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Analysing the Reactor model in Transformational Leadership

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Tuotantotalous

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Aknowledgements

Though no project of this size is possible without the support and guidance of supervisors and friends of varying stripes, I want to in the context of this Masters thesis separately acknowledge the efforts of two colleagues. Jami Nieminen who was of great help in the analysis process used in this research and Kimmo Syvänen without whom this data could not of been gathered. Thank you both.

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ABSTRACT
This Masters thesis written as a literature review of relevant concepts and also as a description of original analysis and research strives to discover both the comparability of Transformational Leadership profiles when analyzed with differing AHP tools and also analyze the Reactor model in Transformational Leadership by comparing the Transformational Leadership tendencies of Reactors to Defenders, Analyzers and Prospectors.

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KEYWORDS: Transformational leadership, Reactor model, AHP, AHP Analysis

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1 Introduction

1.1 Background

This paper is written as a Masters Thesis in Industrial Management at the University of Vaasa. It consists of five chapters including the introduction which outline and explain the development and contents of the central theoretical concepts, define the theoretical basis and practical execution of this research and analysis as well as contain the analysis and conclusions of the papers research questions based on that research.

1.2 Research problems and questions

This Master's thesis aims to tackle two different but connected research questions the first being “Is the TL questionnaire data analysed by a different AHP tool comparable to the earlier results and if so what does that tell us?”. The aim of this question is not only to analyse the Transformational Leadership questionnaire data with the means of an AHP tool, but also to discover if that AHP tool and the results created through its processes are comparable to earlier AHP methods used to analyse the same questionnaire data.

The second research question that this thesis strives to answer is “Are there shared strengths and weaknesses among the other aspects of transformational leadership among those who fit the Reactor model?”. The aim of answering this question is not to find a definitive answer as to what other aspects of TL the Reactor model may correlate to , that is not possible nor sensible given the amount of data being used, the familiarity of the author with this little explored model and the ultimately limited scope of a Master’s Thesis. However as there has not been a tremendous amount of literature written previously on the reactor model in this context, it may be interesting to find out if there are any similarities that can be observed.

1.3 Definition of central concepts

The central concept of this thesis is transformational leadership, a form of leadership that aims to inspire and motivate team members to achieve goals they are ideally committed to themselves. In this Transformational Leadership differs from Transactional Leadership. The abbreviation TL is also used to describe Transformational leadership in this thesis paper.

AHP or the Analytic hierarchy process is also a central concept in this thesis. First developed in the 1970s AHP is a tool and technique used to organize, assess, analyze and group complex decisions.

1.4 Explanation of thesis structure

This Masters Thesis consists of five chapters in addition to the conclusions and references the first chapter being the Introduction that aims to give the reader an overview of the thesis, the theoretical concepts being discussed and research questions being asked as well as the structure of the paper. The second and third chapters delve into the theoretical background of the two theoretical concepts most key to this thesis Transformational Leadership and the Analytical Hierarchical Process. The second chapter on Transformational Leadership exists not only to give a theoretical basis based on earlier research for the concept of transformational leadership overall, but also for the specific earlier research concerning transformational leadership, such as the Sandcone model in TL and the Deep Leadership Model, that are central to the research problems this thesis aims to tackle.

The third chapter concerns the theoretical background for the Analytical Hierarchical Process in the context of this thesis as well as offering the theoretical background for

the AHP analysis tool (AHP OS) used in this thesis. The fourth chapter describes the methods and methodology used in the research done for this thesis paper. The methods and methodologies are described separately for both the analysis of the original data with the AHP OS tool and the further work of the models that were the result of this analysis concerning the Reactor model. The fifth chapter offers the results of the research outlined in the earlier chapter as well as analysis of said results. This analysis aims to answer the two research problems outlined earlier in this chapter. Namely; Is the TL questionnaire data analyzed by a different AHP tool comparable to the earlier results and if so what does the data tell us? And Are there shared strengths and weaknesses among the other aspects of transformational leadership among those who fit the Reactor model?

The final sections of this Master's Thesis are the Conclusions and References. The Conclusions sections aims to offer a summation of both the goals and results of the research undertaken for this thesis paper as well as offer if available insight into what possible avenues for further research or study may exist. The references section of the thesis contains a complete and alphabetical list of the prior research and work referenced in this thesis, presented in the style instructed by the University of Vaasa.

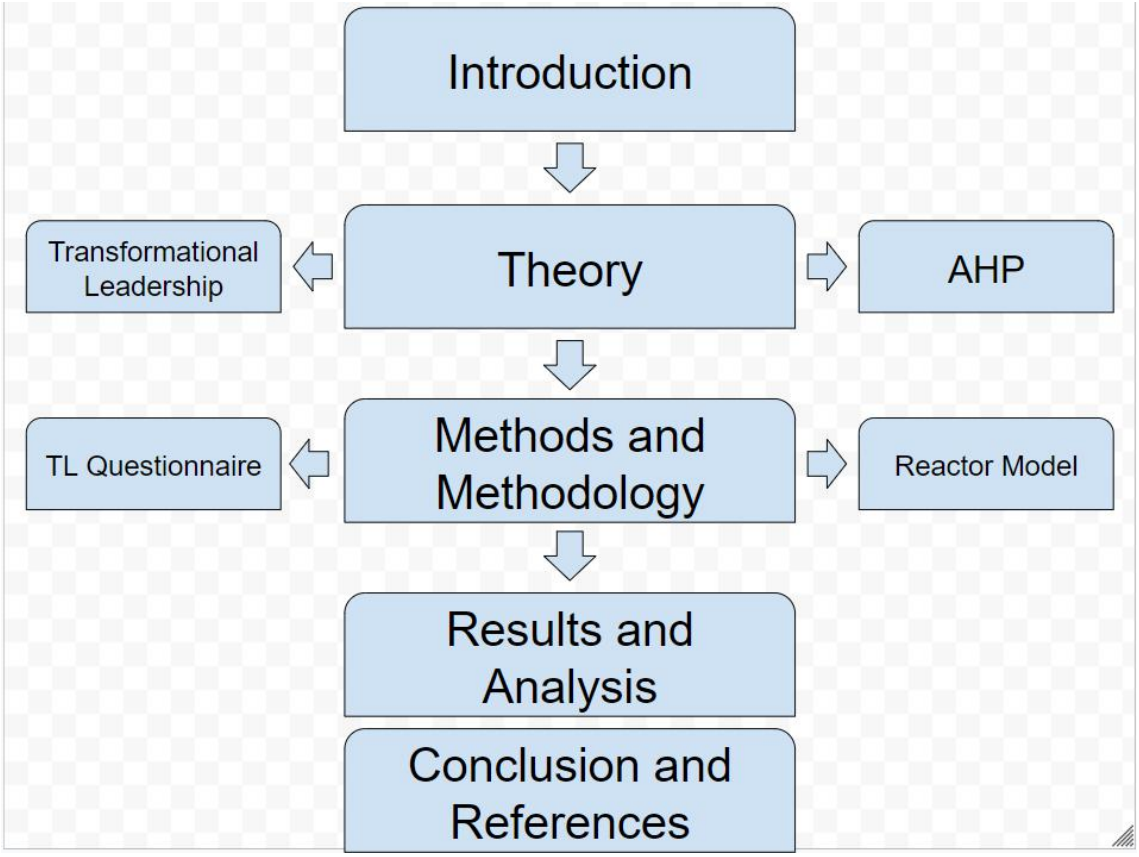


Figure 1. A Graphical Representation of the Structure of this Thesis

2 Transformational leadership

"Leadership is one of the most observed and least understood phenomena on earth"
-Burns, 1978

Transformational Leadership is perhaps most easily defined by, as it was early on by a pioneer in the field James Macgregor Burns, differentiating it from transactional leadership. Where as transactional leadership focuses on rewards and punishments in an effort to achieve the necessary tasks and retain the status quo, transformational leadership aims to use a variety of methods to inspire and motivate members of a group to work in tandem with the leader to attain goals that group members have ideally become committed to themselves.

