenue growth as Apple did.

  o It was also in 2009 that Apple announced the release of the new iPhone, together with the iPad. Apple showed an enormous increase in revenue growth with the launch of these two products, but there were some shipment and manufacturing problems with the iPhone, which also contributed to the decrease in revenue growth from 2010 (Sanford, 2015). Not only did Apple's customers lose trust in the functionality and operating of their products, but it is believed that Jobs's unstable health and the constant changing in management roles, also played a role in the decrease in revenue growth.

- Jobs were asked to return to Apple in 2010, mainly to reinvigorate the products and services Apple provided. But most importantly, he was needed to reinvigorate the

human spirit within the organization and to help the employees remember the true purpose of Apple (ITCandor, 2010). Jobs knew exactly what was important in the organization and where the organization is able to go, as well as what the market and its customers expected from Apple. However, even though there was hope that the revenue growth would turn around and it would show an increase, it failed to do so.

- In 2012 Apple saw the need to undergo several organizational structural changes to increase collaboration between their hardware, software and services. Jobs also stepped down from his position as CEO during this time and Tim Cook took his place.

- Ever since Cooks took over as CEO, Apple saw a stable year-on-year increase since 2012. Apple launched its very first product since 2010 at the start of 2015 and many people hope that this will of significant value for Apple's revenue growth and performance.

However, what is significant from the revenue growth of Apple in comparison with the release and announcements of their products is the correlation seen with both product release dates and revenue growth. The pattern of these two factors, are shown in the graph 3 below.

Apple's revenue growth vs. Release of products

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Revenue Growth	7.7	5.2	5.5	6.0	8.0	13.4	18.6	23.1	31.3	35.2	62.8	104.2	150.7	164.6	176.1
Product Release	None	iPod	None	iTunes	None	None	None	iPhone	None	iPad	None	None	None	None	iWatch
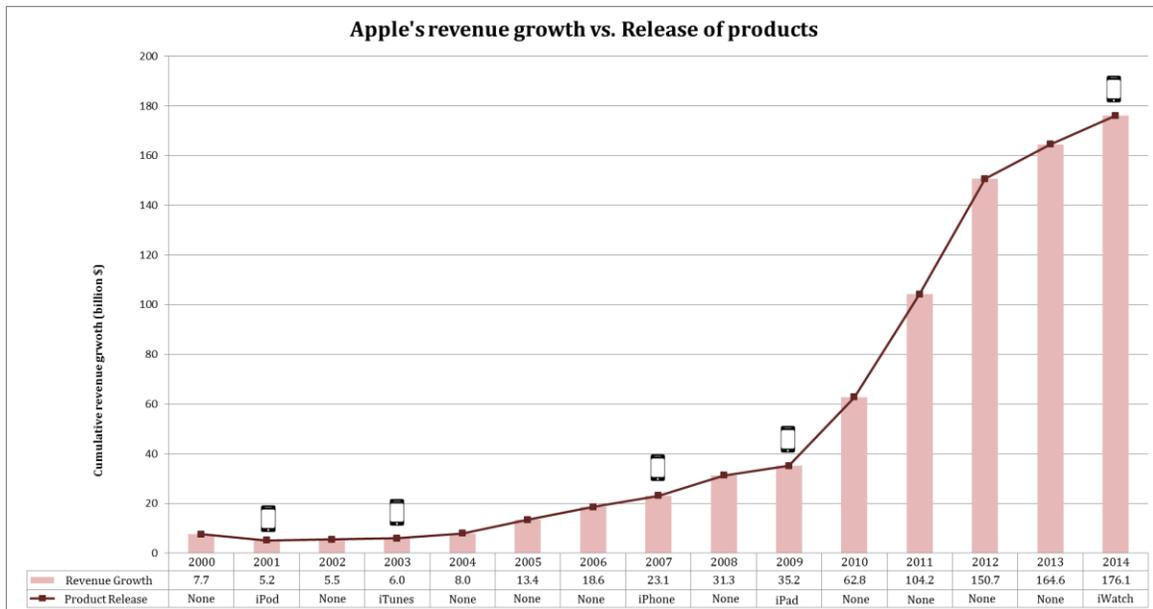
Graph 3: Apple's revenue growth (billion $) versus its release dates of the organization's products.

Even though Apple contributed immensely to its software and hardware over the past 15 years, the graph only indicates the first release dates of the first version of the various products Apple brought to the technology industry. No second or later versions of the various products are indicated on graph 3 above. However, one should take note that at the start of 2009, Apple released a new product to the market (the iPad), as well as a new version of the iPhone was also launched during that time, which may account for the drastic increase in 2009.

From graph 3 which indicates the specific release dates of Apple's products in comparison with its revenue growth since 2000 up to 2014, it can be stated that Apple's products have a fairly large contribution to its revenue growth as shown in graph 3. Taking this into account, it can be noted:

- Apple's customers are brand driven and are curious to try out a new Apple product when it is launched to the market. This can also be proven in critics stating with the launch of Apple's very first iPhone that customers believed that the product was too expensive – especially when Apple later reduced the product's price before the release of the latest version. Each time an Apple product is reduced before the release of the new version, Apple's revenue growth increased rapidly.

- Apple is also known as the organization that '*tells*' the customer what they want and need, before the customer even knows it himself. This can be proven by the release of some of its most innovative products to date: the iPod, iPhone and iPad. With the release of a new product, it triggers any customer to buy the product and 'see' what it can do. The curiosity of Apple's customers also plays a great role in the movement of the organization's revenue growth.

From graph 3 it can be concluded that Apple's cumulative revenue growth path indicates a similar product life cycle path for its various products as it was introduced to the market.

8.2.1.2 Leadership roles

Over the investigated time period, 2000 to 2014, Apple's leadership changed significantly between Steve Jobs, the original founder of Apple, and Tim Cooks. Cooks took over as CEO from Jobs in the times when Jobs had to undergo several surgeries, but also at the time when Jobs was suspended from his own company in 2009.

Apple later realized that they made a mistake by doing so and asked Jobs to return to reinvigorate the organization, since their revenue growth did not deliver the success they hoped for (ITCandor, 2010).

Jobs finally stepped down as CEO in 2010 and Cooks took over. However, the two leaders show very different characteristics and capabilities in their way of leadership and managing the organization's employees and future strategies. While Steve Jobs can be seen as a transformer-type of leader, Tim Cooks are known for being a grower-type of leader (Van der Erve, 2013). Their different leadership traits and leadership roles, as classified by Sieberhagen, an expert in the field of leadership roles, are described below (Sieberhagen, 2015):

 Steve Jobs: Transformer-type of leader

Steve Jobs is known for his unbelievable innovativeness, believing in the impossible and his passion for changing the world (Van der Erve, 2013). TIME magazine awarded him the prize for the most innovative person the world has ever seen in 2009. For these reasons, Steve Jobs can be classified as a transformer-type of leader (Sieberhagen, 2015). As one of the founders of Apple, he knew what the organization was set out to do from the start and with his innovative vision; he set a new standard in the technology industry.

For any organization to succeed at the start of their life cycle, a transformer-type of leadership role is needed to believe in an idea and put it into action. As previously discussed in chapter 7, a transformer-type of leader shows the following distinctive qualities (Van der Erve, 2013):

- They are innovative, have bold ideas and they understood that putting actions to these ideas, which might seem impossible at first, can transform the industry.
- This type of leader also has a clear and direct goal and vision for the organization, and they know exactly what the organization needs to do in order to achieve these goals.
- It is a leader who is very action-orientated and has no patience for planning or administration. It is not always a very enjoyable person to work for, since your employees never knows where they stand with you. This can specifically be proven

in the manner in which Jobs handled his employees. Many stated that he was not a team-player and was very difficult to work with.

Tim Cooks: Grower-type of leader

Tim Cooks on the other hand, is a grower-type of leader (Van der Erve, 2013). He had the ability to foresee threats and opportunities in the market and act accordingly – a specific characteristic that Jobs also shares.

However, a grower-type of leader has the ability to focus his attention on the external environment and the internal organizational environment of the organization (Miller, 2007). Although this specific characteristic can add great value to an organization, it can also result in its downfall when this type of leader focuses too much on either the internal or external environment that they lose sight of the latter. This might have been the case with Cooks during his time as CEO, where he placed his focus on the internal environment of the organization, rather than focusing on the external where at that time, it was most needed.

Specific qualities associated with this type of leadership role, are the following (Van der Erve, 2013):

- A grower-type of leader brings specialization into the organization.
- This type of leader is neither detailed nor customer-orientated. They focus more on the financial aspect of the organization. This is also proven in the actions of Cooks during his time as CEO, since no new products were launched to the market when he took over from Jobs. This might be since he rather focused on the financial aspect of the organization, than putting emphasis on what the customer needs and the releasing of new products. Which in Apple's case is not the right focus or strategy, since as shown in Apple's history, their revenue growth is primarily driven by its products and its customers. By not giving the customer what they want and staying competitive in the market, will result in the declination of the organization.
- A grower-type of leader also tend to devote all of his time to managing and fixing the systems and structures within the organization and do not focus on innovation or the development of new products or services.

- Together with financial growth, they also focus on the growth for more acquisitions. This can be seen in the many acquisitions and mergers that occurred during the time that Cooks was CEO at Apple.

8.2.1.3 Developing stages

As seen in the above graph 2 on page 131, Apple is currently in stage 3 since 2012, after it went through stage 2 of the developing stage theory as presented by Van der Erve (2013).

Stage 2 is the stage where it can be defined as the stage of innovation and nurture. While stage 3 of the development stage theory can be seen as the scale and optimization growth stage (Van der Erve, 2013).

Stage 2 of the developing stage theory in an organization is concerned with testing out various products and services to ultimately determine what will be delivered to the customer. Taking this into consideration, proves Apple's actions during the course of 2000 to 2011, where Jobs tested numerous different products in the market to determine what are Apple's customers' needs and what they expect from the organization. While, during stage 3, the organization and management focuses more on specialization and optimization in the organization, than in stage 2.

Van der Erve (2013) specifically states that when an organization founds itself in stage 2, its main focus point is on the external environment and what the customer wants from the organization. While in stage 3, the organization's focus shifts to the internal environment of the organization where it is more attentive on the improvement on structures and procedures within the organization (Erve, 2013). However, there exist a time during each stage where the organization should shift their focus back to either the internal or external environment, in order for them to still stay competitive in the market and to ensure improvements are still made within the organization.

These stages are specifically reflected in the leadership roles, as indicated in the previous sub-chapter 8.2.1.2, which are illustrated by Apple during these times. It is of the essence for an organization to understand their market and when it is needed to place their focus either on the internal organizational environment or focus on the external environment.

8.2.1.4 Summary

As seen from the above mentioned graph 3, it can be said that Apple's cumulative revenue growth illustrates a similar pattern than a product life cycle path. The only connection which can be seen from the organization's revenue growth pattern and its leadership role during the investigated time, is the specific leadership role attained by management during the increase and decrease of the revenue growth.

While Jobs focused on the external market and the delivery of products to its customers, Cooks was more concerned with the internal organizational environment of Apple. Since Apple's revenue growth path can be related to a product life cycle path, in this case it can be said that Apple only saw a successful revenue growth from 2009 onwards. At this time Jobs was CEO and focused on delivering new innovative products to a demanding evolving market which drove Apple's revenue growth. While, on the other hand when Cooks was CEO, no products was released to the market and Apple did not experience the same peak in revenue growth during these times as it did during Jobs' period as CEO.

In as much, there is also a strong correlation between the development growth stages the organization went through and the specific leadership roles at the various time periods. During stage 2, the innovate and nurture stage in the developing stage theory as stated by Van der Erve (2013), Jobs was primarily CEO and released a number of products to the market in order to determine Apple's customers' needs. Although Jobs show more leadership role characteristics which resembles to that of a transformer-type of leader, it can also be stated that he possessed some qualities that define a builder-type of leader as well; which is essentially needed during stage 2 according to Van der Erve's theory.

During Apple's life span, there were only two CEO's involved in the management and growth of the organization, and since Apple has now grown to stage 3, it may be that the changes in market and the development of the organization to the other stages, caused Jobs to adapt his leadership role in order to achieve success. Although Jobs can primarily be classified as a transformer-type of leader, he still possesses some qualities of a builder-type of leader. This can be seen in his work and the successful revenue growth that Apple achieved over the past 20 years.

In stage 3, Cooks filled the position of CEO and he can be classified as a grower-type of leader. In Van der Erve's (2013) investigations and studies, he proves that the best type of leader during this stage is a grower-type of leader who mainly focuses on improving the internal environment of the organization, rather than focusing on the external factors. Since the growth stage and leadership role is on correspondence with one another, Apple saw a successful performance outcome since Cooks took over as CEO.

However, it is important for Apple to invest in either a transformer-type or a builder-type of leader to ensure Apple has a sustainable growth in the future, since the organization's main revenue growth driving force is its customers' needs.

8.2.2 Deeper Investigation: Samsung Electronics

A detailed overview of the start and history of Samsung since 1938 can be seen in Appendix C.

Samsung's revenue growth, growth stages and leadership roles, as assigned by Van der Erve and Sieberhagen, can be seen on graph 4 on page 141. The time period under investigation dates from 2005 to 2014.

Summary of Samsung Electronics' Growth Path

Growth Investigation: Samsung

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Revenue Growth	69.9	74.1	85.4	105.2	118.2	134.1	154.1	190.6	216.7	216.7
Development Stage	3	3	3	3	3	3	3	3	4	4
Leadership Role	Reformer	Reformer	Reformer	Reformer	Reformer	Reformer	Reformer	Reformer	Reformer	Reformer
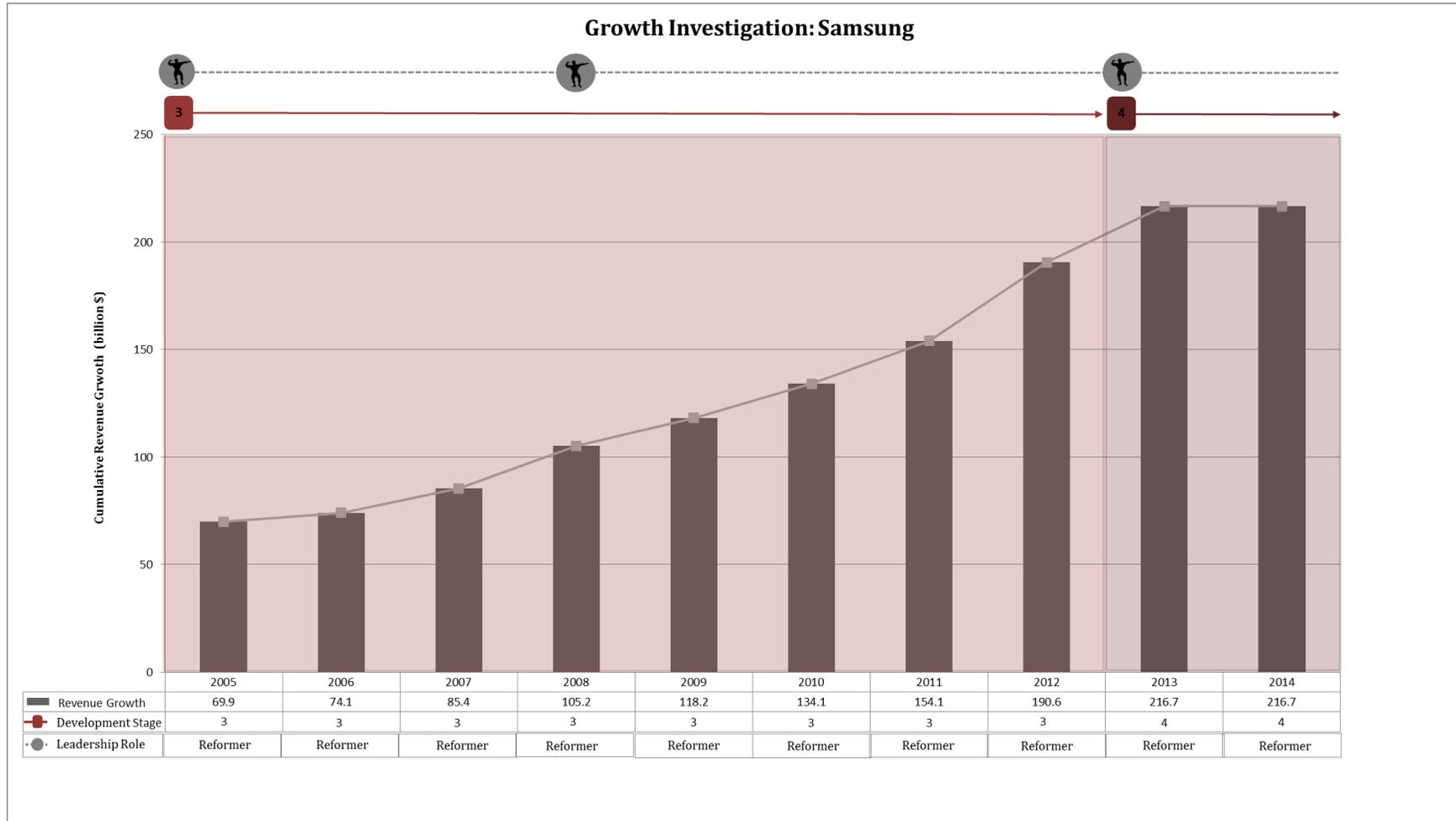
Graph 4: Summary illustrating Samsung's organizational growth path (2005 - 2014). Source: Marketwatch.com

8.2.2.1 Cumulative revenue growth (billion $)

Over the investigated period of 2005 till 2014, Samsung showed continues increases in its revenue growth, with no particular downfall or stagnation. The two years in where Samsung attained a record revenue growth percentage, was in 2008 and again in 2012.

Samsung proved to have a very good year in 2005 when the organization received awards from Fortune and the launch of the world's very first flexible LCD panel (Kovach, 2013). However, the manufacturing and quality of the LCD panels did not reach the success as it hoped it would (Samsung, 2015). Samsung then shot back and became the main sponsor for the Chelsea soccer team for the English Premier Club in the hope that its revenue growth would increase after the failure of its LCD panel manufacturing. This was one of the best marketing schemes a technology organization could ask for, since marketing and creating brand value for their organizations, is not on top of the priority list for most technology organizations (How innovation keeps Samsung one step ahead, 2006). Being the main sponsor for the Chelsea soccer team did definitely influence the slightly higher revenue growth in Samsung's performance over the course of 2005 and 2006.

In 2006 up to 2008, when Samsung reached its record high revenue growth, the organization grew significantly. A number of factors could account for this:
- After the first manufacturing downfall with its LCD panels, Samsung partnered with Sony in 2006 to develop a stable supply of LCD panels (Samsung, 2015).
- Samsung launched the world's very first 7-inch mega pixel camera phone, together with features like speech recognition – something Apple could not yet deliver to its customers. Together with these features, Samsung also developed other features which set the standard in the technology industry (Samsung.com, 2015).

Even though Samsung launched the very first thinnest Blu-Ray player in 2009 and announced their new open mobile platform, called 'bada', they did not experience the revenue growth they hoped for. This can be connected to the change in management positions during the course of 2008 and 2009 when Yoon-Woo Lee took over as CEO of Samsung at the end of 2008 (Kovach, 2013).

Yoon-Woo Lee had a slow start as his role as CEO and during 2009 to 2011, Samsung showed only a slight growth in its revenue growth percentage, even though the organization launched the following products to the market:

- Samsung's first Android smart phone, the Galaxy S.
- Galaxy Tab

During this time, Samsung were also part of a number of acquisitions and mergers with various organizational units, including the merger of Samsung Electronics and Samsung digital Imaging as well as Samsung SDS merged with Samsung Networks (Kovach, 2013).

Samsung reached its second record high revenue growth percentage in 2012 when the new Vice-president and CEO of Samsung Electronics, Kwon Oh Hyun took office (Samsung, 2015). Together with their new CEO, Samsung also recorded sales of more than 5 million on its Galaxy Tablets. This can account for the rapid increase in revenue growth which can be seen in 2012.

However, after its peak revenue growth percentage in 2012, Samsung attained lower revenue, which may be connected to the changes in management and the newly appointed CEO. While in 2013, Samsung launched their second generation of smart phones which resulted in fairly larger revenue than in 2012. However, no significant increases in its revenue growth can be seen since 2013.

The graph 5 below illustrates the new products Samsung launched over the past 10 years in comparison with its revenue growth profile, as illustrated in graph 4 above. It should be taken note that only the first generation of products was taken into account. If Samsung would have launched a second or later version of the specific product, then it will not be shown on graph 5.

The graph illustrates a significant pattern in Samsung's revenue growth – similar to that of Apple. The organization's revenue growth pattern illustrates a product life cycle pattern, but not as noteworthy in comparison with Apple's. Just after a noteworthy decrease in revenue growth of the organization, Samsung releases a new product to the market, and the revenue growth of the organization increased. This pattern can be seen both at the end of year 2008 and at the end of 2012.
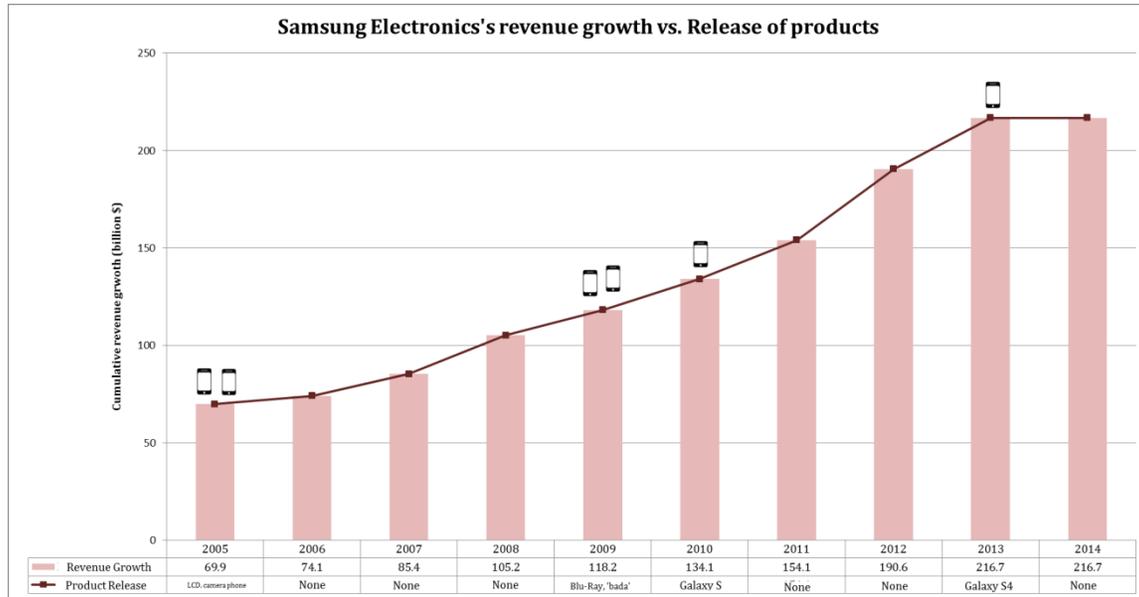
Graph 5: Samsung's revenue growth (billion $) versus its release dates of its various products

However, the following factors should also be taken into consideration when looking at graph 5 above:

-   In the year Samsung reached its downfall in revenue growth percentage, as shown in 2009 and 2013, was when a new CEO was appointed for the organization. In this case, the rising peak in revenue growth could either account for the specific leadership role of the leader at that time, or it can be the increase in the number of sales of Samsung's products.

-   One of the many attractions of Samsung which makes the organization much more favourable than Apple is that they offer high-quality products at the best lowest prices for their customers. It's understandable that they show a much faster increase in revenue growth after the launch of a product to the market. The organization is also well-known for its quality in products. They have a 'line-stop' policy where any employee can stop the manufacturing of a product when it seems as if the highest of quality is not attained (Kovach, 2013).

-   What should also be taken into consideration is that Samsung is also highly focused on promoting their brand and reaching out to the community. Over the course of 2000 up to 2015, they have received numerous awards for their outstanding innovative products. They have also sponsored some of the most well-known sport teams around the world and have given funding to charity in places all around the

world. In the public's eye, Samsung is a well-known brand which lives up to the quality products they promise to deliver. The marketing and providing of funds, can also account for the increases shown in revenue growth over the specific time period investigated.

- It should also be noted that the revenue growth graph illustrated above takes into account not only the smart phone industry and development of Samsung, but also their other electronic products as well, which also in the bigger picture, can make a difference, since one product could have delivered much more sales than the other.

Even though Samsung's revenue growth path can be connected to its product life cycles, other factors such as newly appointed CEOs, marketing and lower product prices, should also be taken into consideration when evaluating the organization's cumulative revenue growth.

8.2.2.2 Leadership roles

Samsung is known for being a family business where the position of CEO stayed in the founders' family since the start of the organization. Samsung's original founder was Lee Byung-chul and his main strategy and vision for the organization was that Samsung would become the pioneers and leaders in every sector of the technology industry. Over the investigated period, from 2005 to 2014, Samsung had three different CEOs.

Lee Kun-hee, who is also the third son of the original founder of Samsung, was CEO up and till the end of 2008 when Yoon-Woo Lee took over his position. Lee managed the organization until Kwon Oh Hyun took over the position as Vice-President and CEO of Samsung in 2012. All three CEOs over the course of the past 10 years were classified as reformer-type of leaders by Sieberhagen when asked to evaluate the CEOs of Samsung Electronics. Reformer-type of leaders specifically shows the following qualities in their leadership role:

 Lee Kun-hee, Yoon-Woo Lee & Kwon Oh Hyun: Reformer-type of leader

A reformer-type of leader is especially needed when the market in which the organization finds itself, changed dramatically or consist of other strong competitors that also contributes to the change in market and customers' needs. The specific leadership role the

past CEOs of Samsung possessed reflects exactly the above statement: the technology industry has been drastically changing the past couple of years and new competitors with new ideas and products are entering the market on a daily basis. In order for a well-established organization, like Samsung, whose structures, processes and procedures are already in place, to survive, one must consistently stay competitive. A reformer-type of leader is exact type of leader that can full fill this role and ensure that the organization still stays competitive and successful.

Another noteworthy quality that a reformer-type of leader possesses is that they are able to focus their strategy on the external environment and can re-evaluate their customers' needs before any new products are launched to the market. Other characteristics of a reformer-type of leader are as follows:

- A type of leader who is open for change and can take the necessary risks in a competitive market.
- Innovative and aspires to re-invent the organization by motivating the organization's employees to push the boundaries and inventing new products and services.

A reformer-type of leader is willing to push the boundaries and take risks to enter a new marketplace. This leadership characteristic was seen in the overall history of Samsung where they started off in the production and distribution of food industry and later on entered the technology industry. The organization has a vision to become the pioneers in every industry and its management style reflects this strategy.

Although the revenue growth shows a slow increase at the start of every new CEO's term, the graph still reaches a maximum revenue growth peak much higher than the previous one. As a matured, further evolved organization than Apple, Samsung has the right type of leadership role in their management to still provide new innovative products to the market and stay competitive in the industry – which is essential in the technology industry.

8.2.2.3 Developing stages

As seen in the summary graph 4 of Samsung's revenue growth and leadership roles, the organization is currently in stage 4 of the developing stage theory as presented by Van der Erve (2013). They started in stage 3 in 2005 and then grew to stage 4 in 2012. According to

the presented developing stage theory, stage 3 can be seen as the scale and optimizing stage, while stage 4 is defined by confronting and purifying.

Stage 3 is signified by improving and enhancing the current structures and processes already in place within the organization. It is usually the time in an organization where the focus point is on the internal organizational environment to determine where improvement within the organization can be made. The inner inequalities or problems are identified and solutions for these problems are determined. This however, is not reflecting the same results as can be seen on the graph 4 which illustrates Samsung's revenue growth.

Over the course of 2005 till 2012 Samsung's focus was to find new innovative products which they can launch to the market in order for the organization to stay competitive among the other competitors in the industry. This time period in Samsung's history shows more attributes and qualities that indicate that Samsung was already in stage 4 at the start of 2005.

The confront and purify developing growth stage is the stage when the organization changes its strategy in order to focus on the external environment of the industry. During this stage a lot of changes in strategy and organizational perspectives take place, which results in many employees leaving the organization since they do not believe in the changed new strategy. The organization also motivates innovation in the organization to ensure that new products are developed.

Even though the graph 4 illustrates that Samsung only entered stage 4 in 2012, the above factors which are significant during stage 4, can clearly be seen in Samsung's performance outcome and revenue growth since 2000. This also emphasizes the reformer-type of leaders that took the position as CEO over the course of 2000 up to 2014, whereas a reformer-type of leader can best manage an organization during stage 4.

8.2.2.4 Summary

Samsung's revenue growth graph illustrates a similar pattern as the growth of a product throughout its life cycle. However, the stabile increases in its revenue growth could not only be from the launch of new products to the market. Other factors also play a role in the

revenue growth cycle, such as the appointing of CEOs at the specific times before Samsung attained lower revenue than what was expected. Samsung is also known for its remarkable marketing, sponsorships to large sport teams and contributions to charities and countries in need. All of these factors should be taken into consideration when the revenue growth graph of Samsung's performance over the past 10 years is evaluated. It can be said that the revenue growth graph do not only reflect a similar life cycle as that of a newly released product to the market, but it can also illustrate the change in CEOs and external environmental factors.

One specific connection can however be made between the revenue growth and the appointing of a new CEO during that time. Whereas it can be seen that at the start of every new CEO's term at Samsung, the revenue growth percentage illustrates a slight decrease in revenue growth at that time. This can either be that the newly appointed CEO had a slow start in understanding the vision and strategy for the organization, or other factors can account for this downfall. At the start of every new CEO's term, Samsung launched a number of new products to the market which resulted in the revenue growth percentage to increase. This can either be a strategic decision from Samsung to release new products at the start of every new CEO's term, in order to ensure higher revenue, or it might have no correlation between the start of new management.

Although a link can be seen between the product release date, the revenue growth and the start of a new CEO; there are no significant correlation between the leadership role of Samsung and the developing growth stages applicable, except for the past 3 years. Samsung indicates that the organization was in stage 3 up and till 2012 when it developed to stage 4, but the activities that took place within the organization and the external focus on the external environment, has proven otherwise.

Nonetheless, Samsung showed a reformer-type of leader over the course of the investigation period, which is the best-fitted type of leadership role for Samsung in the current competitive industry it's competing in.

8.2.3 Apple versus Samsung Electronics

If one would compare both Apple and Samsung against one another by evaluating them according to the three identified variables, there are noteworthy factors that should be taken into consideration. The graph 6 below illustrates Apple's revenue growth against Samsung's revenue growth over the investigated time period. The release dates of the two organizations' products are also shown on the graph.
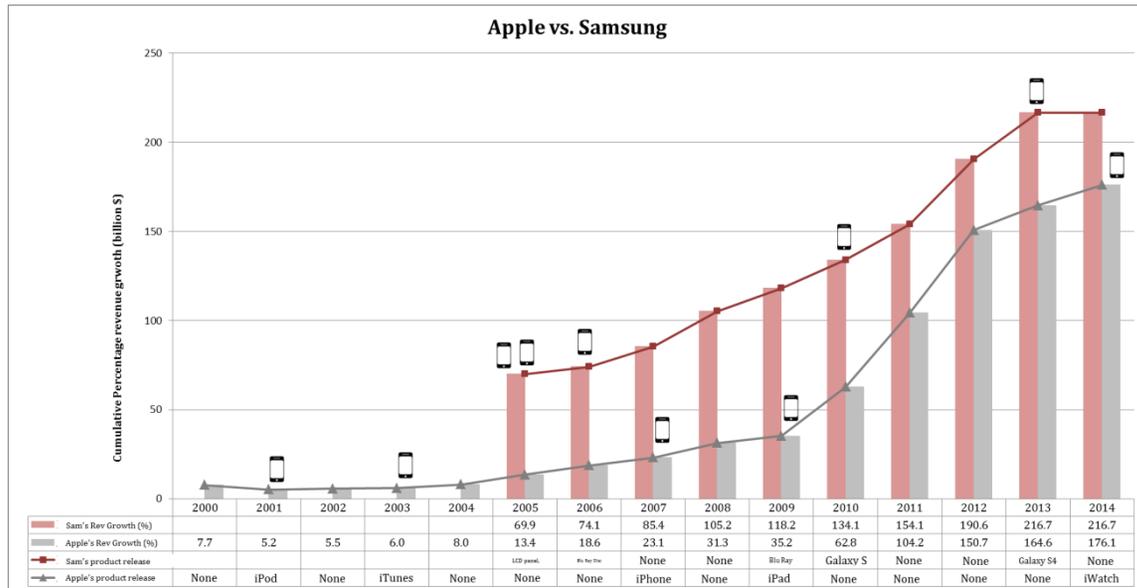
Graph 6: Apple's revenue growth (billion $) versus Samsung's revenue growth (billion $).

From the above graph 6, the following significant factors can be emphasized when the revenue growth and date of release of products from the identified organizations are analysed:

- **Revenue growth pattern:** In comparison with Apple, Samsung shows a much more stable revenue growth pattern that Apple. Whereas Apple's revenue growth illustrates a pattern with no sign of any increases at the start of 2000 to 2008; Samsung is much more steady growing and unchanging. However, this can be explained by Samsung's organizational maturity and that they have been in the technology market much longer than Apple. A mature organization's structures, processes and growth pattern are much more stable, organized and set than an organization that are still in the early stages of its life cycle. Also, Samsung has proven timelessly that they are much more stable than their competitors. Despite

the financial crisis in 1997 that affected nearly all Korean organizations, Samsung was one of the organizations that showed a continuous growth throughout these difficult times (Kovach, 2013). This can especially be attributed to Samsung's leadership in digital- and network technologies and its steady and strategic focus on its electronics, finances and related services.

- ***Product prizing:*** Apple's high pricing of its products can definitely be seen in its revenue growth, while Samsung's much lower price, but still guaranteeing high quality for its customers, can also be seen in its lower revenue growth in comparison with Apple. However, even though Apple's product is much higher in price range than Samsung's products, the increase in revenue between the release of the product and the year after is much higher in comparison with Samsung. Thus, even though customers might complain about the higher price range of Apple's products, it does not stop them from buying the product – Apple still sells much more products in comparison with the sales of Samsung.

What is also of noteworthy in this case is that the graph 6 above illustrates Samsung's entire revenue growth in the technology industry, which includes its revenue in its home appliances range as well other electronics, while Apple only illustrates the products it currently has on the market.

Even with a much smaller product range Apple has to offer for its customers, the organization still achieves a much higher cumulative revenue growth than Samsung. *Business Insider* recently reported that Samsung will not be able to keep the costs down with the manufacturing of its next smart phone, the Galaxy S6 (Samsung, 2015). Samsung will not be able to cover the extra software costs it did in the past, which will result in its customers to expect a similar price for the smart phone as other Android devices. With a history of development in software – they have the knowledge and necessary platforms to sell products at a much cheaper price, but it seems the development of other features have caught up with Samsung and they will not be able to deliver the same product at the same price for its customers. This may result in a higher revenue growth for Samsung or it might result in Samsung losing some of its customers since they are not able to pay that kind of money.

Other differences between the two organizations in their functionality and operation, consists of the following:

- ***Marketing and brand value:*** Another significant difference between Apple and Samsung's outlook in the market and revenue growth, is that Apple only recently started to market some of its products. This might be due to the fact that they only recently started selling their products in other countries around the world or for the reason that it was previously not necessary. The brand, '*Apple*', sell itself – every person wants an Apple product. While Samsung is one of the world's most known brand with its continuous marketing and sponsorships for famous sport teams. This might be since Samsung is a much more matured organization than Apple and the marketing of its brand is a necessity to still show its competitiveness in the market. However, the extra marketing of its brand and sponsorships shows no improvement or influence in the organization's revenue.