The aim of transformational leadership is not force compliance by a carrot or stick approach but rather to transform team members values and attitudes to create cohesive forces that have a motivation to achieve not only the results expected of them but to surpass those expectations (Asiya, Kazmi and Takala 2012). Bernard Bass an influential researcher of transformational leadership defined transformational leaderships four cornerstones as terms beginning with "I", idealized influence, intellectual stimulation, inspirational motivation and individual consideration (Takala, Kukkola and Pennanen).

Transformational leadership relies on stimulating and motivating and inspiring the followers under a leader and focusing on their individual needs and concerns, by empowering those individuals it in turn ties and aligns them to the wider objectives and goals of the leader, group and organization. Through this transformational leadership process the leader themselves also aim to improve their TL skillset. The benefits of Transformational Leadership were mainly found in military settings, that traditional consist of strict hierarchies, originally but later viewpoint found the philosophy and methods effective in every sector, setting and industry. By

transforming the view of the leadership relation from one of pure exchange that is ultimately found limiting, to one where the followers commitment and involvement in the team and mission is high as they feel they can take self worth from their part in the process. (Bass & Riggio)

Transformational leadership can be seen as similar to charismatic leadership, an earlier concept described for example by Weber, and it certainly share some features with this idea that predated it. Bass & Riggio however describe charisma as only being a part of transformational leadership in their (2006) book “Transformational Leadership”. Bass & Riggio also argue that transformational leadership is separate from what they describe as pseudotransformational leadership, a form of leadership that shares some elements with transformational leadership but has as the authors describe “personal, exploitative, and self-aggrandizing motives.'' These motives separate pseudotransformational leadership from the efforts of what Bass & Riggio find to be authentic transformational leaders.

As described earlier in this chapter Bass describes four core elements of transformational leadership idealized influence, intellectual stimulation, inspirational motivation and individual consideration. A fair understanding of these terms in the context of transformational leadership can be useful as contextualization and as such they are shortly covered hear. Idealized influence consists of two elements the leaders actions and behaviours as one and the elements that associates, colleagues and followers attribute to the leader as the second. Inspirational motivation is the creation of clearly defined expectations and commonly shared vision of the future that followers want to help to achieve as they also feel committed to the leader and vision. The goal of Intellectual stimulation is to create open exchange of ideas, visions and creative solutions to old problems. A key point in the Intellectual stimulation element is not to harshly criticize mistakes made in this realm or differing solutions from those held by leadership, but to make followers feel safe in offering innovative solutions. Individualized Consideration describes the need for transformational leaders to

consider the specific attributes and differences of individual in a constructive way that also reflectively allows the individual themselves to develop. (Bass & Riggio)

2.1 Universality of transformational leadership

More and more companies compete in global markets and are multinational or global by their structure. These globally competitive surroundings create pressures and unique requirements for organizations and their leadership. Multinational organizations such as the one examined in this study can gain benefits from adopting the goals and criteria of transformational leadership. Effective leadership is paramount in achieving organizational results in a globalized environment, transformational leadership facilitates organizational learning, innovation and progress furthermore it can create a shared vision of the future that function as a common inspiration. (Ghasabeh Soosay Reaiche 2015)

It is not necessarily self evident that the efficiencies or benefits of transformational leadership are similar across regions, countries and differing economic and cultural backgrounds. There are core aspects of transformational leadership that are tied to attributes and instincts such as trust, loyalty and vision that may be seen as differing depending on social and cultural contexts. Bass & Riggio (2006) however state that research from Global Leadership and Organizational Behavior Effectiveness (GLOBE) research program suggests that elements transformational leadership are effective and valued as attributes to be found in leaders among all countries and cultures. Though Bass & Riggio caution that there may be certain cultural contingencies for particular occurrences there general view is that transformational leadership is universal.

Dickson & al generally agree with the findings of Bass & Riggio in their 2012 paper “Conceptualizing leadership across cultures”, the authors find that attributes such as vision and empowerment have universal appeal and that the findings of Bass (1997) do

show that transformational leadership is universally preferred to transactional leadership. Dickson & al conclude that “as a general statement, culture does matter, and not in a small way” and that while cultural differences do not exclude the benefits of transformational leadership they should still be given some consideration. Holten & al arrive at similar conclusions in their 2018 paper on differences in transformational leadership among immigrant and native employees in Denmark. The authors of the study are skeptical of the total universality of a certain form of transformational leadership finding that “*national background matters for employee-related outcomes of leadership even within a shared national employment context*”, while finding that perceptions of leadership were similar across both groups either due to assimilation or in fact universality.

This research seems to indicate that there are certain key aspects of transformational leadership that have universal appeal or usefulness and that the qualities and attributes that make transformational leadership effective compared to transactional leadership are not intrinsically tied to certain cultures but can be described as universal. However an understanding of the differences among regions, countries, backgrounds and cultures is important in analyzing specific occasions and implementations of leadership of any form. Furthermore approaching leadership with a rigid view of universality globally may not be the most effective method of producing desired results.

2.2 Sand cone model

The Sand Cone model is a tool for interpreting and modelling transformational leadership. The Sand Cone model has been the subject of a fair amount of development and the model here has been developed by Takala et al. The model as seen in Figure x (specifically a sand cone model describing deep leadership) consists of four main sections or levels. From top to bottom the titles of these levels are “Directions of outputs”, “Cornerstones of transformational leadership”, “Results” and

"Resources". As defined by Takala et al. there is an optimal value to each variable that makes up these levels. As seen in *Figure 2* these levels themselves are formed by different elements. The lowest level "Resources" is made up of in total four different variables or elements the first one being People, technology, know-how, the second one being Information systems and the third and fourth elements being Organisation and Processes. "Cornerstones of transformational leadership" in turn consists of the elements of Building trust and confidence, Intellectual stimulation, Inspirational motivation and Individualized consideration. The "Results" consists of three differing styles of leadership as its elements, these styles being Passive, Dynamic and Controlling. Directions of outputs consists of three differing types of accomplishment as its elements Effectiveness, Extra effort and Satisfaction. Optimally it is explained by Ha- Vikström (2018) referencing the work of Takala et al. that the theoretical balanced optimal form of leadership is found when the values of the Directions of outputs are 33% each, the values of the cornerstones are 25% each and the values for the resources are 25% each as well.

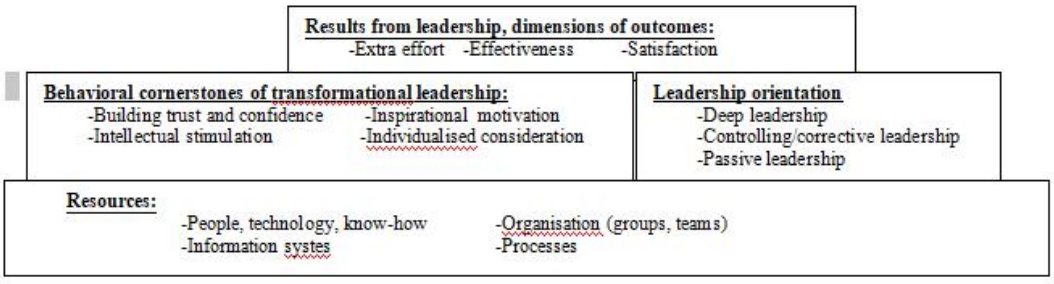


Figure 2. Deep Leadership Sand Cone Model (Takala et al.)

It is worth mentioning in the context of this thesis paper separately that as explained by Ha-Vikström (2018) the directions of outputs elements of different accomplishment serve as the "main foundation of the Prospector, Analyzer and Defender model". The Prospector Analyzer and Defender model invented in 2008 by Takala, Kukkola and Pennanen is especially important for the focus of this thesis as it is the basis for the

creation of the Reactor model and the paradigm within any research on the reactor model exists.