- ***Founders' vision:*** Samsung was started by Lee Byung-chul and surprisingly the organization started out in the production and distribution of groceries. The organization only expanded later into other industries, such as insurance, retail and securities. Even though Samsung expanded to various other industries before it entered the technology industry, the organization's vision as promoted by the original founder, stayed the same: Byung-chul wanted the Samsung Group to be the leading pioneers and trend-setters in almost all the industries. With the founder's passing, the organization still lives out the same philosophy of large-scale expansion into various different industries and development. Not only is Samsung's leaders and management not afraid to take any risk, they also invest millions of dollars each year into research for better technology and the development of their products. Since the start of Apple, Steve Jobs was the only main driving force for innovation and new product development in the organization. Except for the release of the iWatch in 2014, Tim Cooks have not shown any interest in innovation or setting the standard in the technology industry, as previously proven by Apple when Jobs was CEO. Even though Jobs had a clear vision of where he wanted Apple to go and he fully understood what needed to be done to become the most competitive organization in the technology industry, the vision he had, still needs to become part of the organization's '*everyday living'.* Samsung has proven that the vision and philosophy the original founder had for the organization, has stuck over the years –

perhaps since this is a family business and that it was rooted in the organization from the start. For Apple to ensure a similar growth pattern and success rate as it has shown in the time of Jobs, Cooks need to adapt a similar vision like Steve Jobs had.

- ***Adaptability to the changing market:*** Due to the fact that Samsung can be seen as a much more mature organization, makes them much more adaptable to changes in the industry when compared to Apple. Samsung's expansion into various different industries with diverse marketplaces caused Samsung to be very adaptable to change in any industry. However, the technology industry is known for its fluctuation and constant changes and still Apple proves to be the number one competitor in the market. This can either be due to its significant leadership roles and management or because of its innovative products which seems to be setting the standard for innovation in the technology industry. Nonetheless, both Samsung's history of adapting to different changing markets and Apple's innovative products and management, has caused the organizations to survive in one of the most fast-evolving industries in the world.

From the above investigations of Samsung and Apple, there are no particular connections that can be drawn between the different variables which were specifically investigated. Apple has shown that there is a strong correlation between the specific developing growth stage the organization operates in and the leadership role of the CEO at that specific time period. Still, its revenue growth graph shows a similar pattern to the product life cycle of its products as they are released to the market. While Samsung shows strong connections between the organization's revenue growth and its leadership role. However, in both cases it can be stated that organizations', which delivers a product to the market, revenue growth graph illustrates a similar pattern as a product life cycle.

Thus, from the above mentioned analyses for both organizations, it can be stated that the presented hypothesis can neither be accepted nor rejected for organizations in the technology industry which specifically provides a product for its users. However, even though no significant patterns and correlations between the developing stages and the corresponding leadership roles illustrates a successful outcome in the organization's revenue growth, there exist a growth pattern is driven by the release of new products to the market. In this case, if only the developing stages and leadership roles are taken into

account, the formulized hypothesis can be accepted for organizations operating in the technology industry and providing products to their users.

8.3 Technology industry: Service-focused customer

Even though organizations in the technology industry, which focuses primarily on providing a product to its customers, are facing serious changes, the organizations which provides a service for a certain customer base, are experiencing the opposite. In the same article, *'Technology Industry Trends: Value and Innovation'*, the authors reckons that the organizations which currently shows the highest stable revenue growth are the organizations which are providing a service in the technology industry. This is because the service-providing unit in the technology industry has enjoyed an enormous amount of growth the past couple of years.

Leaders specifically in this part of the technology industry include organizations such as Salesforce.com, Amazon, Google, Yahoo and Microsoft Azure for a number of various cloud-based platforms, apps and services. Most of these organizations are strongly competing for the most market share in their web-based platforms, and as they compete among each other, they drive down the pricing to lure the customer to their platforms, which motivates more and more organizations to follow the same innovative business model. Another plus point for these organizations is that the revenue for web-based software and systems, are expected to grow at a compound annual rate of more than 20% in the next decade (Baer, 2015).

Experts believe that web-based organizations will continue to rapidly grow in the future, but only as the industry will permit it to grow (Baer, 2015). In order to ensure sustainable growth in the future, organizations in the technology industry that specifically focuses on providing a service to its customers, need to fundamentally change the policies and processes they rely on to source, integrate, maintain and manage its web-based platform. Organizations also need to continuously adjust their operating systems to accommodate the changes in the market and invest in capabilities to deliver their service effectively. Among the capabilities that are essential for web-based organizations, are the ability to build long-term relationships with their customers to understand their needs, and to ensure that their service are user friendly to guarantee more frequent customer visits and selling, as well as

better revenue management and forecasting of changes in the future. To ensure that some of these capabilities are met, the organizations can either merge or acquire other organizations. In other cases, the organization can decide to rather hire more external consultants to receive the necessary capabilities.
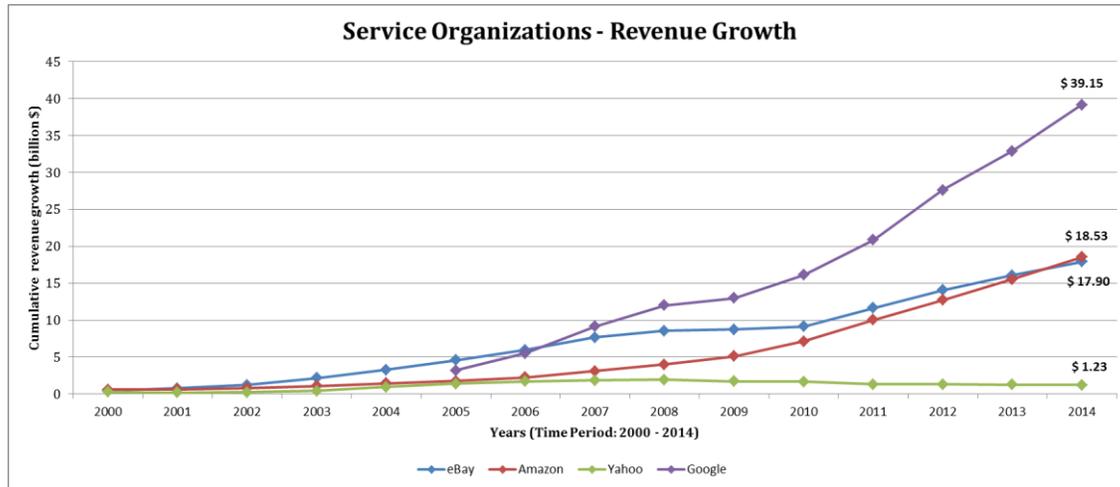
Graph 7: Illustrates the percentage revenue growth (billion $) of the identified organizations under investigation. Source: Marketwatch.com

The graph 7 above illustrates the specific organizations which are service-focused in the technology industry and of which the preceding analysis and investigation in this chapter is based upon. Graph 7 illustrates the service-focused organizations' revenue growth (as shown in billion $) path.

As can be seen by the revenue growth pattern of the various organizations under investigation, no trend can be seen in the later growth stages of the specific time period under investigation. However it is only in the early stages that a similar revenue growth correlation can be seen among the organizations. Only Amazon and Google showed an increase in revenue growth from 2009 onwards, while the other organizations, such as Yahoo and eBay, indicate a decrease in their revenue growth over the same time period, even though all of the organizations functions and operates in the same market space.

For the purposes of this study, deeper investigation and analysis will be done on specifically Yahoo and Google, since both these organizations are in the same market segment in the technology industry and share similar customers.

The two organizations chosen are also currently the two major competitors in the same sector of the technology industry. Both organizations are competing for the number one spot in the search-engine sector of the technology industry. The two organizations differ in the developing stages they are currently operating in, as well as the leadership roles of their current CEOs are also not similar.

The chosen organizations will specifically be evaluated on the organization's performance, according to its revenue growth, the developing growth stages as presented by Van der Erve (2013), and also the leadership roles of their previous and current CEO. As previously stated in the product-focused analysis of the technology industry, outside representatives and experts in their field, were asked to assist and give their knowledge on the particular variables being tested in the formulated hypothesis.

Marc van der Erve, organizational expert and creator of the theory under study, were asked to indicate the particular growth stage of every organization under investigation. While, Marike Sieberhagen, human resource manager and expert in the field of leadership roles, were asked to classify the particular leaders involved at every growth stage of the chosen organizations, into Van der Erve's leadership roles. In doing so all findings from the hypothesis are objective and not biased.

Van der Erve's developing stages include:
- ***Stage 1:*** Explore and discover
- ***Stage 2:*** Innovate and Nurture
- ***Stage 3:*** Scale and Optimize
- ***Stage 4:*** Confront and Purify

Whereas, in evaluating the specific leaders in the two organizations, their leadership role will be classified according to the following leadership roles:
- Transformer-type of leader
- Builder-type of leader
- Grower-type of leader
- Reformer-type of leader

Even though these three variables will be the main focus throughout the study, other factors which may have influenced the organization's revenue growth, will also be taken into consideration when testing the presented hypothesis.

The chapter will conclude in a comparative summary where Yahoo and Google will be evaluated and compared to one another to ultimately determine whether the presented hypothesis at the start of the study, can be accepted for service-focused organizations, or whether the hypothesis are not applicable to these organizations.

8.3.1 Deeper Investigation: Google

A detailed overview of the start and history of Google since 1995 can be seen in Appendix D.

Google's revenue growth, growth stages and leadership roles, as assigned by Van der Erve and Sieberhagen, can be seen on graph 8 on page 157. The time period under investigation dates from 2005 to 2014.

Summary of Google's Growth Path

Growth Investigation: Google

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Revenue Growth	3.2	5.5	9.1	12.0	13.0	16.1	20.8	27.6	32.9	39.1
Development Stage	3	3	3	3	3	3	3	3	3	3
Leadership Role	Grower	Grower	Grower	Grower	Grower	Reformer	Reformer	Reformer	Reformer	Reformer
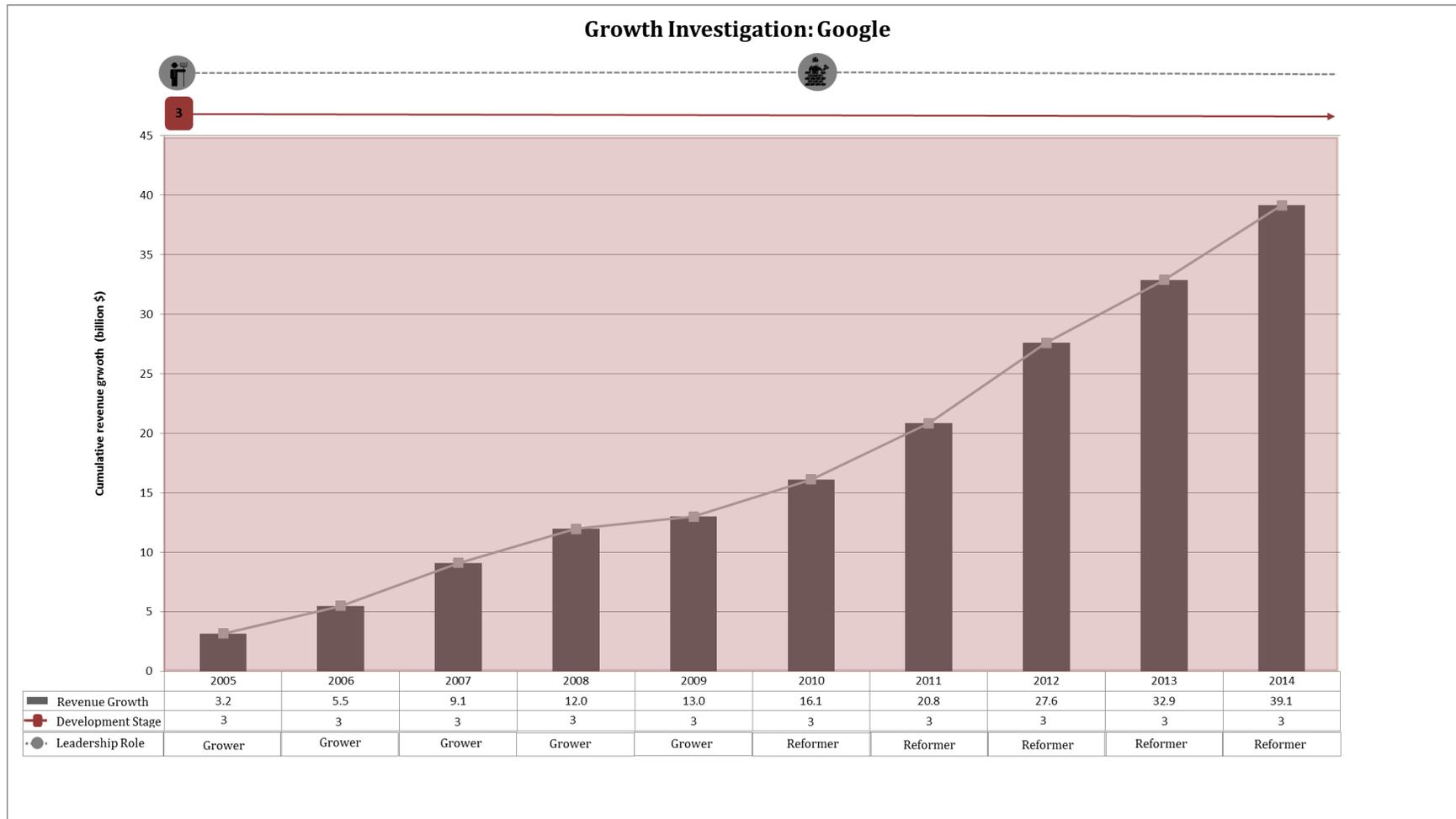
Graph 8: Summary illustrating Google's organizational growth path (2005 - 2014). Source: Marketwatch.com

8.3.1.1 Cumulative revenue growth (billion $)

Over the course of the investigated period, from year 2005 up and till 2014, Google has shown a steady climb in its revenue growth.

The noteworthy peak in Google's revenue growth since 2010 and the steady climb onwards can however be explained by the following points:

- A total of $ 4000 billion management shares Google decided to sell at the end of 2005 (Hall, 2015). The organization hired two investment banks, specifically Morgan Stanley and Goldman Sachs to handle the initial public offering for them. Only four months into the new year of 2006 and the Security and Exchange Commission of America (SEC) announced that more than 50% of the shares which Google offered are sold out (Kettler, 2014). In August of 2006 more than 19 million shares of Google were sold to private investors at a share price of $85 per share. This resulted in Google's revenue growth percentage to reach its ultimate peak when the organization got 1.67 billion dollars in return for the shares they offered to investors (Hall, 2015).
- Another significant contributor to Google's growing revenue growth during 2005 up to 2008, was that the organization bought Android Inc. during this time (Google.co.za, 2015). This was a very smart move from Google since experts believe that the Android operating system will turn into the number one operating system for smart phones world-wide.
- Google Maps also went live and was later activated on mobile phones in America for all users (Hall, 2015).

However, since the organization reached their highest peak in revenue growth over the past 10 years, it failed to overstep the 92.5% mark in revenue growth percentage ever since. Google has experienced a number of failures throughout the years; some had a major effect on the outcome of their revenue, while others, as in 2009, resulted in the revenue growth to gain positive momentum. The services and products which resulted in the steady growth of Google's growth revenue, includes:

- Google invested in both two new developments over the course of 2005 and 2007, but it failed to deliver any success when the products reached the market. One of these, are the *Web Accelerator*, which Google launched to its customers in order for

them to reduce their web access times by using different software technologies (Hall, 2015). This product however had some deal breaking bugs and it prevented users from watching *Youtube* videos. The other product Google created, but was unsuccessful was *Google's video player*. This video player was a standalone desktop application which the user could use for playing Google video files (Kettler, 2014). However, the product did not reach its success rate, since many customers thought that the other video players on the market offer much more. This proves that unless Google enters a market with a clear improvement on existing products, they will not succeed.

- Google *audio ads* in 2006. Google Audio ads is a radio-based advertising platform which would offer powerful metrics of search-based advertising to broadcasters, but Google found the measuring of the performance of the product fairly difficult and they decided to leave Google Audio Ads behind (Hall, 2015).

- *Google Notebook* was launched in 2007 which offered Google users to cut, paste, link, save and even share text from the web to a personal 'textbook' on their computer (Hall, 2015). However, even though this application was not as successful as Google have hoped, the functionality of it was replaced by Google docs. Whereas the user could have access to the 'textbook' from its computer, they can now log into Google from anywhere and access their documents.

- Another service Google attempted in 2008, but was proved to be unsuccessful, was *'Jaiku'* (Kettler, 2014). This is a similar micro-blogging service that Twitter provides to its users.

- Google also launched *Google Wave* at the start of 2009 – an instant messaging and e-mail service Google provided for its users (Hall, 2015). Google have hoped that this will bring a new revolution to communication, but it failed enormously. Google wave also showed very similar functionality as Google's *Gmail*, which was launched at the end of 2004 (Kettler, 2014).

Nonetheless, even though Google did not show much of a success story with all of the products and services it launched to its users, the organization did acquire both Youtube (2006) and Motorola Mobility Holdings (2008), which resulted in Google attaining a peak in revenue growth which they most probably would not have achieved if they did not make these acquisitions.

Google started to attain a higher increase in revenue from 2009 onwards. This might be due to Larry Page, one of the original founders of Google, returning to the organization as CEO. His reformer-type leadership role, which will be explained in detail further in this chapter, might have resulted in him focusing on the external environment of the organization and launching the specific products and services to the market which Google's users wanted.

Although Google launched Google +1 in 2012 which quickly reached more than 90 million users world-wide, they did not attain the revenue they hoped for at the time (Kettler, 2014). However, since 2012 Google has shown no significant upward change in its revenue growth path, but many critics believe that with Page as CEO and the increasing promise Google +1 has shown over the past few years, Google might be one of the main competitors in the market among Facebook and Instagram. Graph 9 below illustrates the cumulative revenue growth of Google over the investigated time period with the specific services and products the organization launched over this time period.
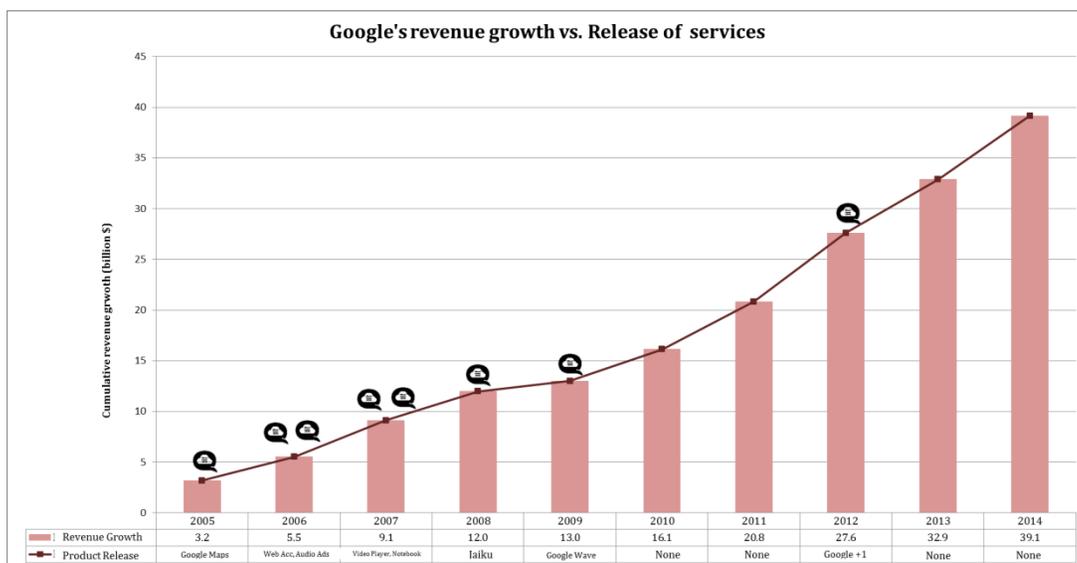
Graph 9: Google's cumulative revenue growth (billion $) versus its release dates of Google's services.

From graph 9 above, it can be seen that Google's revenue growth percentage path do not show any correlation or resemblance to a service life cycle, as was shown in the investigation of organizations which provided a product to its customers. This might be due that Google's success does not lie in the launch of new services or products, but rather in the revenue they receive with their *AdWords*, which was launched in 2000 (Hall, 2015). AdWords sells advertisement space on the Google platform next to the related search

results of the user. This service Google provided become very popular among many organizations whereas their advertisement appeared next to the related search results of the user. This was very valuable for any organization and in return, Google also benefits from it. Statistics indicate that 97% of Google's revenue in 2011 was primarily from AdWords (Kettler, 2014).

What makes AdWords different from the other space advertisements other competitors 'sell' to its customers, is that Google maximises the revenue they earn by selling the top advertisement space to the organization which will most likely pay Google the most. This however differs from Yahoo's business model; where they sell the best advertisement space to the organization who wishes to pay the most for a specific keyword which the user searches for. Google's business model in how they approach AdWords are so successful, that statistics indicate that the revenue Google attains from their AdWords are 30% more per advertisement than what Yahoo makes from their advertisement space (Hall, 2015).

The success AdWords provides to Google can definitely be proven by its revenue growth over the course of the past ten years. The contribution Google AdWords adds to the revenue of the organization, could account for the fact that Google's revenue growth indicates a stable growth.

8.3.1.2 Leadership roles

Google had two very different types of leaders over the course of the investigated time period. Eric Schmidt, who was the previous CEO of Novell, was the CEO of Google from 2005, while Larry Page, one of the original founders of Google, returned to the organization as CEO at the start of 2010 (Kettler, 2014). These two leaders have very different types of leadership roles and the leadership qualities they possess.

While Schmidt can be seen as a grower-type of leader, Page can be classified as a reformer-type of leader which focuses on the external environment of the organization, rather than a grower-type of leader whom are more concerned with the internal environment of the organization. The different leadership roles, as indicated by Sieberhagen, are described below in detail:

Eric Schmidt: Grower-type of leader

Eric Schmidt possesses the same leadership-and management qualities that can be classified as a grower-type of leader which focuses mainly on the scaling and optimization of the organization. A grower-type of leader is mainly focused on the behaviour of the employees inside of the organization and how the current structures and processes can be improved. This leader's perspective changes to the internal problems the organization currently faces, whereas the leader's weakness is focusing on the external environment and trying to find solutions to improve the outer problems the organization faces. More specifically, a grower-type of leader possesses the following characteristics:

- They are able to see the current problems on hand inside of the organization and find the necessary solutions for it. Where these problems specifically concerns the organizational structures, systems which are in place, employee behavioural problems and other processes which needs attention.
- Together with solving problems, this type of leader also focuses on improving the current systems and processes in place and providing more specialization in the different departments.
- A grower-type of leader is also more attentive on the finance and the management of fixing systems and attending to problems.

Larry Page: Reformer-type of leader

On the other hand, Larry Page shows similar traits as that of a reformer-type of leader. Van der Erve (2013) explains that this type of leader is especially needed when the market changes dramatically with the introduction of new technologies, competitors or other products and services.

It is at this time that the organization should also shift its focus to the outside environment and determine what the customer needs. As being one of the original founders of Google, Page understood Google's vision and more importantly, he understood Google's users. When he took over as CEO in the early stages of 2010 he brought innovation and new changes into the organization, which can account for the fact that Google showed an

increase in revenue growth since he became CEO (Hall, 2015). Other significant qualities the reformer-type of leader possess, includes:

- This type of leader aspires to re-invent the organization. Either by implementing the same vision and strategy from which the organization was originally based on, or by establishing new strategies and objectives within the organization.

- A reformer-type of leader also challenges the boundaries of the industry and is not afraid to take risks even if they know it might not turn out as a success.

- A leader who is not afraid to take on a new vision for the organization and they also possess strong motivation qualities to get the rest of the organization also on board with the new vision and goal for the organization.

The leadership roles of the two leaders do not reflect the outcome of what can be seen from the revenue growth of the organization. Whereas, Schmidt possesses qualities of a leader who mainly focuses on the internal problems of the organization, he focused primarily on launching new services and products to the market. No significant increase in revenue growth was seen during the time Schmidt was CEO.

On the other hand, Page showed management traits of a leader who focuses primarily on the external environment of the organization. He first re-evaluated the market and Google's current users before he launched a service to the market in 2012 (Kettler, 2014). Although Google +1 did not immediately show such a noteworthy revenue growth as in the previous years, many experts believe that this innovative service for Google's users will become one of the main competitors among others like Facebook and Instagram (Hall, 2015).

8.3.1.3 Developing stages

As can be seen in the above summary graph 8 illustrating Google's revenue growth and developing growth stages, the organization is currently in stage 3 as defined by the developing stage theory by Van der Erve (2013). This stage is known for improving and enhancing the structures and processes which are already in place within the organization. More specifically, stage 3 according to Van der Erve's (2013) developing stage theory can be seen as the scale and optimizing stage.

During this stage in an organization's life cycle, the organization and its employees are primarily focused on the internal environment of the organization (Van der Erve, 2013).

Attention is primarily given to the current structures and processes to provide more specialization and optimization to these areas within the organization. The developing stage in which Google found itself during the course of 2005 up to 2009, when it did not experienced any particular increase in revenue, can be the reason why Google experienced so many service failures during this time. Where the organization should have actually focused on the inner problems within the organization, they were more attentive on introducing services and products to the market. This emphasizes the need for management to understand its organization and the developing growth stage the organization is in at a certain time during the course of its life cycle.

Google had the right leadership role in place in 2005 to scale and optimize its structures and processes, but the organization's main focus was not on the right strategy at the time. If the leadership role was more effectively implemented in the scale and optimizing stage in which Google developed through, the organization would probably have shown a much higher revenue outcome during this time.

8.3.1.4 Summary

The findings of the evaluation of Google's revenue growth, leadership roles and developing growth stages of the investigated period, indicates other similarities if compared to organizations also in the technology industry but providing a product to its customers. Its revenue growth path does not show any correlation to a service life cycle, as shown in the illustrated in graph 8. Rather, Google's revenue growth path has a strong connection to the leadership roles which was applicable during the specified time period.

Like Apple, Google is mainly a customer-orientated organization where it is important for the organization to take the customer into account when they implement innovation within the organization. The organization should launch the right product and services at the right time in the organization's development cycle, in order to achieve success. By taking both the customers' needs and the developing stage of the organization into account, the right products and services should be launched to the market in order to gain a strong revenue growth.

For this reason, Google is a good example to illustrate that if the organization recognizes the developing stage in which it currently operates and implements the correct leadership role associated with this stage, it will guarantee success for the organization. However, if the organization fails to connect the right leadership role with its developing stage, the results may be unpredictable.

The biggest success of Google is its collective entrepreneurship which is a network organization that allows a diverse group of people to share the same risks and rewards associated with the discovery and exploitation of new business ideas and opportunities (Hall, 2015). Google provides a platform where different organizations and users can view, share, blog and advertise their services, opinions or products. It is a platform that connects millions of people around the world, either with a service, product or opinion. A successful outcome, results in a beneficiary result for all of the parties involved: a user gets the information that he or she searches for, advertisers make a profit from the product or service they advertise on the search page, while bloggers and Google share in the profits. When the founders of Google started the organization, they did not necessarily have a vision in mind of an organization which provides different products and services to its users. Rather, they believed in developing a business model innovator by focusing on collective entrepreneurship.

This vision the original founders had, improved the organization's revenue growth since Page took over as CEO in 2010. He knew Google's intended vision from the start and understood what the users wanted. Not only did he re-invent the organization to what it originally was created to provide to its customers, some experts even believe that the latest service Google launched, will be one of the main competitors in the market.

8.3.2 Deeper investigation: Yahoo

A detailed overview of the start and history of Yahoo since 1994 can be seen in Appendix E.

Yahoo's revenue growth, growth stages and leadership roles, as assigned by Van der Erve (2013) and Sieberhagen (2015), can be seen on graph 10 on page 166. The time period under investigation dates from 2000 to 2014.

Summary of Yahoo's Growth Path
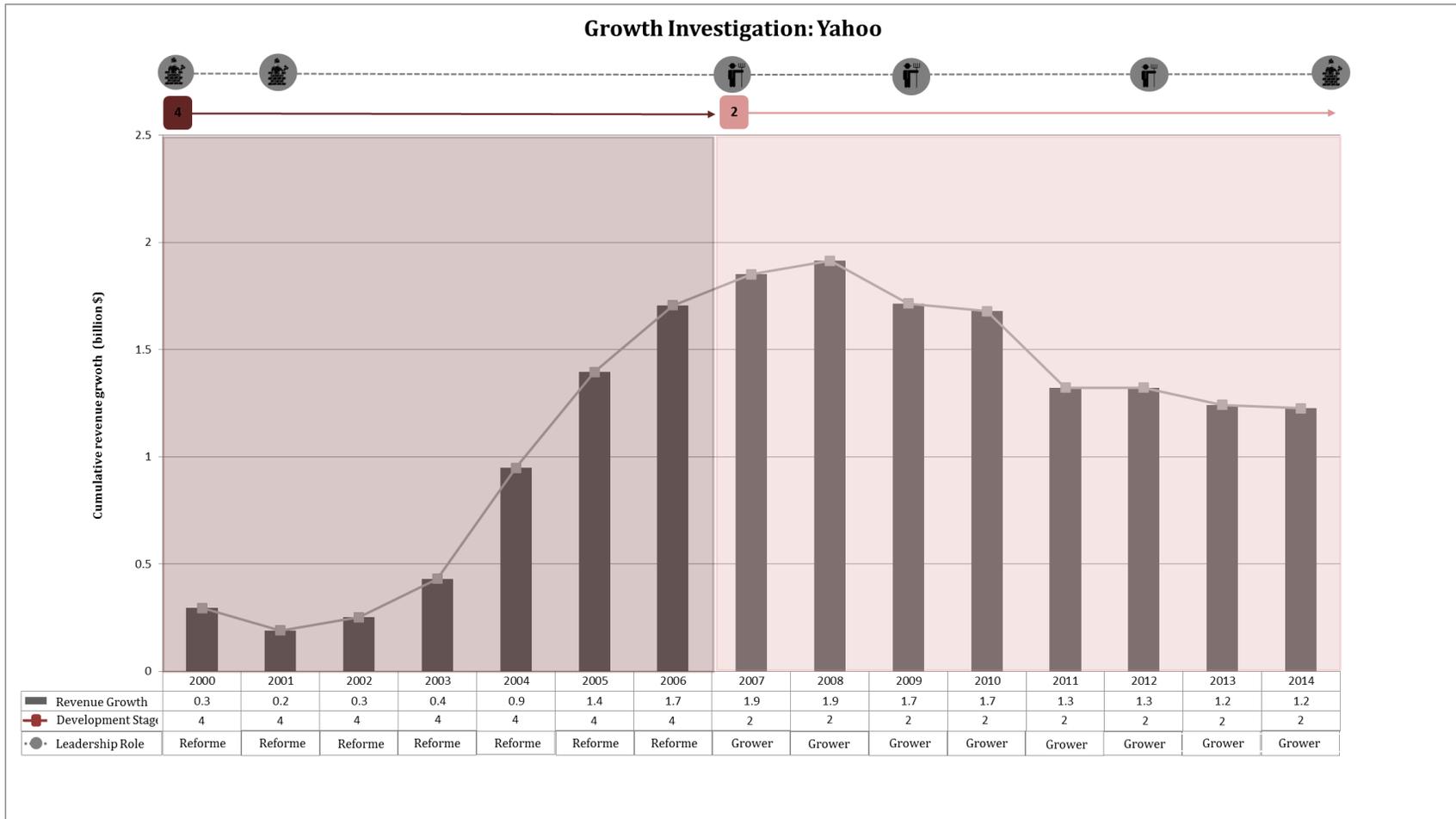
Graph 10: Summary illustrating Yahoo's organizational growth path (2000 - 2014). Source: Marketwatch.com

8.3.2.1 Cumulative revenue growth (billion $)

Over the course of the investigation time period, from 2000 up to 2014, Yahoo has only shown an improvement in the organization's revenue growth up to 2004.

Since the organization reached its highest peak in 2004, Yahoo could not succeed in attaining more than 8% in revenue growth. Even though the investigation period only stretches from 2005 onwards, Yahoo's share price reached its ultimate high in 2000, when the share price peaked at $188.75, but it soon dropped to an all-time low when the financial crisis hit at the end of 2000 – the result of this can also be seen with Yahoo's revenue growth drop in 2001 (Olanhoff, 2012).

When the investigation period is taken into account, many things can be said from the peak revenue growth which Yahoo attained in 2008 to when the organization's revenue growth continuously declined and never seemed to be able to gain momentum. Many reasons can account for this, however some of the most significant ones, are:

- In 2005 Yahoo launched a number of different services for its users. Yahoo music was launched which provided users with the streaming of audio, music videos, internet radio, music news and exclusive artist features (Olanhoff, 2012). They also launched their Yahoo blogging and social networking service, Yahoo 360. Lastly, the organization also released its Yahoo widgets – a software platform that was acquired from *Konfabulator* and transformed to accommodate Yahoo users (Successstory.com, 2015).
- In 2006 Yahoo started using smart advertisements on its search engine, which changed continuously based on the user's location and its searches. Even though this should have increased the organization's revenue growth in 2006, the service which should have been beneficial for both the user and the organization advertising the product was unsuccessful.
- Yahoo also bid against Google in 2006 to gain ownership of the popular video site, *Youtube.* Even though Yahoo was outbid against Google, they showed innovation in their search engine's appearance by improving its appearance and some features. One of the most competitive attributes which sets Yahoo apart from the rest of the

competitors in the market, is that Yahoo personalized each user's homepage (Olanhoff, 2012).

- At the same time, yahoo also had the opportunity to buy the popular social networking site, Facebook, but due to an uncertain stock price, Yahoo had to lower its offer, which allowed Mark Zuckerberg, Facebook's CEO, to walk away from the deal (Olanhoff, 2012).

Although many service and product releases, and acquisitions took place in 2006, the most significant transformation during this year was the re-structuring of the organization. Both Yahoo's COO and CFO departed the organization and many unit shifts were made (Olanhoff, 2012). This can also account for the drop in revenue since the re-structuring of different departments takes time for employees to understand and gain trust in the new organizational structure.

- Furthermore, in 2007 Yahoo started shutting down Yahoo Photos to transition its users to its new service, Flickr – a platform Yahoo acquired earlier and which provided a much more stable platform for its users (Successstory.com, 2015). This however left Yahoo's users in confusion since not all of them were aware of the transition.

- One of the major mistakes some experts believed Yahoo made, was to not accept the offer from Microsoft in 2008 when they offered to buy Yahoo for $20 billion, because since then, no increase in Yahoo's revenue were seen. Some believe that Yahoo's management back then should have accepted the offer and walked away, before the organization's revenue growth declined further. However, it was not until 2009 that Microsoft gained a fairly huge amount of profit shares in Yahoo and they took over the operation. Microsoft then later announced in 2009, that Bing would now in future power Yahoo's searches (Olanhoff, 2012).

- Yahoo launched a mail and messaging application for Android in 2009, but this proved no significant value to Yahoo's revenue growth.