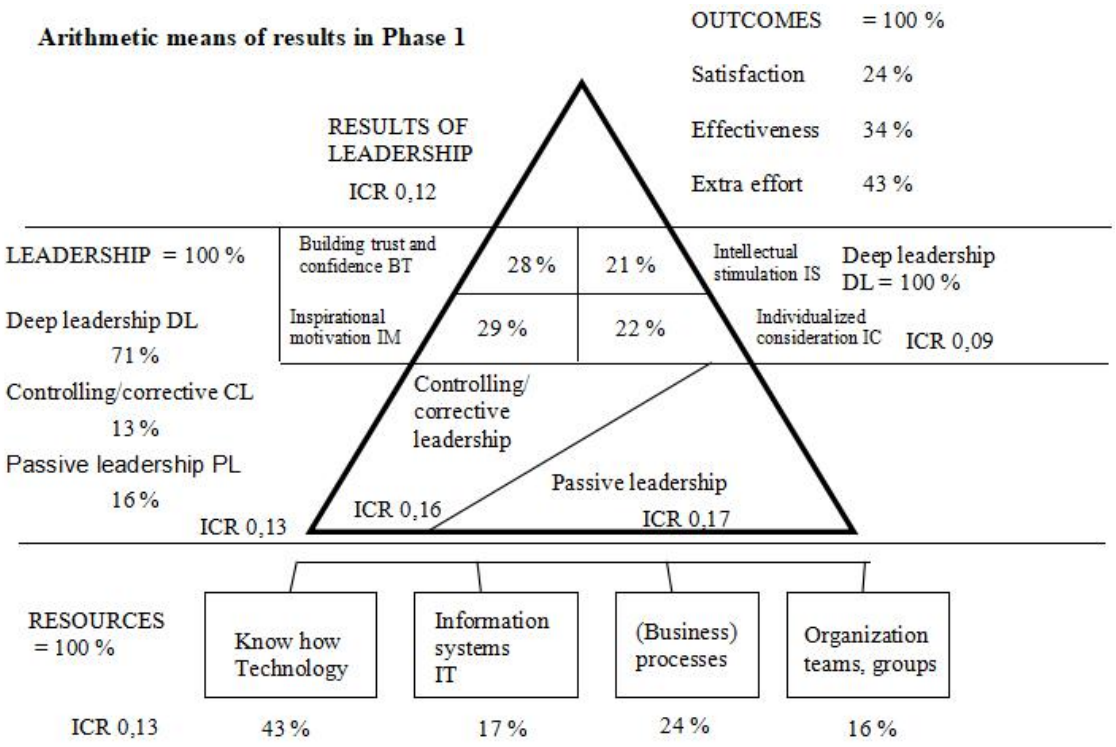


Figure 3. Leadership Profile tool (Takala et al.)

2.3 Reactor model

The Reactor model is a fourth model that is identified in addition to the more established and better known three Transformational Leadership models of Prospector, Analyzer and Defender. The Reactor model is not uniquely identified by a value in most models that make use of the Prospector, Analyzer and Defender split rather the Reactor model is the result of the Prospector, Analyzer and Defender outcomes being equally weighted. Though traditionally seen as “unstable or inconsistent with their leadership style”, Takala, Kukkola and Pennanen claim that those fitting into the

Reactor model can be characterized as “highly adaptive, effective and systematic”. In this analysis Reactors are not considered ineffective but rather seen to have a keen sense of direction and an ability to confidently make rapid decisions when necessary.

This distinction in the possibility of those fitting the reactor model of finding success with transformational leadership is significant because of the benefits that transformational leadership can provide. This not only means that the benefits of transformational leadership can be accessed by more leaders, but that more individuals and organizations can better identify the uniques strengths as related to TL possessed by those that may fit the Reactor model in addition to possible weaker areas.

3. Analytic hierarchy process

The Analytic Hierarchy Process or AHP is perhaps most simply described as a tool to aid with determining complex decisions or preferences that involve a multitude of factors (Saaty 1988, 2008, Forman & Gass 2001).

In their 2001 paper "The Analytic Hierarchy Process – An Exposition" Forman and Gass describe AHP as "perhaps, the most widely used decision making approach in the world today" and argue that its value and validity is proven by the thousands of successful applications of the method were the results were accepted by cognizant decision makers. Forman and Gass break down what they consider the three primary functions of AHP as being Structuring complexity, Measurement on a ratio scale and Synthesis. Structuring complexity is described as finding a method that allows lay people to participate and understand the method. This is achieved by what Forman and Gass call "the hierarchical structuring of complexity into homogeneous clusters of factors". Ratio scale measures are derived in AHP by using assessments of the ratios of each pair of factors that are in the hierarchy. The synthesis function of AHP is described as the methods ability to facilitate the measurement and synthesis of the different factors in a hierarchy.

AHP was originally developed by Thomas Saaty while working at the Wharton School of the University of Pennsylvania. Saaty was inspired to create a simple method that would allow ordinary people to make complex decisions. (Forman & Gass 2001). Though Saaty first described AHP in 1979 it can be argued that the analytic hierarchy process is more relevant today than ever before. This can be seen in the steady rise of business applications and more varied fields of study where the principals of AHP are

being put to use. AHP is also still highly discussed and relevant in the academic realm, in their 2017 literature review Emrouznejad and Marra find that the number of publications about or relating to AHP have grown substantially in the last 15 or so years, from a steady amount of under 200 in the 1990s and early 2000s to highs of over 800 published works in the year of 2013 and 2015. This steady rise can be further observed in *Figure 4.*

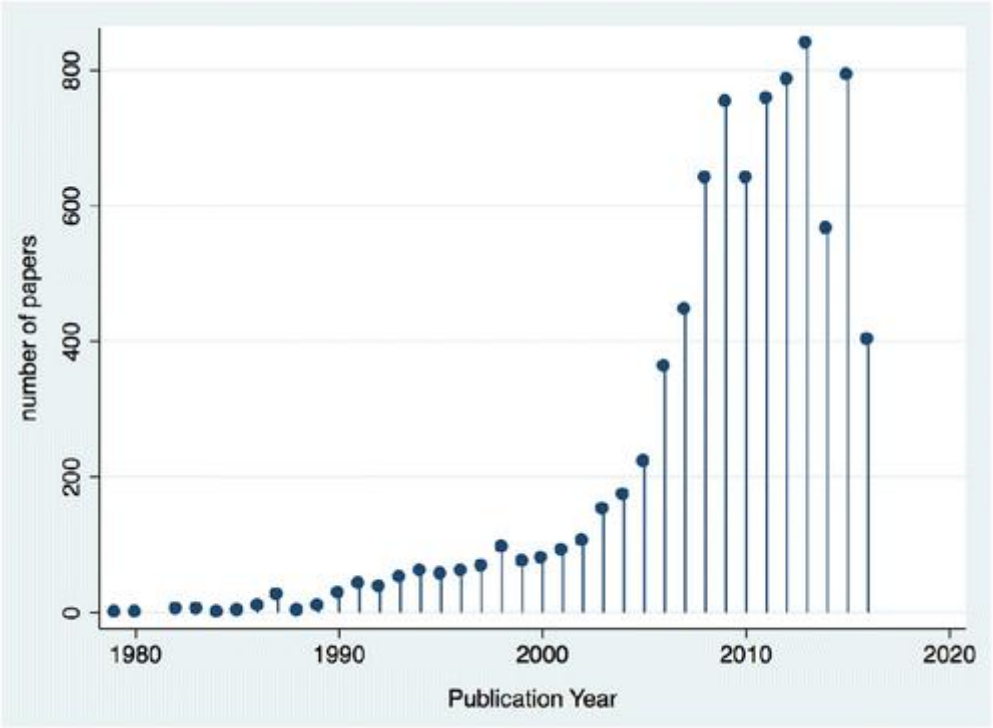


Figure 4. Graph showing the increase in academic papers concerning the Analytical Hierarchy Process (Emrouznejad and Marra 2017)

AHP can be utilized as a form of Multi-criteria decision analysis or MCDA. MCDA can be described as a practice that allows people or entities facing decisions that involve multiple conflicting criteria to arrive at a decision (Alessio Ishizakaa*, Craig Pearmana and Philippe Nemery 2011). MCDA can be applied to different categories of problems that have been categorized by Roy (1981) as choice problems, ranking problems, sorting problems and description problems.