Graph 11 below indicates the services Yahoo launched over the investigated time period to its users. Since 2008, when Yahoo reached its highest peak in revenue, the organization struggled to attain the same revenue since.
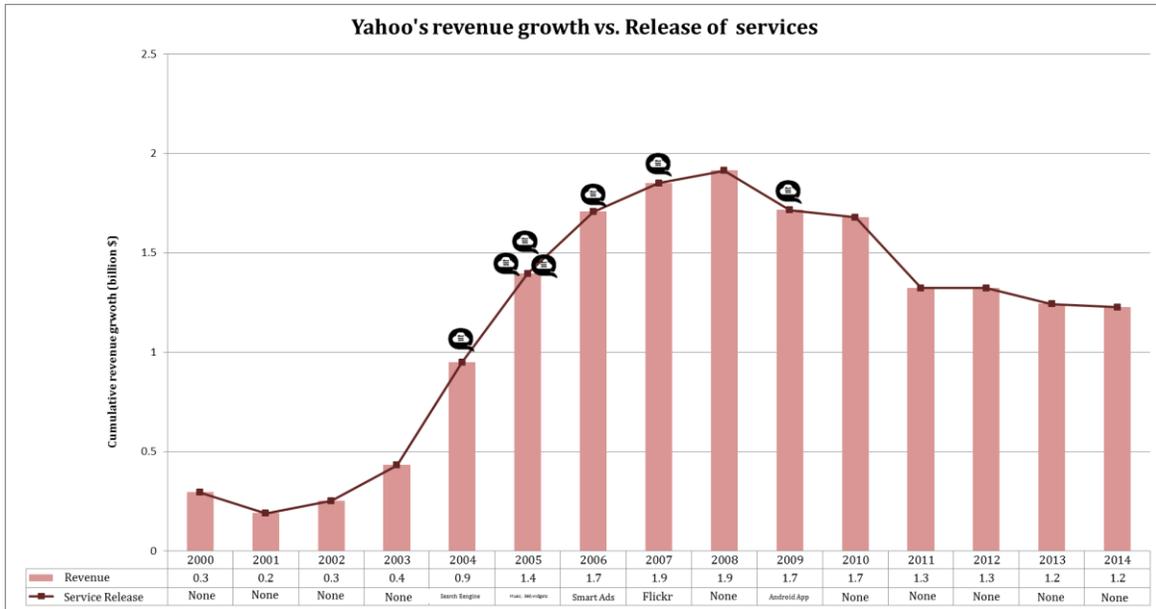
Graph 11: Yahoo's revenue growth (indicated in billion $) versus its release dates of its various services.

Yahoo also tends to focus more on acquiring other acquisitions or merging with other organization, rather than enhancing or developing innovative services for their users. This is emphasized by the above graph 11, which indicates the release dates with the specific service over the investigated time period. Yahoo especially focused on launching new services to their users when the revenue growth percentage was promising, but these attempts failed since the revenue growth did not show any improvement afterwards.

Yahoo reached a record of gaining more than 79% profit percentage on revenue earned in 2004, which resulted in Yahoo attaining some momentum and showing an improvement in their revenue. During this time, Yahoo also sold half of its stake in the Alibaba Group for more than $1.7 billion in cash and stock – another factor which can account for the high increase in revenue growth of the organization up and to 2008 (Successstory.com, 2015).

However, together with the increase in revenue growth, Yahoo also laid off 2000 employees in 2007 after the new CEO was appointed, but allegations later then surfaced in regard of an error in the newly appointed CEO's resume (Olanhoff, 2012). Scott Thompson, the CEO of Yahoo in 2012, then left the organization at the end of 2012.

Even though the organization's revenue gained does not necessarily show it, but Yahoo was the most used search engine portal in America in 2013, overtaking its biggest competitor, Google, for the first time. Not showing very promising revenue growth ever since the high peak in 2008, many experts are hopeful that Yahoo will turn around their performance, especially with newly appointed CEO, Marissa Mater, who previously worked in Google to help in the development with some of Google's most innovative products.

8.3.2.2 Leadership roles

Yahoo clearly did not show any success with its management's performance over the past 15 years. Over the course of the investigated time period, Yahoo had the most CEO's appointed at an organization – each with a different type of leadership role according to Van der Erve's (2013) suggested leadership roles in his developed stage theory.

Terry Semel was CEO of Yahoo since 2001 when the organization showed a significant increase in revenues, even though many experts believe that appointing Semel as CEO of Yahoo was one of the biggest mistakes the organization could have made (Successstory.com, 2015). Having previously worked at Warner Bros, people felt that he had no experience in the technology industry and did not show the innovative drive in the organization, which was so desperately needed.

Yahoo was hopeful when they appointed Yang, one of the original co-founders of Yahoo, in 2007 (Successstory.com, 2015). They expected that the revenue growth of the organization will turn around, but Yang failed in his attempt. Carol Bartz then took over from Yang in 2009, the former CEO of Autodesk, but he only lasted until 2011, when he was fired from the organization (Olanhoff, 2012).

In 2012 Yahoo had a rough start when the organization appointed Scott Thompson as CEO after Bartz got fired. However, when allegations surfaced regarding an error on Thompson's resume, he resigned later that year. Yahoo later then appointed its very first female CEO, Marissa Mayer, who was previously part of the Google group who developed some of the most innovative products and services the world has seen.

More specifically, these leaders were classified according to the leadership role Van der Erve (2013) presents in his developing stage theory:

Terry Semel: Reformer-type of leader

Terry Semel is one of the leaders, apart from Marissa Mayer in the investigated time period of Yahoo's performance which can be classified as a reformer-type of leader. Although the investigated period only focuses on the year 2005 and onwards, Semel was already appointed as CEO in 2001.

When looking at the revenue growth percentage of the organization during these years, from 2001 to 2007, Yahoo did acquire a very strong revenue growth percentage from the organization's lowest revenue growth percentage in 2001. One could say that Semel did his homework when he re-evaluated the customers' needs and gave back Yahoo's upward momentum. Many critics believed that appointing Semel, was one of the biggest mistakes Yahoo could have made, but looking at Yahoo's revenue growth percentage outcome during his time as CEO, he did achieve a higher performance for the organization than most other CEOs in his position.

Semel specifically shows leadership traits of a reformer-type of leader. One who is more attentive on the organization's customer and what they want from the organization. Other specific characteristics from this type of leader, includes:
- This type of leader provides a more simplified outlook on the external environment and helps to re-direct the organization's vision into the correct direction.
- The leader specifically focuses on re-aligning the organization's strategy in parallel with what the market needs.
-

Jerry Yang, Carol Bartz & Scott Thompson: Grower-type of leader

Three of Yahoo's former CEOs over the past couple of years, all indicate the same qualities of that of a grower-type of leader. This type of leader specifically focuses more on the inner environment and the improvement thereof, than the eternal environment where the

customers' needs are of importance. More specifically, these types of leaders are mainly focused on the following aspects of the organization:

- Their primarily goal is to increase the revenue of the organization. They mainly focus on the growth of acquisitions, rather than the development of new products or services. This quality and driving focus of these types of leaders can especially be seen in the downward revenue growth percentage curve of Yahoo since 2005. The amount of acquisitions which occurred during this time, also increased dramatically.
- A grower-type of leader are also focused on their own needs, instead of taking into account the needs of the customers, as well as the needs of the organization's employees.
- They also do not show any interest in company culture and would rather take part in acquisition plans for the future to ensure more wealth for the organization.

Marissa Mayer: Reformer-type of leader

Having a Google background, Mayer comes from a fast, innovative environment where creativity and creating competitive products and services are of the essence. However, while many critics believe that Mayer is exactly the CEO needed to turn Yahoo around, others are very sceptical of her management style. She believes strongly that the organization should rather focus on their users, rather than their competition – specifically a re-former-type of leader quality. This type of leader believes that the organization can grow and develop further by focusing on the external environment of the organization and more specifically, identifying what the customer wants. Mayer recently said in an article in Fortune (Olanhoff, 2012):

"Analysing what are their (Yahoo's customers) problems, what are their (Yahoo's customers) needs, and how Yahoo can roll out features that serve those users best and that's primarily what we are focusing on."

Although many experts are hopeful that Marissa will help to turn around the negative past of Yahoo, others believe that her failure to delegate, her dominant leadership she brings to the organization and her misunderstanding of Yahoo's users, might be Yahoo's final call (Successstory.com, 2015). However, a reformer type of leader, one who specifically re-

aligns the organization's focus with the needs of their users, is the type of leader Yahoo urgently needs.

8.3.2.3 Developing stages

As seen in the above illustrated summary graph 10 of Yahoo, the organization is currently in stage 2 according to the presented developing stage theory of Van der Erve (2013). From the investigated time period of 2000, Yahoo found itself in stage 4 and then advanced to stage 2 at the start of 2007. This development, where an organization progress to higher stages without moving through every stage, do not happen often, but Van der Erve (2013) is of opinion that it can happen. Many other researchers, such as Penrose (1959) and Bridge (1990), as previously seen in the life cycle literature study, also believes that organizations do not necessarily progress discretely through every development stage throughout their life cycle.

Stage 4 is known for confronting and purifying the organization, whereas this stage is in strong connection with a reformer-type of leader. During this growth stage, the structures and processes that were formerly put into place by previous leaders in the organization, is starting to crumble. The need for new structures, re-organizing and re-evaluating the customers' needs are required during this stage. This stage resembles a need for confrontation and purification.

It is important that the organization's focus shifts to the external environment in order to re-establish the balance within the organization which was previously attained in the life cycle of the organization. Even though Van der Erve (2013) does not guarantee strong growth during this stage, Yahoo did show a significant growth in their revenue during this growth stage. This might account for the fact that the right leadership role was appointed as CEO during this stage in Yahoo's life cycle.

Yahoo then progressed onto stage 2 in 2007, which are presented as the scaling and optimizing stage in the developing stage theory. During this stage, management is primarily focused on optimizing, improving and scaling the current systems and processes in place within the organization. Management's focus drifts towards the inside of the organization

and internal re-structuring is needed in order for the organization to be able to successfully progress to the next developing stage.

Yahoo's performance during this stage, have not shown any improvement or a promising outcome. This might be due to the fact that the right type of leadership role is not right for this stage in Yahoo's life cycle, or it can also be an indication of other external factors which might result in stage 2. However, it is crucial for Yahoo to change their current outlook and vision to the external structures and processes within the organization in order for them to survive this stage.

8.3.2.4 Summary

Yahoo's revenue growth graph does not show any correlation between the release of the organization's services and revenue performance of the organization. Thus, it can be stated that there are no connection between the releases of new innovative services to the market with the revenue growth of Yahoo over the investigated time period.

There is however a strong correlation between the upward revenue growth of the organization, as shown since the start of 2001, the leadership role during this time, as well as the developing growth stage in which Yahoo operated during this time. Yahoo found itself in the fourth stage of the developing stage theory as presented by Van der Erve (2013). As Van der Erve's (2013) theory also states, for an organization to be successful during the fourth stage, it has to invest in a reformer-type of leadership role, which in essence is exactly what Yahoo accomplished during this time. The right type of management operated in the corresponding developing stage to deliver a successful revenue growth.

However, once Yahoo entered stage 2 of the developing stage theory, they failed to appoint the right leadership role at the right time when it was most needed for the organization. The revenue growth of the organization is proof of this, since Yahoo reached an all-time low in its revenue growth and has failed to increase it ever since. It might not be the best option for Yahoo to hire a reformer-type of leader during stage 2, but many experts are hopeful of Mayer's outcome and that she will be able to transform the organization back to the success that it previously was. However, the coming years might show a better outcome for Yahoo,

since they have appointed Marissa Mayer as the new CEO which resembles a correct match in leadership role for the current developing stage the organization currently operates in.

8.3.2.5 *Google versus Yahoo*

If one would compare both Google and Yahoo against one another by evaluating them according to the three identified variables in order to determine whether the stated hypothesis can be accepted, there are noteworthy factors that should be taken into consideration.
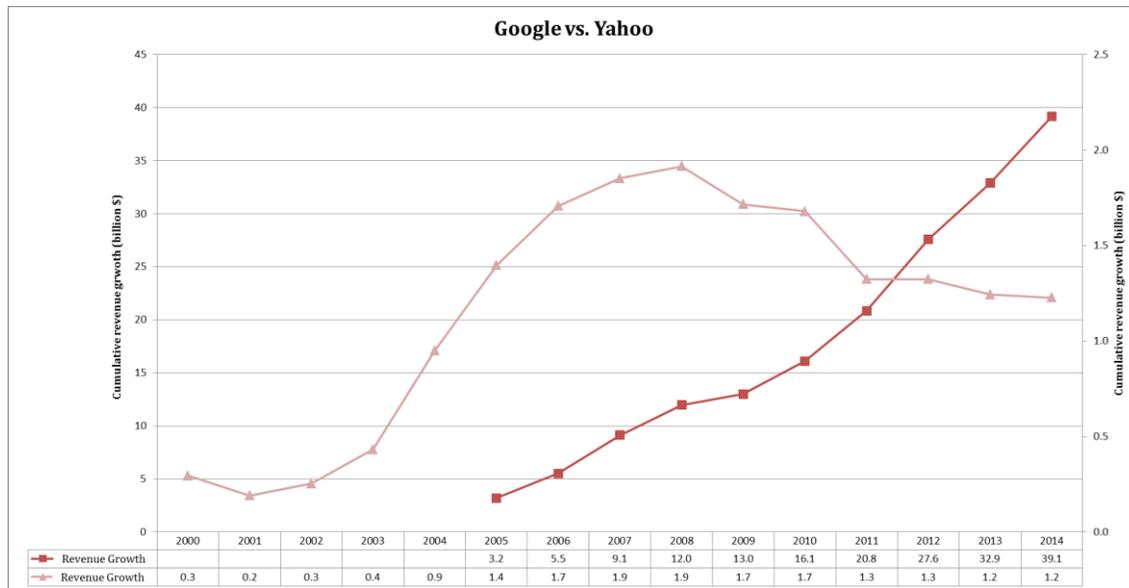
Graph 12: Google's revenue growth (given in billion $) in comparison with Yahoo's revenue growth (given in billion $).

The following significant factors can be emphasized when the revenue growth, illustrated by the above graph 12, from the identified organization is analysed:

-   ***Revenue growth pattern:*** In comparison with Google, Yahoo has a much lower revenue growth than its biggest competitor in the market. Whereas Google's revenue growth curve indicates much more stability and promises to deliver a positive revenue growth outcome each year, Yahoo fails to do so. However, Yahoo did attain its highest revenue gained in 2008, but failed to keep its revenue growth curve a positive outcome. Yahoo's poor revenue growth outcome since 2008 can be the result of many factors that played a role throughout the organization's development. Together with the organization's incorrect decision-making and leadership roles, it resulted in Yahoo's downfall in revenue growth. With their

innovative services and products for their users, Google still remains the main competitor in the service technology market, as can be seen when the organization's revenue growth pattern are compared to that of Yahoo's.

- ***Business Model:*** One significant difference between service providing organizations and product providing organizations in the technology industry is the manner in which their business models are structured. While product providing organizations are primarily focused on delivering the product to the customer at the right time, the service providing organizations are more focused on acquiring the right acquisitions at the right time and on generating revenue through on-line advertisements which appears on the search pages of users. However, it is also crucial for service organizations to acquire the right acquisitions at the right time during the development of the organization, because acquiring the wrong acquisitions which might not be successful for the organization can result in failure for the organization. This specifically might explain Yahoo's decrease in revenue growth over the course of 2008, since during this time management focused primarily on obtaining external acquisitions, rather than on focusing what was actually important for the users of the organization: innovative services.

Google's business model also differs from the presented model of Yahoo, since statistics indicate that Google gains 30% more revenue with each advertisement adverted on a search page. Google knew exactly where they should focus their attention on: by creating innovative products and services for their customers. For this very reason, Google is able to ask 30% more in profits from its advertisers to advertise on its search sites, since they attract more than a million users each day. This is a clear indication on why Google's revenue growth is much higher than that of Yahoo's. The above graph 12 also illustrates that service-providing organizations should focus their strategy on the right things at the right time during their development growth path. This emphasizes the importance of any organization to know and understand what their users need at a specific time during their developing stage.

- ***Collective entrepreneurship:*** Another factor which also distinguishes service providing organizations from product providing organizations in the technology industry is that they share a collective entrepreneurship with their customers and

users. This was specifically developed by Google and Yahoo when they adapted the live advertisements on their search sites in 2004 – which can contribute to their increase in revenue since then. Collective entrepreneurship implies that the organization benefits from the live advertisements on the search engine, as much as both the user and organization of the advert does. Thus, if a search site gets visited regularly, both the organization who advertises the specific product, receives sales from the customer and the service-providing organization also shares in the profits. This can also result in the organization not gaining any benefit from it when the amount of user visits to a search site decreases, which results in the fact that the service-providing organization are force to decrease the price of its advertisement space. In effect, the revenue graph of both Google and Yahoo illustrates the above mentioned point. Google has increased in their amount of users for their search sites, which resulted in them gaining much more revenue growth than Yahoo. This can be shown by the constant increase in their revenue growth over the investigated time period.

By analysing the specific points mentioned above and evaluating the organizations data according to the identified three variables, the following concluding points can be made in order to determine whether the presented hypothesis can be accepted for organizations that provides a service for its users in the technology industry, or whether the hypothesis should not be accepted:

- If both evaluations of the two organizations are taken into consideration, both Google's and Yahoo's evaluation outcome in which the correlation between leadership role, developing growth stage and revenue growth are taken into account, shows a strong connection between them. This can be seen from the above inserted graph 8 and graph 10.

    o *Yahoo:* In 2001 Yahoo operated in stage 4 of the developing stage theory as presented by Van der Erve (2013). During this time, Semel was the CEO of Yahoo – a type of leader whom can be classified as a reformer-type of leader according to Van der Erve's (2013) leadership roles in connection with his presented developing stage theory. Van der Erve (2013) is of opinion that if an organization should be successful at a specific stage during its life cycle, it would be beneficial for the organization to also have the correct leadership role in place in order for the organization to attain a high performance. This

can be illustrated by Yahoo's increased revenue growth performance during 2001 up to 2006 where Semel was CEO, a reformer-type of leader.

o   ***Google:*** Google illustrates a similar image when the same comparison method between the identified variables is applied. As seen in the above graph 8, where a similar image is sketched for Google as was shown for Yahoo. Over the investigated time period, Google can be classified as operating in the third stage of the presented developing stage theory of Van der Erve (2013). According to Van der Erve's (2013) theory, in order for an organization to gain the best benefit from its performance during this particular stage, it should attain a grower-type of leadership in its management. During this time, Google appointed Schmidt as the organization's CEO – a leader who especially possessed the qualities of a grower-type of leader. This ensured a stable increase in Google's revenue over the course of the past 10 years. However, when Larry Page was appointed in 2010, showing a builder-type leadership role, Google continued in showing an increase in revenues.

From the above mentioned analyses for both organizations, it can be stated that the presented hypothesis can be accepted for organizations in the technology industry which specifically provides a service for its users.

4

PHASE FOUR

"Looking at the future"

| "Setting the Framework" | "Uncovering the History" | "Unveiling the Present" | *"Looking at the Future"* |
| Chapter 1 & 2 | Chapter 3, 4, 5 & 6 | Chapter 7 & 8 | *Chapter 9* |

The final phase of the exploitation of a new idea is to determine if the idea should be taken into the *future* and be further developed into a product or if the research shows that there is no attraction to the new venture in the market. The presented project concludes with a similar view to ultimately answer the presented problem set out at the start of the project, namely:

Is the newly Developed Stage Theory presented by Marc van der Erve valid in organizations today?

9. Conclusion: "Is this the new future for organizational life cycles?"

"Looking at the Future"
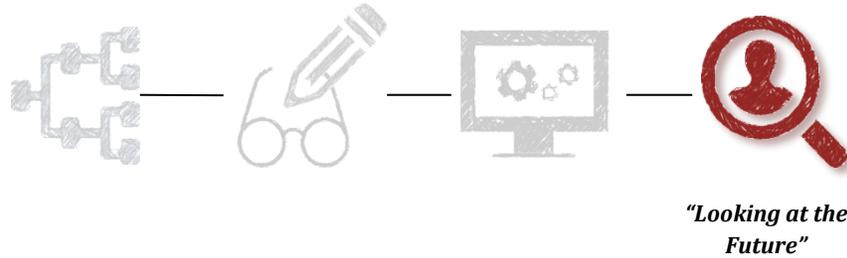
"All organizations do change when put under sufficient pressure. This pressure must be either external to the organization or the result of very strong leadership."

~ Bruce Henderson (CEO of Boston Consulting Group, 1979)

*The presented study and the structural layout of the project resembled the development of an idea into a product, just like Marc Van der Erve had an idea and transformed it into a revolutionary theory. Throughout the four presented phases, different aspects of organizational life cycles were researched, investigated, analysed and evaluated against one another. The present study started with the first phase, '**Setting the Framework'**, which introduced the reader to the overall project statement and what the project intended to deliver.*

*In the second phase, '**Uncovering the History'**, literature of the chosen life cycles were researched and a detailed discussion on the developing stage theory under investigation were given. This phase concluded with an evaluation of the various life cycles against Van der Erve's newly developed theory.*

*During phase three, '**Unveiling the Present'**, the second objective which were introduced at the start of the study, were under investigation. In this phase, specific organizations which operates in the same industry, were investigated and analysed to determine whether they meet the formulized hypothesis.*

*Concluding the present study with phase four, '**Looking at the Future'**, the concluding findings of the study are summarized and it is determined whether Van der Erve's theory can be seen as the next revolutionary life cycle theory.*

9.1 Reflection on methodology

The introductory chapter of this project gave an overview of numerous successes and failures of organizations throughout time. One particular researcher, Whetten (1980), stated that organization growth is an appropriate measurement of success and it 'is synonymous for effectiveness' and that 'bigger is better' (L. Fleck, 2009). Which begs one to ask the question: *How do some organizations become successful and how do they maintain their successful performance throughout their organizational life cycle, while other organizations in the same industry, fail to do so?* Can an organization's success then be predicted if the correct factors are taken into account and if so, prevent unforeseen failures and declinations of so many organizations?

These intriguing questions laid the fundamentals of the presented study and inspired much needed research on how organizations can attain a sustainable success in their organization life cycle. Marc van der Erve (2013), an organizational researcher and philosopher, took action on the above question and developed a stage theory which he believes might be the next scientific revolution in predicting the future success and performance of an organization (Van der Erve, 2013). Van der Erve (2013) presented a developing stage theory, together with corresponding leadership roles for every developing stage; and by doing so, stated that if an organization successfully aligns both the developing stage and matching leadership role, then the organization will successfully show value.

The main purpose of the presented project was to investigate these claims and to determine whether Van der Erve's (2013) developing stage theory can be accepted in the industry today. Furthermore, in order to do a comprehensive investigation, two objectives were set out to be achieved in the project:

- **Firstly:** The examination of Van der Erve's (2013) developing stage theory and the comparison thereof with already existing life cycle models.

- ***Secondly:*** Determining whether an organization is successful if its organizational life stage is aligned with the specific leadership role, as presented by Van der Erve (2013).

9.2 Results obtained

In order to achieve the above stated objectives, six life cycle models of various organizational life cycle researchers were identified and thoroughly investigated, compared and analysed against a set of criteria. The six life cycle models were specifically chosen because of their distinctive origin and background, as well as the role each model played in the specific market segment of the organizations it influenced. All of the chosen life cycle models also shares similar dimensions with one another. Some of these dimensions includes the main rational behind the life cycle model as well as which organizations influenced the organizational researcher to develop the life cycle model.

Moreover, the criteria by which the life cycles, including Van der Erve's developing stage theory, were evaluated on, were specifically chosen to emphasize and highlight the origin, purpose and reasoning behind the researcher's approach. These criteria are specifically chosen in such a manner to illustrate the core principles on which the life cycle models are based upon. By evaluating and comparing the main fundaments structuring of each life cycle model with one another, clear comparisons and similarities can be stated.

The findings, by evaluating the chosen life cycles and Van der Erve's (2013) developing stage theory with the identified criteria, were significant. Greiner's (1972) *Revolutionary and Evolutionary* life cycle model was the only life cycle model which showed noteworthy parallels in comparison to Van der Erve's (2013) developing stage model. Both models focused on the explicit leadership roles needed in each life cycle stage. Greiner's (1972) model indicated a revolutionary phase, which can also be seen as a 'hurdle' management needs to overcome, at the end of each growth stage. The only difference between the two models is that Greiner's (1972) model is modelled against an empirical set of data and historical happenings, while Van Der Erve (2013) focuses on natural and behavioural sciences, which in essence makes his theory more sustainable and applicable for the future.

Although only some parallels and resemblance could be seen in Greiner's (1972) model in comparison to Van der Erve's (2013), other researchers' models also had distinctive comparisons. Miller and Friesen (1988) identified external and internal factors which influence the growth path of any organization, which is a similar illustration of the identification of the corresponding needed leadership role Van der Erve (2013) identifies at each developing growth stage. While focusing on leadership roles, Churchill and Lewis (1983) identified the important factors management should keep in mind at each growth stage, which can justify the critical importance of having the right leadership role at the right stage in the organization's life cycle. Most of the models originated from the metaphor of a living organism and are based upon historical organizational performance, but all of them, share a similar purpose, including Van der Erve's (2013) theory: to ultimately achieve success and generate profits (Ionescu and Negrusa, 2007).

By researching and investigating historic and current literature on life cycle models, prominent correlations and discrepancies were shown when evaluating the life cycle models with the identified criteria. From the literature, it can be concluded that although Van der Erve's (2013) theory is not yet proven in the industry today and based on natural – and behavioural sciences, it acts as a sustainable, flexible theory for the future which can predict the success of organizations.

The second objective the project was set out to achieve, in order to ultimately determine the feasibility of Van der Erve's (2013) developing stage theory in the industry today, was to determine whether an organization shows a successful performance when both their developing stage and leadership role are aligned.

By making use of a deductive research approach, a hypothesis was formulated in order to achieve the above objective. The main objective from a deductive research approach is to define whether there are any links or connections in a particular theory, which further indicates that it might be relevant for other cases as well.

The technology industry was specifically chosen to test the formulized hypothesis, since it is innovative, and a continuously evolving industry. For this reason, all the organizations identified for testing the hypothesis against would have experienced similar external and

internal environmental, which results in using only factors applicable to the testing. In order to keep the results objective, three different parties were asked to provide their expertise on the three factors considered when the hypothesis was tested on the four organizations. The three factors were:

- *Cumulative revenue growth* of the organization
- *Life cycle stages* of the organization throughout the time period of investigation
- The *leadership role* every leader can be associated with

By taking all three variables into account and doing a detailed analysis on the four identified organizations, of which two are in the customer-based technology industry, and the other two operates in the service-based technology industry, conclusions were made. The analysis and evaluation of the two product-based organizations, particular Apple and Samsung, showed clear connections between the leadership role and the developing stage of the organization.

Interestingly, Apple showed a strong correlation between the developing stage and leadership role, but its revenue growth graph showed a similar pattern of a product life cycle. When comparing Samsung, all three factors were in line with one another; showing success when the correct leadership role is corresponding with the current developing stage. Although it can be said that organizations', in the product-based technology industry, revenue growth pattern shows similar resemblance to a product life cycle, the outcome found from Samsung's investigation adds value to the outcome of Van der Erve's (2013) stated theory.

However, when looking at the analysis done on the service-based organizations, it showed a different outcome. Yahoo and Google were chosen as the two organizations in the service-based technology industry. Both Yahoo and Google showed a favourable outcome of the two samples. Both the leadership role and developing stage were correlating, which illustrated a positive, valuable outcome in Yahoo's performance up and till 2008. Yahoo experienced a downfall in revenue growth from 2008 onwards – which can also translate to the fact that the organization did not have the correct leadership role in place. While in Google's situation, all three variables seemed to correlate with one another, illustrating a very good steady revenue performance for Google the past 15 years.

From the four analysis and investigations done on both the service- and product based technology industry, it can be concluded that the formalized hypothesis can neither be accepted nor rejected, since two organizations showed perfect correlation, while the other two indicated similarities of a product life cycle but did not show any indication to reject the hypothesis.

9.3 Concluding remarks and Future research

Concluding from the results obtained and investigation done, it does not indicate that Van der Erve's (2013) presented study is not of value to the industry and that it cannot be used to predict the future success of various organizations. The hypothesis was only tested on organizations in the technology industry, while organizations in other industries might show different patterns and results.

The study was set out to achieve and answer the following question:

> *Determining whether Marc Van der Erve's presented Developing Stage Theory can predict the future success of organizations today.*

It can be concluded that the presented developing stage theory can be applicable in some organizations in the technology industry where the future successful performance of the organization can be predicted, but the research must be expanded to determine whether it is valid in other industries as well. This holds a future research opportunity to explore whether Van der Erve's (2013) developing stage theory can be accepted in determining the future successful performance of other organizations as well.

References

Websites:

Baer, D. (2015). *Tesla's Original CEO Reveals What It's Like To Get Fired By Elon Musk*.

Biography.com, (2015). Available at: http://www.biography.com/people/bill-gates-9307520

Google.co.za, (2015). Our history in depth – Company – Google. [online] Available at:
https://www.google.co.za/about/company/history/

Great Business Ideas, Entrepreneurs, Start Ups & Inspirational Success Stories, (2012).Google's
History. [online] Available at: http://businessideaslab.com/google-history/

Ir.teslamotors.com, (2015). *Tesla Motors Reports Fourth Quarter and Full Year 2010 Results
(NASDAQ:TSLA)*.

ITCandor, (2010). *The World ITC Market Grows To $1.5 Trillion In Q2 2010 â€" 5% Growth
Expected For 2010*.

Johannsen, M. (2016). The Organizational Life Cycle. [online] Legacee. Available at:
https://www.legacee.com/potpourri/the-organizational-life-cycle/

Marketwatch.com, (2015). *Tesla Motors Inc.*.

Olanoff, D. (2012). *The History of Yahoo's CEOs*.

Phenomena,(2014). *Where Do New Ideas Come From?* Available at:
http://phenomena.nationalgeographic.com/2014/06/18/where-do-new-ideas-come-from/

Pierce, S. (2005). *5 Steps for Turning Your Invention Ideas Into a Product*. Entrepreneur. Available
at: http://www.entrepreneur.com/article/77962

Samsung.com, (2015). History - Corporate Profile - About Samsung - Samsung. [online] Available
at: http://www.samsung.com/us/aboutsamsung/corporateprofile/history06.html

Samsung, (2015). SAMSUNG. [online] Available at:
http://www.samsung.com/us/aboutsamsung/samsung_group/history/

Sanford, G. (2015). *apple-history.com / iPhone 3G*.

Statista, (2015). *Samsung Electronics: global revenue up to 2005-2013 | Statistic*.

TIME.com, (2015). *The Apple Revolution: 10 Key Moments - TIME*.

TowerJazz, (2015). *TowerJazz Reports Highest Ever Quarterly and Full Year 2014 Revenues with
Strong Organic Growth and Betterment of all Financial Metrics*.

Successstory.com, (2015). Yahoo! Story - CEO, Founder, History | Famous Companies | Success
Story. [online] Available at: http://successstory.com/companies/yahoo-inc

Ycharts.com, (2015). *Samsung Electronics Co Revenue (Quarterly YoY Growth) (SSNLF)*.

Articles:

Amine Belarbi, M. (2015). Start-up from the Bottom: How Uber started out?.

Bort, J. (2004). Success Stories of Bill Gates. *Business Insider*.

Brown, M. (2015). What's fueling Uber's Growth Engine?. *Growth Hackers*.

Collony, C. (2013). How the cup sleeve was invented. *Smithsonian*.

Cusumano, M., Suarez, F. and Kahl, S. (2007). *Product, Process and Service: A New Industry Life cycle Model*. MIT Sloan School of Management, Boston University School of Management.

Diebold, F. and Rudebusch, G. (1996). *Measuring Business Cycles: A Modern Perspective*. University of Pennsylvania.

Douglas, J. (2010). *The Prime Mover: The Nature and Origin of Business Cycles*. Florida State University.

Ernst, E. and Stockhammer, E. (2006). Macroeconomic Regimes. University of Vienna.

Francois, P. and Lloyd-Ellis, H. (2010). Implementation cycles, growth and the labour market. Department of Economics. University of British Columbia.

Gates, B. (1999). *Business @ the speed of thought*.

How innovation keeps Samsung one step ahead. (2006). Strategic Direction, 22(2), pp.21-24.

Jones, N. and Khaire, M. (2000). *SME's Life Cycle - Steps to Failure or Success?*. Assistant Professor. Harvard Business School.

Kovach, S. (2013). How Samsung went from a dried fish exporter to one of the top names in tech. Business Insider.

L. Fleck, D. (2009). *Archetypes of Organizational Success and Failure*. University of Rio de Janeiro.

Maddison, A. (1991). *Business Cycles, Long waves and phases of Capitalist Development*. Oxford University.

McCraw, T. (2003). *Prophet of Innovation: Joseph Schumpeter and Creative Destruction*. Harvard University.

McMahon, R. (2001). *Stage Models of SME growth reconsidered*. Head of Commerce. Flinders University of South Australia.

Nazzart, S. and Foroughi, H. (2012). *Organization's changes through its Lifecycle; A system Dynamics Approach*. Graduate School of Management and Economics. Sharif University of Technology.

Penrose, E. (1959). *The theory of the growth of the firm*. Oxford: Oxford University Press.

Sabol, A., Sander, M. and Fuckan, D. (2013). *The Concept of Industry Life Cycle and Development of Business Strategies*. University of Zagreb, Faculty of Economics and Business.

Saleh, M. and Davidsen, P. (2001). The origin of business cycles. University of Bergen.

Schumpeter, J. (1934). *The theory of economic development*. Cambridge: Harvard University Press.

Schumpeter, J. (1951). *Historical Approach to the analysis of Business Cycles*. Harvard University.

Schumpeter, J. (1939). *Business Cycles*. New York: McGraw-Hill Book Company, pp.53 - 78.

Walton, J. (2010). *Aspects of Organizational Learning: Four Reflective Essays*. University of Pennsylvania.

Wang, K. (2005). *Business Life Cycle and Five Elements Theory*. Doctoral Program. National Taipei University.

Wax, D. (2015). Where do Ideas come from?. *LifeHack*.

Journals:

Anderson, E. (2005). The Limits of Schumpeter's Business Cycles. *Industry and Innovation*, 1(5), pp.2-6.

Blundell, R. and Walker, I. (1986). A Life-Cycle Consistent Empirical Model of Family Labour Supply Using Cross-Section Data. The Review of Economic Studies, 53(4), p.539.

Carayannis, E. (2012). The quintuple helix innovation model: global warming as a challenge and driver for innovation. *Journal of Innovation and Entrepreneurship*, 1(2).

Chaston, I. and Mangles, T. (1997). Core capabilities as predictors of growth potential in small manufacturing firms. *Journal of small Business Management*, 35(1), pp.47 - 57.

Churchill, N. and Lewis, V. (1983). The five stages of small business growth. *Harvard Business Review*, 61(3), pp.30 - 50.

Gabisch, G. and Lorenz, H. (1955). *Business Cycle Theory: A Survey of Methods and Concepts*. Berlin Heidelberg: Springer-Verlag, pp.23-36.

Greiner, L. (1972). Evolution and revolution as organizations grow. *Harvard Business Review*, 472, pp.37 - 46.

Gupta, (2013). Firm growth and its determinants. *Journal of Innovation and Entrepreneurship*, 2(15).

Hall, M. (2015). Google Inc. Encyclopedia Britannica.

Ionescu, G. and Negrusa, A. (2007). The Study about Organizational Life Cycle Models. *Review of International Comparative Management*, 8(4), pp.1-13.

Jansen, T. (2004). The Seven Stages of a Business Cycle. *Just-In-Time Management Group*, 1(24), pp.3-8.