One of the key functionalities of AHP is its ability to compact complex hierarchies of for example preferences or evaluations into a series or set of pairwise comparisons. The simplicity and legibility of the pairwise comparison format means that AHP can be employed in diverse situations and environments. If used effectively the pairwise comparisons that AHP uses are also easy to understand for all involved in an analysis and do not necessarily require as much prior training or preamble as MCDA methods with more complex premises of gathering information.

The AHP tool used in this study was a web-based AHP online system developed and implemented by Klaus Goepel and laid out in a 2018 paper
"Implementation of an Online Software Tool for the Analytic Hierarchy Process (AHP-OS)". An overview of how the tool was used and implemented for this study can be found in the Methodology and Methods chapter.

4 Methodology and methods

The data used in this paper and study was collected from a large multinational company that will not be directly identified in this analysis but rather referred to as Company A or “The Company”. The titles and names of those involved in the questionnaire that provided the primary dataset for this analysis have also been protected for the privacy of those involved in the study. The titles used in this analysis have also been changed so as to not identify Company A and instead these roles if referenced are referred to by generally accepted names for the roles within an organization that allow the reader to recognize the general role of the positions in question.

4.1 Transformational leadership questionnaire

The checking, transfer and analysis of the data from the questionnaires that ultimately led to the creation of the individual and group TLI profiles followed a multi step process, which is given a basic overview in *Figure 5. Figure 5* serves as a tool to give an overview of the process and chronology of analyzing the questionnaire data, it does not include further analysis focused on the Reactor model, which is extrapolated on in Figure x later in this chapter.

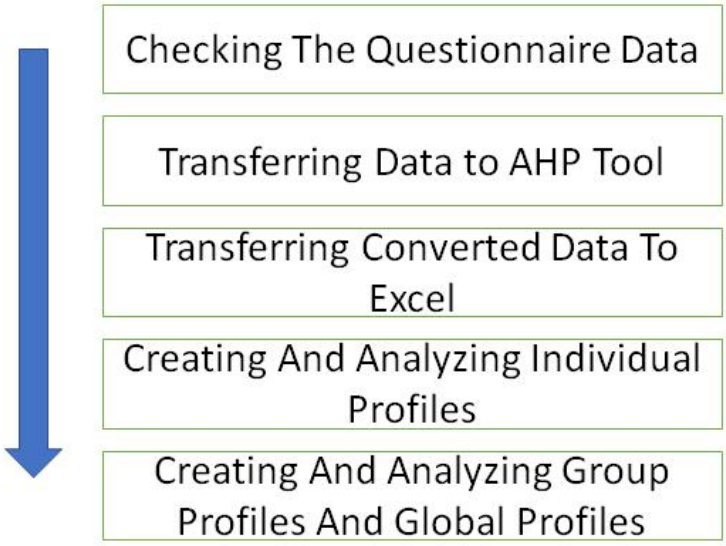
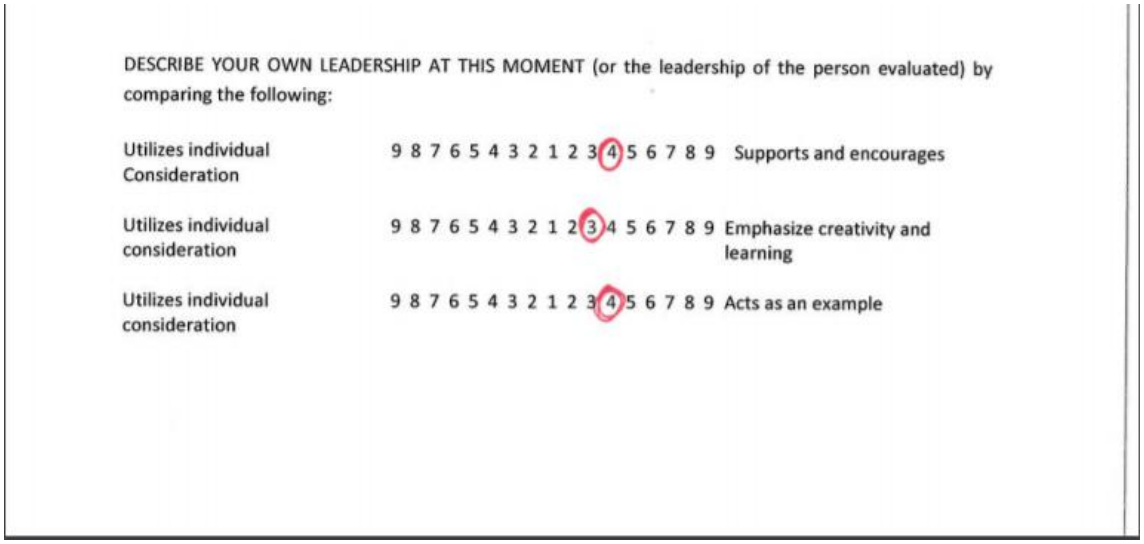


Figure 5. Chronological Overview of the Processes used in this thesis to analyze and model the questionnaire results

The data set was gathered by a questionnaire that was primarily answered in paper form. The questionnaire is of a recognizable and widely accepted format in TLI questionnaires . The questionnaire focused on separate sections that will be further extrapolated in this chapter and allowed the questionnaire taker to choose from pairwise comparisons on a sliding 20 point scale with 0 functioning as neutral point and the scale going towards 10 in both directions of the pairwise comparison. The use of such a scale that does not for example label a certain sign as minus numbers is in this author's estimation a reliable way to not guide the answerer in their determinations. Based on the commentary and substance of the answers given by the n=31 people involved the study the questionnaire can be seen as legible and well understood by those answering it. Any examples of stated misclarity were discarded from the ultimate analysis as described later on in this chapter. The total number of these pairwise comparisons was 29. An example of the questionnaire is pictured below.



DESCRIBE YOUR OWN LEADERSHIP AT THIS MOMENT (or the leadership of the person evaluated) by comparing the following:

Utilizes individual Consideration	9 8 7 6 5 4 3 2 1 2 3 **4** 5 6 7 8 9	Supports and encourages
Utilizes individual consideration	9 8 7 6 5 4 3 2 1 2 **3** 4 5 6 7 8 9	Emphasize creativity and learning
Utilizes individual consideration	9 8 7 6 5 4 3 2 1 2 3 **4** 5 6 7 8 9	Acts as an example