Kettler, S. (2014). The Google Chronicles. bio..

Lester, D., Parnell, J. and Carraher, S. (2003). Organizational Life Cycle: A five-stage empirical scale. *The International Journal of Organizational Analysis*, 11(4), pp.2-15.

O'Rand, A. and Krecker, M. (1990). *Concepts of the Life Cycle: Their history, meanings, and uses in the social sciences*. North Carolina: Annual Reviews Inc., pp.2-9.

Phelps, R., Admas, R. and Bessant, J. (2007). Life cycle of growing organizations: a review with implications for knowledge and learning. *International Journal of Management Reviews*, 9(1), pp.1 - 30.

Quinn, R. and Cameron, K. (1983). Organizational Life Cycles and Shifting criteria of Effectiveness; Some preliminary evidence. *Management Science*, 29(1), pp.2 - 14.

Rutherford, M., Buller, P. and McMullen, P. (2003). Human resources management problems over the life cycle of small to medium-sized firms. *Human Resource Management*, 42, pp.321 - 335.

Stubbart, C. and Smalley, R. (1999). The deceptive allure of stage models of strategic processes. *Journal of Management Inquiry*, 8, pp.273 - 287.

Books:

Adizes, I. (2015). *Organizational Dynamics*. 8th ed. pp.3 -25.

Chaston, I. (2010). *Entrepreneurial management in small firms*. London: Sage Publications, pp.55 - 72.

Crowther, S. (2008). *My Life and Work*.

Dowson, D. (2005). Life cycle tribology. Amsterdam: Elsevier for the Institute of Tribology, the University of Leeds and Institut National des Sciences Appliquées de Lyon.

Erve, M. (2009). New leadership ethos - the ability to predict. [Place of publication not identified]: Erve Research.

Erve, M. (2013). The next scienfitic revolution. Antwerp: Somerset West.

Erve, M. (1994). Evolution management. Oxford: Butterworth-Heinemann.

Festre, A. (2002). *Innovation and Business Cycles*. Routledge.

Francois, P. and Lloyd-Ellis, H. (2008). *Schumpeterian Cycles with Pro-cyclical R&D*. University of British Columbia.

Hanks, S., Watson, C., Jansen, E. and Chandler, G. (1993). Tightening the life-cycle construct.

Entrepreneurship Theory and Practice, 18, pp.5 - 29.

Knell, M. and Robertson, P. (2004). *Innovation, Diffusion and Schumpeter's Business Cycles Today*.

Kuratko, D. (2009). *Entrepreneurship, theory, process and practice*. Nashville: South Western Publication, pp.1 - 22.

Levie, J. and Lichtenstein, B. (2010). A terminal assessment of stages theory. *Entrepreneurship, Theory & Practice*, 34(2), pp.317 - 350.

Miller, L. (2007). *Organization Life Cycles: The Creation and Destruction of wealth*.

Mohapatra, S. (2013). Business process reengineering. New York: Springer.

Odling-Smee, F., Laland, K. and Feldman, M. (2003). Niche construction. Princeton: Princeton University Press.

Tripon, C. and Dodu, M. (1987). Change management and Organizational development. pp.3 - 76.

Van der Erve, M. (1989). The power of tomorrow's management. Heinemann Professional.

Van der Erve, M. (1986). Dynamisch Ondernemen.

Van der Erve, M. (2004). Temporal leadership. European Business Review, 16(6), pp.605-617.

Interviews:

Sieberhagen, M. (2015). Leadership Roles Discussion.

APPENDIX A: A summary of all identified life cycle models against the chosen criteria

Life Cycles	*Criteria 1:* **Definition of an organization**	*Criteria 2:* **Purpose of the life cycle**	*Criteria 3:* **Origin of the life cycle**	*Criteria 4:* **Number of stages in a life cycle**	*Criteria 5:* **Inspiration of stages within life cycle**	*Criteria 6:* **Major Rationale behind the life cycle**
Kenneth Boulding (1950)	A group of people who are driven towards a similar goal. In Boulding's view, the overall goal for an organization will be to generate profits.	The model sets out as the main purpose being to generate revenue. In the following stages, the focus shifts to growth and survival.	Originated from the traditional biological metaphor for any living organism, where the growth stages develops from birth, youth and maturity, to final decline.	Originated from the traditional biological metaphor of any living organism with three main life cycle stages: Birth, youth/maturity and decline.	The desire for growing profit in the organization inspires and motivates the employees and managers.	Based upon the growth path of any living organism.
Lippitt & Schmidt (2012)	Similar to Boulding's.	The model helps management to overcome various problems which might arise in the different development stages, by asking crucial questions.	Also originated form the metaphorical view of any living organism.	Based on Boulding's model and also originating from the growth path of a living organism. A life cycle model with three stages: birth, youth and maturity.	Generating revenue is the main motivator in Lippitt and Schmidt's life cycle model.	Similar to Boulding's life cycle model – the principle behind their life cycle, is based on the metaphorical view of any living organism.

Larry Greiner (1973)	Shares a similar view of an organization as Boulding.	Identifies the revolutionary problems and with the given characteristics contributes valuable information for organizations to help them in progressing onto the next evolutionary growth phase.	Greiner's revolutionary and evolutionary life cycle model are primarily based on empirical tests performed on various different organizations and the measurement of their performance across a certain time period.	Five growth phases, where each growth phase is based upon the needed direction in the specific growth phase. Growth phases include: creativity, direction, delegation, coordination and collaboration.	The main driving factor in Griener;s model, is the involvement and management style of the leadership involved in the organization.	Principle behind Greiner's life cycle model, is the empirical tests and historical performance of the organizations under investigation.
Churchill & Lewis (1983)	Shares a similar view of an organization as Boulding.	Similar purpose and focus point of Boulding's model. Also, it highlights the important factors management should pay attention to, rather than management styles. Factors such as growth, survival and existence.	Also originated form the metaphorical view of any living organism.	Organizational life cycle model illustrating five growth stages: existence, survival, success, take-off and resource maturity.	Similar to Boulding and Lippitt and Schmidt's life cycle model, although their life cycle model focuses on generating profits for a start-up organization.	The main principle on which Churchill and Lewis's model is baes upon, are the performance history of various organizations.
Hanks (1993)	Shares a similar view of an organization as	The main purpose for Hanks's model is to	Also originated form the metaphorical	Hanks's life cycle illustrates similar life		Related to Churchill and Lewis's model,

Boulding.	generate revenue, but also to obtain a healthy balance between organizational growth and control-ability of the various external factors which might affect the growth of the organization.	view of any living organism.	stages as Boulding and Lippit and Schmidt: start-up, expansion, maturity and diversification.		Hanks's model is also based upon the primary principle of using historical performance data of various organizations.
Miller & Friesen (2013)	Shares a similar view of an organization as Boulding.	Main purpose is to identify both the external and internal environmental factors which influence the growth path of an organization. From these factors, the 'hurdles' which an organization might face during each development stage, are identified.	Miller and Friesen's model also joined Greiner's model by making use of empirical data tests on various organizations. Historical performance data also made a contribution to their findings.	A life cycle model with five main life cycle stages: existence, survival, success, renewal and decline.	Miller and Friesen's investigation and empirical tests have shown that organizations have a number of driving factors which motivates them to progress from one stage to the next. In their findings, they have identified the following factors: size/age, organizational structure, decision-making and	Like Greiner's studies and investigations, Miller and Friesen's model's major rationale is also based upon historical data and using the different organizations' performance data.

				leadership, market.	
Marc van der Erve (2013)	An organization consists of and emerges from a group of recurring patterns of behaviour.	Identifying the best-fitted management style for the organization at a specific development stage will enable the organization to progress from one stage to the next.	Van der Erve's develop stage theory are based	Van der Erve's development stage theory demonstrates four primary development stages: explore and discover, innovate and nurture, scale and optimize and lastly, confront and purify. Each stage is based upon a certain type of management style needed in the specific development stage.	Van der Erve's theory illustrates that there are only one main deciding factor which motivates an organization to progress through its life cycle. In his impression it lies in the rise and decline of the recurring patterns of behaviour in an organization.	Different from the rest, the primary principle behind Van der Erve's development stage theory, is the rise and decline of recurring patterns of behaviour of natural organizations.

APPENDIX B: Detailed overview of Apple's history

Apple started out as selling computers from a garage in 1976 (Sanford, 2015). The very first Apple, designed by Steve Jobs and his co-founder Steve Wozniak, was originally a do-it-yourself kit which only required the computer to be connected to a monitor and keyboard (ITCandor, 2010). Although the first Apple computer did not require any extra circuitry to display text, it was a giant step forward in comparison with the rest of the competitors in the market. In 1999 it was announced that Apple I was the most collectible computer of all time – making sure Apple's revenue growth is above the rest of its competitors (Sanford, 2015).

In 1985 Apple's board voted to dismiss Jobs as CEO of his own company, since many employees could not handle working with Jobs at that time. A former Apple board member stated during an interview, "Back then he was uncontrollable. He got ideas in his head and the hell with what anybody else wanted to do" (Sanford, 2015). However, in 1997 Apple reached an ultimate low when the company operated at a loss and Microsoft's Windows 95 flew off the shelves. The board voted that Jobs return to Apple as the CEO (ITCandor, 2010). At this time, the board knew that they needed new inspiration and innovation to ensure that Apple stays competitive in the market. Jobs, which later was seen as the company's biggest asset, was also known for his innovation and 'thinking outside the box' mind-set. The reassigning of Jobs to Apple can be seen in the increase in the organization's revenue growth from 1997 up to 2000.

After Jobs returned as CEO of his own organization, the iMac was introduced in 1998 (Sanford, 2015). The iMac had specifically two main characteristics which made the computer the top-selling computer in the world:

- It was a self-contained unit, which made it easy to handle by the customer. The minimal amount of hardware also made it attractive to customers which are not used to the daily use of computers (ITCandor, 2010).
- Secondly, the iMac stood out against the rest of the grey computers on sale.

The iMac was very attractive to first time buyers, since statistics show that one-third of the iMac sales went to customers who bought their first computer.

After the breaking sale limits of the Apple I and iMac, Apple launched the Power Mac G4 cube in 2000 (Sanford, 2015). Although this was an attractive piece of industrial equipment, it did not fare well in a still evolving market where most of Apple's customers are still getting use to their very first computer. This failure in Apple's history can be seen by the revenue growth percentage decreasing from a record high from the success of the Apple I and iMac to a low of 40% in 2001 (Sanford, 2015).

Just after Apple's decrease in revenue growth, they announced the very first iPod (ITCandor, 2010). Jobs described it as being a device where your entire music library can fit inside your pocket. The iPod was in a category of its own with its innovative interface, impressive storage capacity and lightning-quick download capability. It quickly became one of the top-selling products in the technology world (ITCandor, 2010). At this time in the market, the launch of Apple's first iPod could not have come at a better time, since Napster, the free music sharing platform, hit a downfall in July of that year (ITCandor, 2010).

It was also in 2002 that Apple stated in a press release that Apple computers will receive a new operating system, Mac OS X, which is much more stable, faster and easier to use (Sanford, 2015). This specifically became a major selling point for all Apple users who switched from Windows driven computers.

Two years after Napster was shut down for violating copyright laws, Apple saw the opportunity in the market to launch its own music store: iTunes (ITCandor, 2010). In 2003 Apple launched its very own music store offering music downloads to customers world-wide for 99 cents per song. Apple's entry into the music industry changed the technology industry entirely. This can be seen by the successful breaking revenue growth percentage of Apple since 2003. Not only was Apple's music library much more user friendly, but it also had a vastly greater library than the rest of the competitors in the market (Sanford, 2015). Apple also had the advantage of connecting iTunes to its own products, which enabled Apple users to create their own Apple platform and accessing any songs, data or operating system from any of their products.

During the course of 2004, Jobs undergo several surgeries which during this time, Tim Cooks stepped in as CEO in his place. This however, did not have any effective change in

Apple's revenue growth from 2004 onwards. In 2005 Apple announced that after more than 20 years of using Motorola processors, they are going to start using the CPU's of Intel for Mac computers (ITCandor, 2010). This caused a major downfall in Apple's revenue growth. Having had a successful revenue growth of 66% up to 2005, the organization decreased to a low of 20% in 2007 (ITCandor, 2010).

It was at the start of 2006 when competitors in the market speculated whether Apple will enter the smart phone market. The rumours continued until January of 2007 when Apple announced its very first iPhone release in June 2007 (ITCandor, 2010). TIME magazine named this new product of Apple, the "Invention of the Year" (Sanford, 2015). The launch of the iPhone turned the dull view of the organization around and revenue growth increased again.

By September 2007, Apple sold more than 2 million iPhones, but customers felt mislead by the staggering prices of the product when they learnt that just two months later that Apple decreased the price of their iPhone's by 50% (ITCandor, 2010). A year later, the iPhone 3S was released at half the price of the previous iPhone, which was a much better price fit to Apple's market. This was a much better value proposition to all Apple customers and ever since, every iPhone started at the same price as long as you sign a two year contract with a mobile phone service provider. The high prices of the iPhones might explain the significant decrease in revenue growth for the organization during the course of 2007 up to 2009.

In 2009 Apple experienced a number of factors which might explain the drastic increase in revenue growth for the organization. Firstly, after news broke that Job's failing health forced him to take medical leave, the organization's stock fell almost 10% (ITCandor, 2010). Ever since Apple's existence, they have been pioneers in the technology industry and have launched new innovative products to the market. When Jobs stepped down as CEO, the industry lost trust in the ability of Apple to introduce the same innovative products to the market, as when Jobs were CEO (Sanford, 2015). However, although many customers saw Apple's future path as unpredictable and unstable, the revenue growth of the organization grew enormously when the iPhone 3S were even more reduced before it was finally discontinued at the end of 2010 (ITCandor, 2010). This enabled Apple to enter the market and introduce the upgrade of the iPhone 4.

During 2009 Steve Jobs unveiled the next product which he believed will revolutionize the world: the iPad (ITCandor, 2010). However, some customers and critics dismissed it as being nothing more than a giant iPhone. They were right for most of the features the iPad has to offer, but except for one part: the fact that so many customers loved the idea of a giant iPhone. The iPad was launched at the end of 2009 and it became one of Apple's fastest selling products ever. The iPad did not only increase the revenue sales for Apple, it also brought business to many magazine publishers where they saw the opportunity to release digital editions from their magazines especially built for an iPad (Sanford, 2015). Many other competitors in the market jumped at the opportunity to also launch similar tablets to the industry, but none of them had the same features and brand image as the iPad. By June of 2012, just four months before Apple announced that they are going to launch a new era of iPads (the iPad mini), Apple had sold more than 84 million giant 'iPhones' (ITCandor, 2010). This however is especially significant when one compares the enormous sales growth over these three years with Apple's revenue growth, as can be seen in the figure above.

Together with the introduction of the iPad, Apple also introduced the iPhone 4, the replacement of the iPhone 3S (ITCandor, 2010). The iPhone 4 came with similar features as the iPad, together with the now well-known '*Facetime*' application and Apple also claimed that the high-resolution of the iPhone's display, is one of the best in the world. The iPhone came in two models with a $100 price difference. However, due to manufacturing and quality problems, the white iPhone, which was highest in demand, did not ship until April 2011, which lead Apple to decrease in their revenue growth and also in the process lose a portion of its customers (Sanford, 2015).

In October 2011, all iPhone models were replaced with the newly iPhone 4S, but the iPhone did not reach its record selling point as with the first version of Apple's iPhones, which resulted in the product price being subsidized to zero and the iPhone being discontinued in September 2013 (ITCandor, 2010). This can be seen in the revenue growth graph of Apple, when Apple hit its all-time low since 2001. The decrease in Apple's revenue growth since the start of 2010, which was the launch of the iPhone 4, illustrates that although an organization might introduce a new product to the market, it still needs to stay competitive and deliver the best quality product of which it is known for. In this case, Apple failed to achieve that. Many factors which can support the reason, plays a role here:

- The high price for the iPhone might have resulted in the customers not willing to buy a product which they knew will be renewed in two years' time.
- The customers might also have experienced the same features of the new iPhone in the newly introduced iPad and felt it unnecessary to invest in both the products.

The main reason why Steve Jobs returned to Apple in 2010, after his period of exile from the organization, was because he was needed to reinvigorate the products and services Apple provided (Sanford, 2015). But most importantly, he was needed to reinvigorate the human spirit within the organization and to help the employees remember the true purpose of Apple (ITCandor, 2010). Jobs knew exactly what was important in the organization and where the organization is able to go, as well as what the market and its customers expect from Apple.

After a surprising, unpleasant outcome of the launch of the iPhone 4 and 4S, Apple unveiled the iPad' second generation model: the iPad 2 (ITCandor, 2010). This product had similar features as the iPod and iPhone, along with other applications that utilize the features. However, the product did not increase the revenue growth of Apple after the dramatic decline of the previous three years, and with the resignation of Jobs as CEO, Apple further decreased in its revenue growth. Tim Cooks took over as the new CEO of Apple.

At the end of 2012, Apple announced that they will undergo structural changes to increase collaboration between their hardware, software and services (Sanford, 2015). This involved the departure of Scott Forshall, the person responsible and main driver of the IOS, which was replace with Craig Federighi as head of the IOS and OS X teams (ITCandor, 2010). Other organizational re-structuring that took place included Jony Ive who became the head of Human Interface, while Eddy Cue was announced as head of online services, which included Siri and Apple Maps (ITCandor, 2010). Although the restructuring might seem as a drastic movement after the announcement of Jobs retirement, however during this restructuring the IOS 7 was launched, the very first version of the operating system with a drastically different design as its predecessors. The launch of the new operating system was mainly led by Jony Ive.

Together with the organizational restructuring, Apple also acquired an organization called PrimeSense and later in 2014 also acquired Beats Electronic, the producer of the well-

known Beats by Dre headphones and speaker range, as well as the streaming service, Beats Music (ITCandor, 2010).

During this time, Apple also released the iPhone 5 – the very first iPhone, and smart phone, with a screen larger than 3.5 inches (Sanford, 2015). Together with the larger screen, the phone also came with finger print scanning technology.

The iPhone 6 was launched short afterwards and it gave a smart phone with a large screen, a whole different meaning. It was also in this time that Apple launched its iPad mini and iPad Air and various Mac updates was also released, including the MacBook Pro (ITCandor, 2010). The original MacBook was also discontinued during this time for a short period, before Apple reintroduced the Mac with brand new features and improvements.

Recently, Apple launched the Apple Watch, the very first new product range since the departure of Steve Jobs in 2011 (ITCandor, 2010). However, even though the new product was thought to bring a more competitive edge to the market, many customers and critics suggests that the product lacked purpose and it was similar to many other products on the market, One of the main critics about the Apple watch is the fact that the watch cannot function beyond its basic features without being within Bluetooth or Wifi range to an iPhone (Sanford, 2015). Even though it received mixed reviews, the Apple watch was launched in April 2015.

APPENDIX C: Detailed overview of Samsung's history

Over the past 5 years Samsung, a company that specializes in dishwashers and smartphones, has become one of the most powerful and competitive organizations in the technology industry. Samsung's name originated from a Korean background which means 'three stars' – the name later became so widely known that customers began associating the name with the three main organizational units of Samsung, namely electronics, information technology and development. Surprisingly, Samsung was started in 1938 by Byung-Chull Lee as a family organization that exported food, especially dried fish and flour to China (Kovach, 2013). In 1969 Samsung electronics were born and from there, the organization acquired and invested in a number of different organizational units, these include a hospital, manufacturing plants, life insurance companies, as well as department stores (Samsung, 2015).

Samsung has become one of the world's leading electronic organizations, which now specializes in not only digital appliances, but also media, semiconductors, memory and system integration.

Samsung expanded during the 1950's and 1960's when they included life insurance and textiles as part of their businesses (Kovach, 2013). However, Samsung entered the technology industry in 1969 when they introduced their very first black and white TV (Samsung, 2015). However, it was only in the seventies that Samsung began entering the international market when they acquired half of Korean's semiconductors, which made Samsung the leading electronics manufacturers in the country. The organization grew further in 1970 when Samsung entered other industries, such as petrochemicals, and they also started making washing machines, refrigeration and other home ware appliances (Samsung, 2015).

It was not till the early 1980's that Samsung shifted their main focus to electronics and merged with Samsung semiconductors and telecommunications – it now produced colour TV's, personal computers, VCR's and even tape recorders (Samsung.com, 2015). The merger guaranteed future success for Samsung in many international countries. The development in Samsung's electronic unit continued by being continuously innovative, pushing the

boundaries and restructuring its organizational plan to accommodate the evolving changes in the market (How innovation keeps Samsung one step ahead, 2006).

However, in 1987 the death of Lee Byung-Chull, their former CEO, left the Samsung group in four separate organizational units: electronics, engineering, construction, and most high-tech products (Kovach, 2013). The other organizational units, including retail, food, chemicals and logistics, were all grouped into the Shinsegae Group and Hansol Group.

They later teamed up with BP in the early 1990's to form Samsung BP Chemicals (Samsung, 2015). The organization now focuses on its main market, which is to sell most of its chemicals in Korea. Samsung also further expanded its electronic organization by starting to produce its own memory and hard drives for the use in the manufacturing of their own computers. This is still a big part of Samsung's organization today, since it provides a crucial component for most of its electronics.

The organization then introduced its very first mobile phone in 1995; however the mobile phone failed to live up to its standards and did not work (Kovach, 2013). When Samsung's chairman, then Kun-Hee Lee, found out about the non-working mobile phone, he visited the manufacturing factory and immediately reported all of the produced mobile phones as defects (Samsung, 2015). After that incident, Samsung made quality its top priority and began taking the production of mobile phones much more seriously in the late 1990's. Making a successful come-back, Samsung launched its very first internet-ready phone in 1999 and without realizing it then, they quickly became one of the top, most profitable competitors in the technology industry. It was also during this time that Samsung did some advances in its television range as well (Kovach, 2013). Samsung is known for creating the world's first mass-produced digital TV in 1998, and while the organization grew so fast, it had a full line-up of digital TV's by the end of 1999 (Samsung, 2015). They then went further in manufacturing Blu-Ray players and other home theatre equipment in the early 2000's. Today, Samsung are the leading maker in the industry when it comes to HD TV's.

Despite the financial crisis in 1997 that affected nearly all Korean organizations, Samsung was one of the organizations that showed a continuous growth throughout these difficult times. This can especially be attributed to Samsung's leadership in digital and network

technologies and its steady and strategic focus on its electronics, finances and related services.

They also responded to the crisis by reducing the number of its affiliated organizations to 45%, decreasing its employees by almost 50 000 people, selling 10 organizational units which showed no promise for the future, while also improving its financial structures by lowering its percentage debt ratio (Kovach, 2013).

For the current investigation, revenue growth were only available from 2005, however it was only during this time that Samsung begun to introduce products to the technology market, which made them one of the main competitors who should be reckoned with.

In 2005 Samsung developed the world's largest flexible LCD panel and in the same year they were ranked 27th in 'the World's most admired organizations' of Fortune (Samsung, 2015). As being one of the world's most admirable organizations, they also became the official sponsor of Chelsea, which were the renowned English Premier League football club. This was one of the best marketing schemes a technology organization could ask for, since marketing and creating brand value for their organization, is not on top of the priority list for most technology organizations (How innovation keeps Samsung one step ahead, 2006).

If they could not have asked for a better year, Samsung also launched the world's very first 7inch mega pixel camera phone, together with features like speech recognition – something Apple could not yet deliver to its customers until 2006, and during this time, they could not offer the same features to their customers as Samsung could (Kovach, 2013). They also partnered with Sony in 2006 to develop a stable supply of LCD panels for both organizations.

Samsung then took it up a notch and launched their second smart phone in 2006, but this time with a 10 inch mega pixel camera phone, together with other technology appliances that changed the industry, such as a double-sided LCD, the world's first Blu-Ray Disc Player and reflective LCD screen (Samsung, 2015). While in 2007, they were rewarded No. 1 worldwide market share position for TV's in the world, taking it for the seventh time in a

row, and also claiming the no. 1 worldwide market share position for LCD for the sixth year in a row (Samsung, 2015).

During 2008, Yoon-Woo Lee took over as CEO and Vice Chairman of Samsung Electronics. In 2008 Samsung also expanded their TV manufacturing and opened a number of new manufacturing factories in Russia (Kovach, 2013). However, the most significant accomplishment for Samsung during this time was that they achieved the number one spot world-wide in the US cell phone market, proving to Apple that they can still be seen as one of the most competitive organizations in the market (Samsung, 2015).

In 2009 Samsung celebrated the world's largest mobile phone as recorded in the Guinness World Book of records, as well as SADI, Samsung's design school, received the most IF Concept Design Awards for its entrants (Samsung.com, 2015). Samsung electronics also expanded their product range by bringing out the very first thinnest Blu-ray player and also announced their open mobile platform, 'bada' (Kovach, 2013).

In 2010 marks the year when Samsung announced its first flagship Andriod smart phone, the Galaxy S, at the Mobile World Congress. This product was such a huge success, that it is currently in their third generation and can be seen as one of the best smart phones one can buy (Samsung, 2015). Together with the launch of their first smart phone, Samsung also released the Galaxy Tab in the fall of 2010. This 7-inch device was the first mainstream Andriod tablet which was introduced to the technology industry (Kovach, 2013). Other organizational developments of Samsung, specifically Samsung Fire and Marine Insurance entered the Chinese automobile insurance market. During this time, Samsung Electronics and Samsung digital Imaging also merged into one single unit, while Samsung SDS merged with Samsung Networks (Samsung, 2015).

In 2011 Samsung won the Innovation Awards at the CES 2012 awards ceremony for their innovative contribution to more than 30 products in the technology industry. Contributing to the future education for many countries, Samsung opened their first Samsung Academy in Turkey. They also announced in 2012 that the organization, with all of its different organizational units, holds a total brand value of $ 32.9 billion (Samsung, 2015).

It was also in 2012 that the new Vice-president and CEO of Samsung Electronics, Kwon Oh Hyun took office and by the end of 2012, Samsung recorded a sales number of more than 5 million on its Galaxy Tablets (Kovach, 2013).

In 2013 Samsung launched the second generation of its smart phones: the Galaxy S4. Record recordings later came through when Samsung sold their 100 000 millionth Galaxy smart phone at the end of 2013.

Samsung still proves to be one of the competitors in the technology industry which should be reckoned with when they climbed the Interbrand's 'Best Global Brands' list from nineteenth in 2010 to seventh place in 2014. Apart from being competitive in the market, Samsung also invests in seven established social enterprises to support the unprivileged in Korea (Samsung, 2015).

During 2011 they specifically saw the need for an IT community centre in Korea and by the end of 2011; the very first centre was built in the Korean village in Uzbekistan. They also made a fairly large financial contribution in new projects in the eco-friendly and health sectors to invest in the future, together with making a contribution to aid in providing relief activities in earthquake-stricken areas affected in Japan (Kovach, 2013).

Samsung also proved that by adopting a new form of management throughout the years showed continuous success, since their products are on the list of 'top-must-haves' in various fields. Their excellent method of quality control also contributes to being one of the best electronic organizations in the world. Samsung specifically applies a 'line-stop' method, whereas anyone who discovers a sub-standard product can stop the process of production (Kovach, 2013).

To date, Samsung can be seen as one of the most competitive electronics organization in their market. With its constant improvement of management structure and the application of its strategies, the organization has shown continuous success in all of its organizational units. The future looks bright for Samsung when they launched their future plans in 2015. They are going to specifically focus on investing additional capital in their bio-pharma growth strategy and also to leverage the advantage of their joint ventures (Samsung, 2015).

APPENDIX D: Detailed overview of Google's history

Google started off in March 1995 as a research project by Larry Page and Sergey Brin from the University of Stanford (Kettler, 2014). The project was called "Stanford Digital Library Project", which main purpose was to develop a universal digital library for the university. For this project to be a success, Page and Brin needed an application that is able to collect information from various pages and sites on the internet and classify them to specific criteria (Hall, 2015). In 1996 they launched their very first algorithm and called it *BackRub*. BackRub achieved the main purpose of the project they were assigned to and it collected tons of information, but there was a bigger need of classifying the information according to the specified criteria (Google.co.za, 2015).

Page then further developed their algorithm by reasoning that the more links a certain page has, the more it important it will be for people. They then developed the first system that could measure the importance of web pages and called it '*Page Rank'* (Hall, 2015). None of them knew then that this would later become the core principle of the Google Search Engine; which is still successfully active and working today. However, Page and Brin's Page Rank system was not the only search engine that existed at that time. They shared the market with another competitor, who was called 'RankDex' and it was also based on similar technology for evaluating web pages (Kettler, 2014). RankDex later became very popular in China and its name later changed to Baidu (Hall, 2015).

Initially, their search engine was only available on the university's server for the students of Stanford University. However, the site was such an enormous success that the amount of users visiting the site every day, increased radically. After just one year, in 1997, the university's server could not handle the heavy loads and Page and Serger's search engine, were not appropriate for the university's server anymore (Google.co.za, 2015). They decided to start their own organization and to move their search engine to a much bigger platform: the world-wide web. The initially name for the search engine, BackRub, then changed to 'Googol', which means a very large number, specifically one with an infinite amount of zeros. Nonetheless, the domain was then registered incorrectly as *google.com* on the 15th September in 1997 (Hall, 2015).

In December of 1998 Googles Inc. was finally incorporated. They started their 'business', very similar to that of Steve Jobs with Apple, in the garage of a friend of theirs who lived in California (Kettler, 2014). Around this time, 10 000 searches were made daily on the internet by users on Google.com. Just a year later and this amount increased to a mere 500 000 searches a day. In 2000 they received a second financial injection by funds provided by Sequoia Capital and Kleiner Perking Caufield, who in exchange for the financial funds, received a stake in the organization (Hall, 2014).

In 2000 the organization expanded and it launched the innovative advertising platform of Google, which was called '*Google Adwords'*. Google Adwords consisted of more than 350 customers, who benefited from key targeted advertisements when users clicked on their organization's advert (Google.co.za, 2015). It was in 2004 that Google proudly announced that they hired the investment banks, Morgan Stanley and Goldman Sachs to handle their initial public offering. Google management planned to sell organizational shares for $ 4 000 billion (Hall, 2015). Only four months later, the Security and Exchange Commission of America (SEC) confirmed that more than 50% of these shares were almost sold out. In August of 2005, more than 19 million shares of Google Inc. were sold to private investors and every share was traded at a price of $85. Google Inc. on the other hand, managed to receive more than 1.67 billion dollars in return. Many of Google's employees already had shares and the price at which the shares were sold during the initial public offering, made them millionaires overnight (Kettler, 2014).

In 2005 Google purchased Android Inc, which is the developer of the Android mobile operating system. Statistics show that since 2011 more than 700 000 android phones are activated on the android platform every single day (Hall, 2015). If this continues, the Android operating system will turn into the leading mobile operating system of the world. It was also in 2005 that Google Maps went live and was later activated on mobile phones in America (Kettler, 2015).

During 2006 Google acquired yet another organizational unit: Youtube, currently the most used video sharing platform in the world. It was in 2008 that the organization won the Prince of Austria's Award for Communication and Humanities for the main purpose being that they created the best search engine in history of the internet, which allows the user to

access the knowledge base and information quickly and to find the exact resources they are looking for (Hall, 2015). In order to boost android mobile devices and ensuring a better experience for their customers, Google bought Motorola Mobility Holdings in 2008.

In January 2012 Google launched their social network, Google +1, which quickly reached more than 90 million registered users worldwide (Google.co.za, 2015). Many experts are of opinion that if Google +1 shows the same increasing growth in the next upcoming years, they could become one of the main competitors for *Facebook* and *Instagram* in the social networking industry (Hall, 2015).

Today, Google is the leading search engine in most countries around the world and are valued at 188 billion dollars just after 20 years. Google started as an online search firm, but today it offers more than 50 internet services to their users (Google.co.za, 2015). Some of them includes: e-mail, online document creation and also software for mobile phones. Google is currently the number one organization in the web search portal industry with a total market share of more than 80% (Hall, 2014).

APPENDIX E: Detailed overview of Yahoo's history

Apart from Google, Yahoo can also be considered as one of the biggest internet search engine organizations in the world with nearly almost reaching 650 million unique users visiting their website every month (Olanhoff, 2012). Like Google, Yahoo first started off as just a search based engine, but these days it offers a wide range of different products and services to its users. These products include news, mail, finance, maps and sports. Yahoo has created a mini universe where its users can operate and find all necessary resources which they need to work on.

Yahoo also had a very similar start as Google. During 1994 Yahoo's now-founders, Jerry Yang and David Filo, graduated in electrical engineering from the University of Stanford (Successstory.com, 2015). They started by created a website which shows the user a directory that listed most of the websites listed on the internet and called it "Jerry's guide to the world wide web" (Olanhoff, 2012). The search directory also included sub-categories under which users could find useful sites for the specific criteria or specification they were looking for.

In 1995 they changed the directory name and registered the search engine domain as Yahoo.com, where the term Yahoo stood for: 'Yet Another Hierarchical Officious Oracle' (Olanhoff, 2012). The amount of users Yahoo received increased dramatically over a short period of time and Yang and Filo decided to incorporate Yahoo as an organization. In 1996 Yahoo had its Initial Public Offering and it was able to raise more than $33 million by selling 2.6 million shares to future investors at a share price of $85 (Successstory.com, 2015).

Over the course of the next four years, Yahoo was growing at a rapid pace and it started acquiring and adding more services and products for its customer base. These services and products included Yahoo Mail, Yahoo Messenger and Yahoo Groups which all showed enormous success after their first year. During 2000 the organization achieved an ultimate peak share price record of $118.75, but with the financial crisis soon afterwards, Yahoo's share price dropped to an all-time low of $8.11 (Olanhoff, 2012). Yahoo was one of the few organizations that survived this crisis and it continued operating and staying innovative in its market. Another factor that contributed to this downfall in share price was the losing of

users through the Google portal. Google created an algorithm to search for the specific criteria on the internet and all the various pages, while Yahoo's user's query was sent to a searchable index of pages that was incorporated with its own directory of sites. Yahoo licensed Google to power searches on its own website. This four year arrangement, starting in 2000, gave Google so much exposure that the users eventually started to bypass Yahoo altogether – this resulted in Yahoo losing many of its original users (Olanhoff, 2012).

For this reason, Yahoo became its own web based search engine in 2003, which combined the capabilities and features of all the search engines Yahoo previously acquired and created. In 2006 Yahoo started using smart advertisements on its search engine, which changed continuously based on the users' location or interest (Olanhoff, 2012). However, it was also during this time that they were outbid against Google in the purchasing of Youtube. Even though Yahoo did not win the bidding, they still showed innovation through their search engine's appearance and features. One of the many features that set Yahoo apart from its competitors in the market was that Yahoo personalized each user's homepage (Successstory.com, 2015).

Microsoft offered Yahoo more than $20 billion to buy the organization's search engine in 2008, but Yahoo refused the offer numerous times (Olanhoff, 2012). However, in 2009 Microsoft gained a fairly big market share in Yahoo and they later announced that Bing would now in future power Yahoo's searches. In 2012 reached a record of more than 79% profit percentage on the revenue earned which is the highest among all 500 organizations which falls under the Fortune list (Successstory.com, 2015). While in 2013 Yahoo was the most used search portal on the internet in America, overtaking its long time competitor, Google.

Nowadays, Yahoo employs more than 13 000 employees worldwide, offers services in more than 30 languages, holds a wide variety of different products and services for its customers, and owns more than 50 web properties. It is the only organization that can compete against Google in the technology web portal industry and it is become a well-established organization which earns as much as 75% profits on their yearly revenues (Olanhoff, 2012).