Figure 6a. An Example of the Transformational Leadership Questionnaire

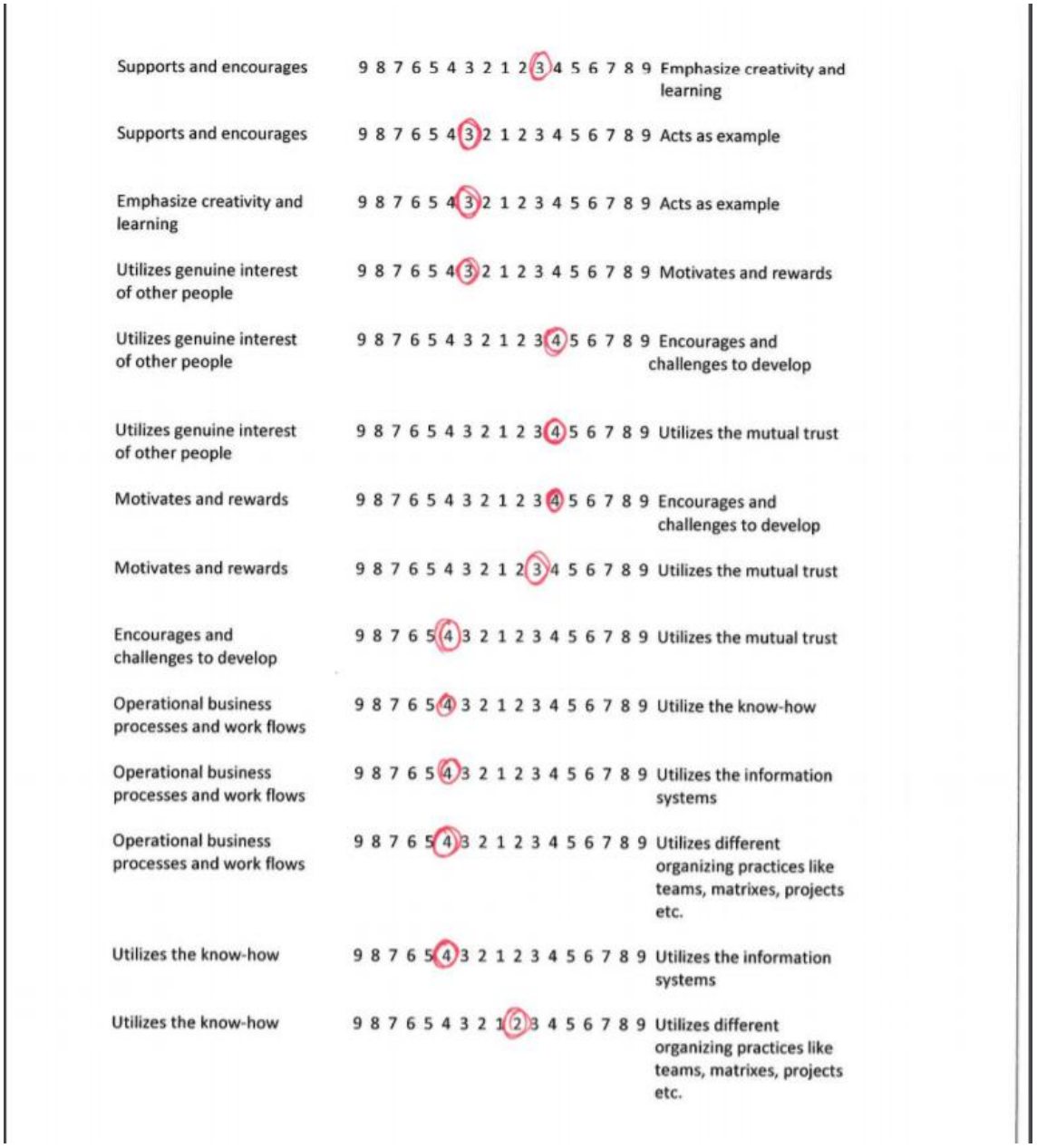


Figure 6b. An Example of the Transformational Leadership Questionnaire

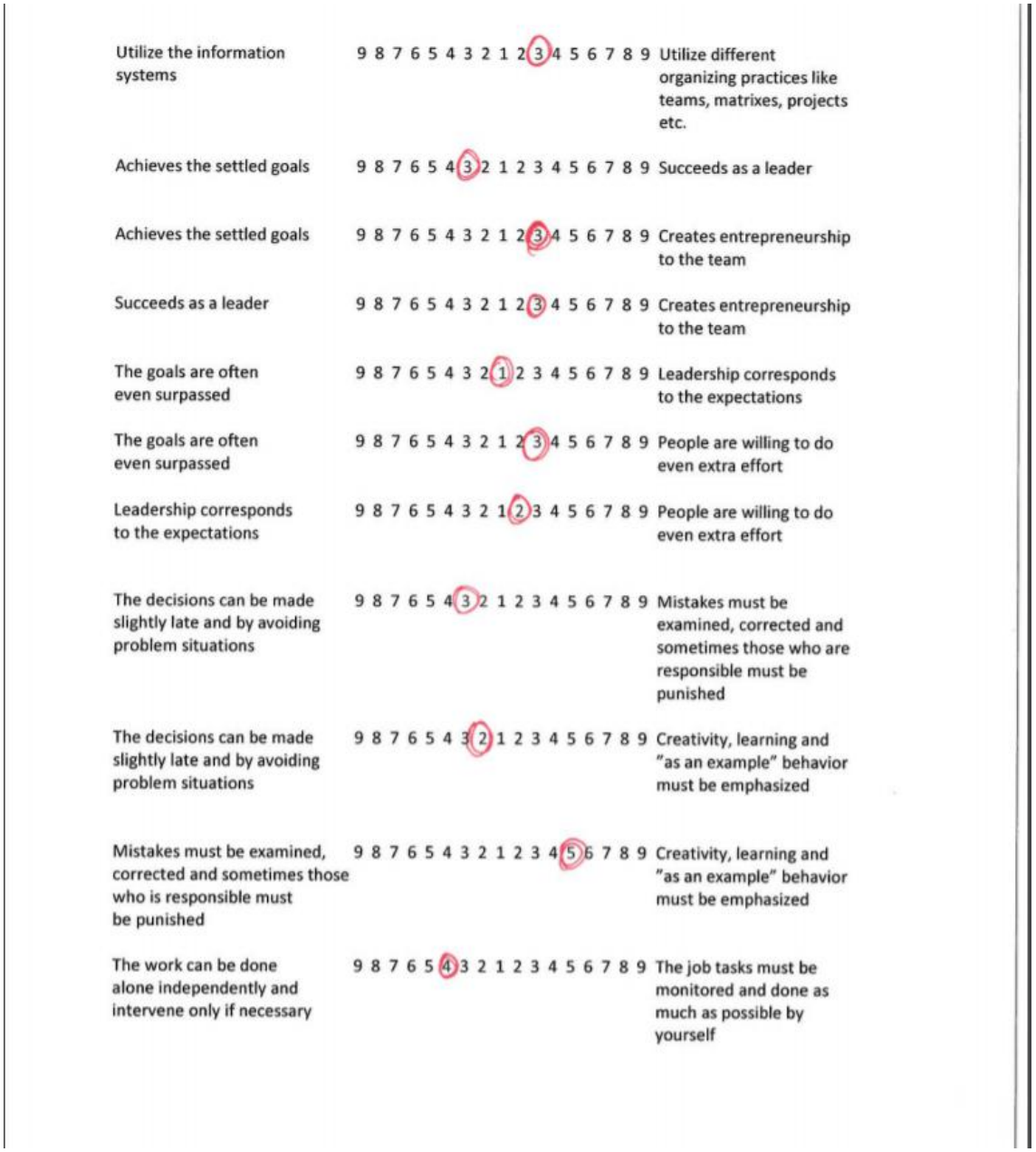


Figure 6c. An Example of the Transformational Leadership Questionnaire

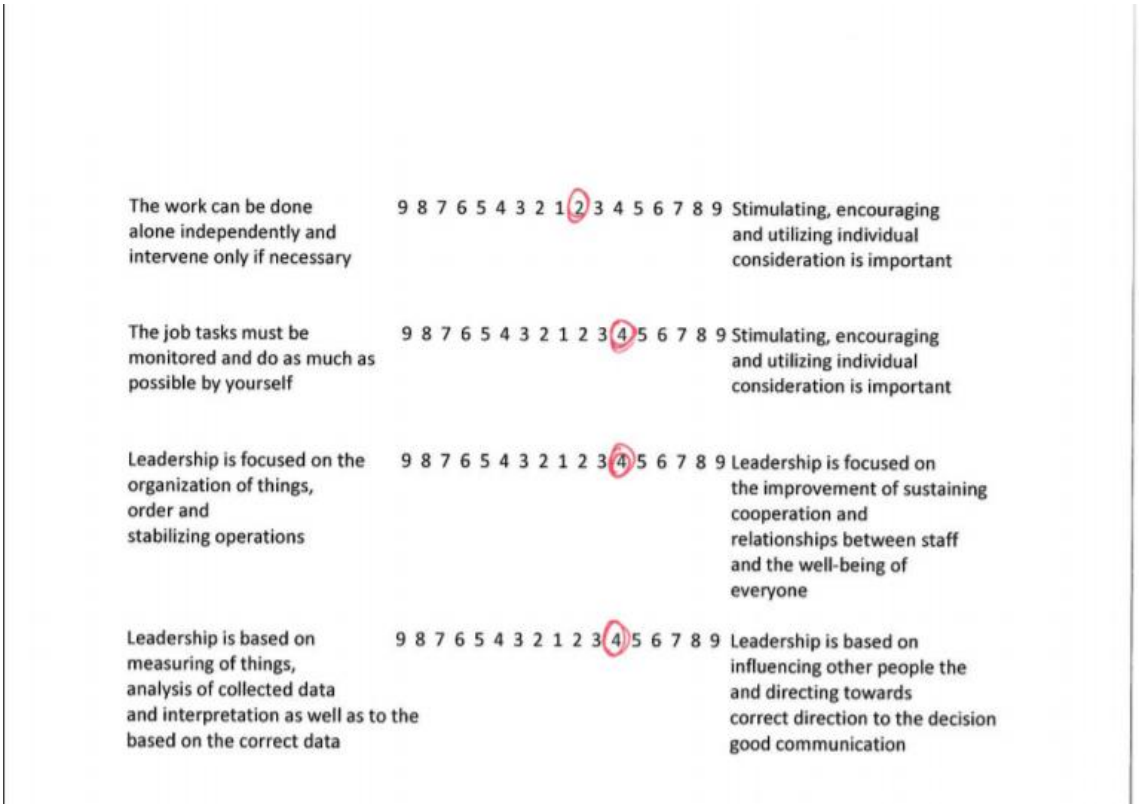


Figure 6d. An Example of the Transformational Leadership Questionnaire

After reviewing the data we discarded two questionnaires fully, both due to the large amount of lacking answers. Questionnaires that were lacking a couple answers due to issues of clarity or certainty were included simply with these sections not being included for those questionnaires, this is visible and commented on in the final analysis but do not make up such a difference or number that they should be seen as having any meaningful effect on the results of the final analysis.

The reviewed data was entered into an AHP tool to create matrices and values based on these answers. As mentioned in chapter three the tool used in this research was the AHP Online System or AHP OS developed and implemented by Klaus Goepel. Goepel who had found in his research in 2013 that while simple AHP calculation can be made in spreadsheets, more complex problem sets require distinct software set out to create an AHP tool that was specifically made for academic and non profit uses were a wide

functionality combined with a transparent process were key. Goepel (2018) states that there have been many AHP tools and applications that predate the AHP OS but that these tend to be developed for focused business uses and as such are not necessarily transparent about the processes and calculations. The AHP OS tool was chosen in this case for its full functionality, free use for non-commercial purposes and its comparability to other tools that allow for similar AHP functions.

The data was entered in to the AHP OS tool one comparison set at a time. Each comparison set consisted of 4 -6 pairwise comparisons depending on the amount of values in each set. The AHP OS treated each question as a separate project that was given a unique session code. Using this session code it was possible to enter the data for each participant a question or comparision set at a time. An example of this is given in *Figure 7*. In addition to the session code in *Figure 7* there is a project name in this case TLI4 that is used to identify that this data is from the 4th transformational leadership question or comparision set on the questionnaire.

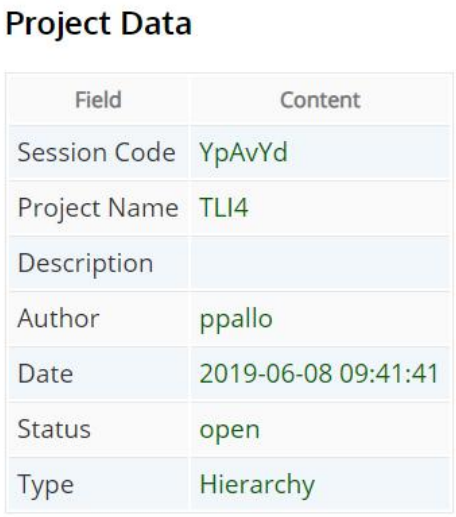


Figure 7. Example of the Project Data Information for the 4th pairwise comparison set in the AHP OS tool

After entering the data and values into the AHP OS tool we were then able to analyze both individual results as seen in *Figure 8* and global combined results of all participants (*Figure 9*).

19.8%	**19.8%**	**34.6%**	**25.8%**	**2.2%**
12.6%	7.7%	54.0%	25.6%	14.8%
14.0%	20.0%	49.5%	16.5%	2.2%
24.1%	33.1%	24.1%	18.8%	5.7%
11.8%	5.9%	23.5%	58.8%	18.3%
21.6%	28.2%	35.5%	14.7%	16.4%
26.6%	17.4%	42.3%	13.7%	5.2%
15.4%	14.8%	14.8%	55.0%	39.8%
18.5%	10.7%	29.3%	41.5%	2.6%
8.0%	23.2%	27.9%	40.9%	6.0%
18.4%	17.2%	34.9%	29.5%	39.9%
8.2%	46.3%	28.1%	17.4%	10.2%
7.3%	17.0%	28.4%	47.3%	1.9%
6.3%	12.9%	64.8%	15.9%	14.7%
4.9%	24.3%	47.3%	23.6%	5.3%
28.1%	23.9%	34.0%	14.0%	2.2%
16.0%	11.3%	48.4%	24.3%	81.9%
60.6%	16.6%	16.6%	6.3%	9.1%
22.2%	22.2%	14.3%	41.3%	18.6%
27.0%	16.0%	22.6%	34.4%	80.8%
27.1%	7.4%	35.3%	30.3%	29.2%
18.5%	11.6%	45.8%	24.0%	5.2%
34.3%	15.3%	25.2%	25.1%	155.5%
48.0%	6.4%	16.4%	29.2%	1.2%
48.6%	17.0%	20.6%	13.7%	44.8%
10.1%	26.5%	53.9%	9.6%	11.4%
21.1%	5.8%	7.8%	65.3%	7.2%
25.6%	34.6%	22.5%	17.2%	61.8%
20.9%	10.1%	55.2%	13.8%	9.1%
25.0%	25.0%	25.0%	25.0%	0.0%
2.9%	63.4%	24.2%	9.5%	40.0%
10.0%	40.0%	40.0%	10.0%	0.0%

Figure 8. Individual Results for a Pairwise Comparison Set in the AHP OS tool

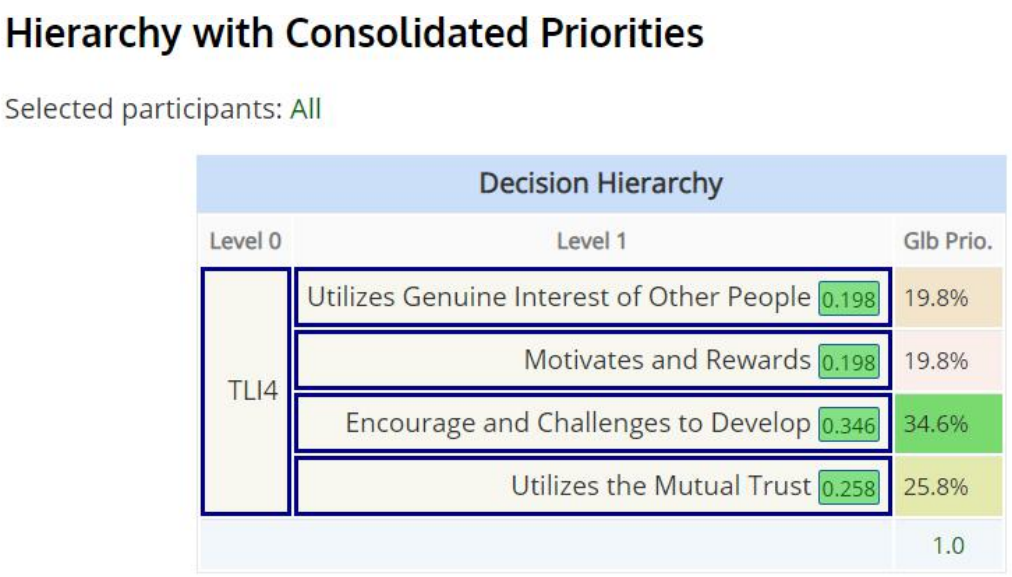


Figure 9. Example of the Average of the Entire Data Sets Answers for a Pairwise Comparison Set in the AHP OS Tool

These AHP OS results were then transferred to spreadsheets, where they were organized into individual profiles. These spreadsheet profiles were the primary tool used in creating the different individual, national and global profiles and served as the basis for later calculations. Before creating the final pyramid models that were used to present the analysis presented in this paper, pie diagrams (*Figure 10,11*) were created within the spreadsheets to visualize the results of the AHP analysis beyond simple numerical values. These pie diagrams were also used as a tool to easily check the consistency ratio of specific answers.

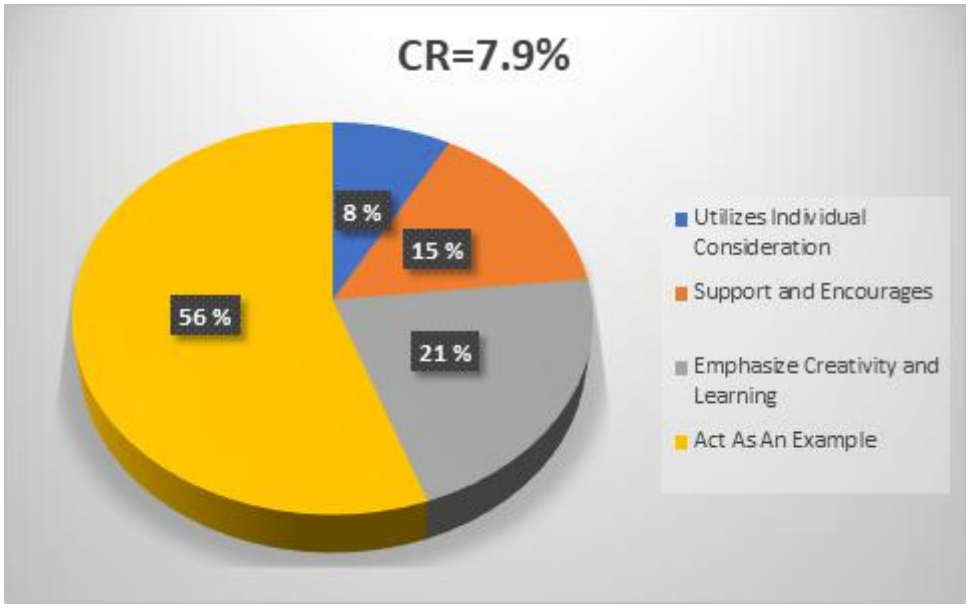


Figure 10. Pie Diagram Illustrating a Single Individuals Values for a Specific Comparison Set

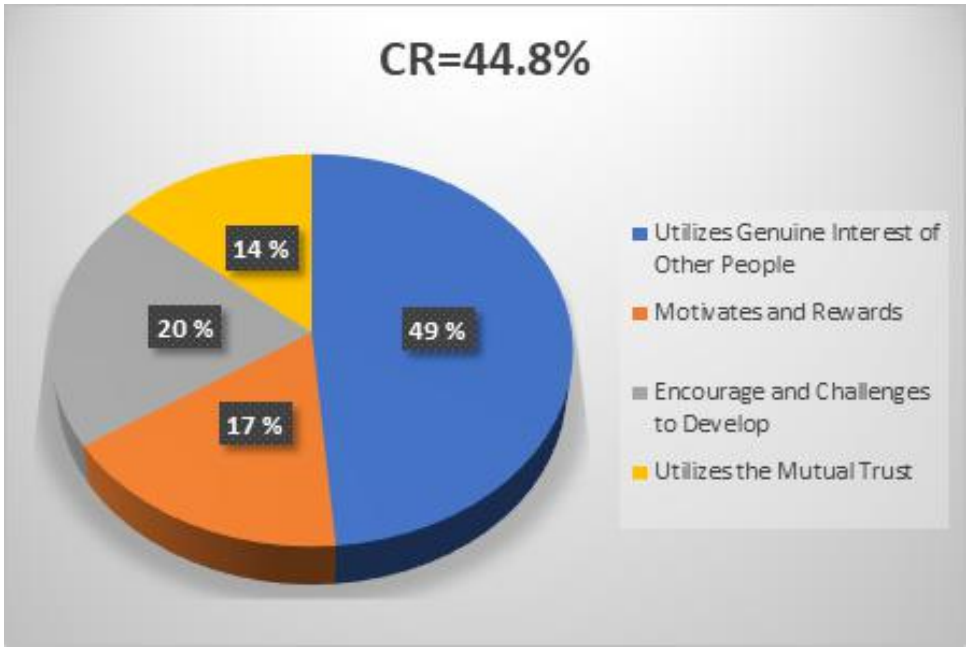


Figure 11. Pie Diagram Illustrating a Single Individuals Values for a Specific Comparison Set

The questionnaire included purposeful redundancies and overlap in the questions and these redundancies were pared down to create the set of questions used as the basis for the profiles. These redundancies did not create a need for further analysis as the final model included or discarded complete comparison sets in all instances except for the middle section of the final Pyramid model which include the values of Utilizes mutual trust and act as an example, Emphasizing creativity and learning: encourage and challenge to develop, Motivate and reward; support and encourage as well as Individual consideration and genuine interest in other people as categories. The redundancies for this section were separate questions from separate comparison sets and thus required the creation of a new comparison set from the questions that were being used. This new comparison set was then analyzed with AHP OS tool following the same principles as for all other comparison sets. The global results for this new comparison set are seen in *Figure 12*, the values names being abbreviations of the values used in the final pyramid model.

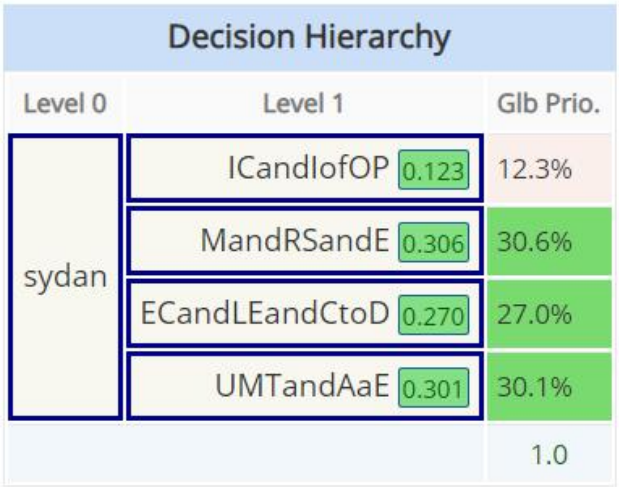


Figure 12. New Comparision Set Created After Removing Redundant Questions

While the profiles existed in a few different formats during the analysis process they were ultimately presented in all cases (including national and global profiles) in a pyramid format developed by Takala et al. 2008 This pyramid model (*Figure 13*) allows

for a simple overview of the relevant data in the analysis that can be easily explained and extrapolated to stakeholders without deep prior knowledge of the relevant concepts, while still being wide ranging enough to sufficiently present the findings of the analysis. In addition to the pyramid models technical strength it was directly comparable to prior research done with the same data sets, but with different analysis tools.

The pyramid model Further examples of the pyramid model used in this analysis that is based on the profile developed by Takala and colleagues will be presented further in this paper, but *Figure 13* is presented here as an example of the model used. The model is divided into four different sections that cover different aspects of the subjects TLI profile. Highest on the pyramid model are the directions of outputs which include Achieves or surpasses the settled goals, Succeeds as a leader and leadership corresponds with expectations and Creates entrepreneurship within the team. The values for the direction of output are based on the answers to questions 19-24 on the questionnaire. Lower on the pyramid are TLI cornerstones which cover Utilizes mutual trust and act as an example, Emphasizing creativity and learning: encourage and challenge to develop, Motivate and reward; support and encourage as well as Individual consideration and genuine interest in other people as categories and was based on answers from questions 1-3,6 and 11 in the questionnaire. Below the TLI Leadership values are the values for Controlling Leadership, Passive Leadership and Dynamic Leadership approach these are based on questions 25-27 on the questionnaire and make up the section known as TLI leadership styles. The base of the pyramid is the resources section that covers Know-how, Information systems, Processes and Way of working. The values for the resources section were based on questions 13-18 on the questionnaire.

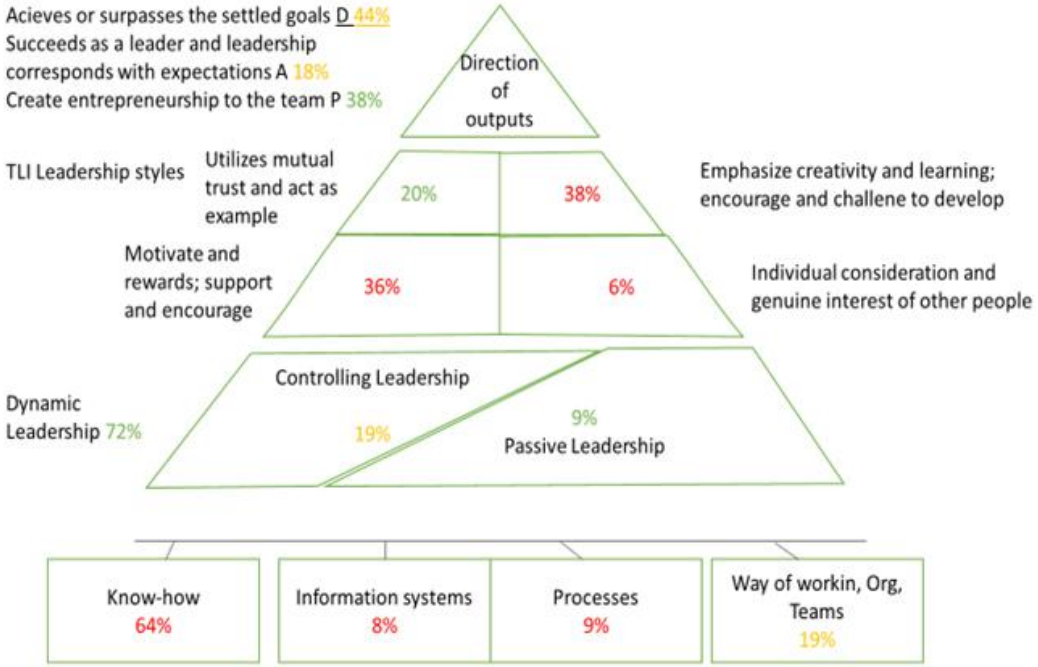


Figure 13. Example of the Pyramid Model, Based on Takala et al. Sand Cone Model, Used In The Creation of The Transformational Leadership Profiles

Every section of the Takala et al 2008 Pyramid model uses three or four values and weights these as sections based on the preferences stated by the subject in answering the questionnaire. These preferences are presented as percentages that add up to 100%. These percentages are presented within the model as colour coded. The three available colours green, yellow and red serves as a quick form of indication of whether certain answers are seen as positive or not within the TLI approach of the model. The exact values for the colour coding used within this paper are adapted from earlier research in transformational leadership to ensure the comparability and legibility of the results of the analysis. The simple explanation of the colour coding is that green indicates that the value in question is weighted by the subject or subjects to an appropriate degree from this research point of view, yellow serves as a warning colour and indicates that the subject or subjects weight this value slightly less or slightly more than would be optimal. The final colour used in this model is red, which indicates a

major deviance from the optimal values in this model. The exact optimal percentages are not static between different sections of the model and are extrapolated fully in *Figure 14*.

Colour codes	Resource; optimal 25%
red = bad	40-100
yellow= warning	30-39
green = good	20-29
	10-19
Direct of outputs; optimal 33%	0-9
50-100	
40-49	Controlling/Passive leadership; optimal 9%
20-39	25-100
10-19	15-24
0-9	0-14

Dynamic leadership; optimal 82%	Cornerstones; optimal 25%
70-100	40-100
50-69	30-39
0-49	20-29
	10-19
	0-9

Figure 14. The value thresholds used as guidelines in this research

4.2 Validity and reliability

As outlined in the theory and prior research provided in chapters two and three on transformational leadership and the analytical hierarchy process, the parameters used in this research have a firm background earlier literature. This theoretical background combined in addition to the fact that the survey described earlier in this chapter conforms to pre-existing standards for functional surveys mean that the external validity of this research should be seen as proficient and valid. The internal validity of this research is ensured by the use of tools previously found valid and functional for the forms of analysis undertaken in this thesis. Those tools, namely AHP OS that have not been previously used strictly in this context have been comprehensively compared to earlier tools and their results using same data sets. In addition to these steps, the inconsistency ratio used in this analysis to disregard inconsistent survey results has

been applied to ensure the data does not include unreliable or invalid results. All these factors combined mean that the analysis and data collection described in this chapter should be seen as bot valid and reliable by the standards relevant to them in the context of academic research.

4.3 Methodology of analyzing the reactor model

The Direction of outputs section of the pyramid model allows us to identify those people or groups that fit the reactor model. As explained earlier in this paper more in depth, the reactor model is not a separate category within the Analyzer, Defender and Prospector paradigm. Rather the reactor model is defined by someone not being clearly aligned with any of these profiles. The pyramid model used in this research allows us not only to identify those that fit the reactor model, but to simultaneously find a workable way to identify other aspects of their transformational leadership profile. The goal in analyzing the Reactor profiles is to discover if there are other aspects of their TLI profiles were they are aligned. While it is not possible to infer correlation based on simply these commonalities it valuable to discover any connections that may exist both from the perspective of analyzing the relative status of the reactor model and possibly from the perspective of future research.

The planned process for analyzing the Reactor model profiles is described chronologically in *Figure 15*. The process begins by identifying those individuals that fit the reactor model. Those profiles are then grouped and the decision has to be made whether to analyze only individual profiles only or possibly analyze group and global profiles for similarities as well. The size of the amount of profiles that fit the Reactor model within the smaller national and role based groups is limited enough that the focus will be on analyzing only the individual profiles that fit within the Reactor profile. After separating these profiles a table is created to list all of their values over the other aspects of their transformational leadership profile. Any consistent similarities are

then identified and recorded. The final step before analysis is to compare any similarities found to the group and global profiles that have been created earlier. This was designed to discover whether the similarities found in the transformational leadership variables and inclinations of those that fit the Reactor model are common across the traditional Defender, Prospector and Analyzer groups as well. Finally these results are analyzed and compared to existing research to discover what they may tell us about the Reactor model in Transformational leadership.

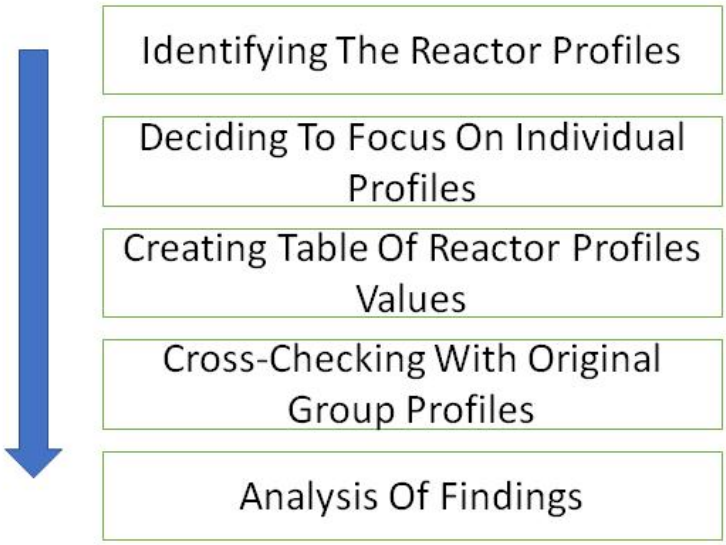


Figure 15. A Chronological overview of the process of analyzing those profiles that fit the Reactor Model

The first step in identifying the individual profiles that fit the reactor model was to separate those profiles from the data set that did not fit any of the more established Analyze, Defender or Prospector profiles. As defined by Takala et al the reactor model is not defined by a separate value in the Sand Cone model or the transformational leadership tools based on similar principles. Rather an individual or group that is seen as fitting the reactor model is identified by the lack of a clear definition to any of the three other models of Defender, Analyzer or Prospector. This definition of the Reactor

model as existing in the absence of other earlier determined models not being viable meant that parameters had to be set that defined which profiles fit the description of Reactor and which on the other hand showed what is perhaps best described as a weak inclination or bent towards one of the existing profiles.

After analyzing the individual profiles and the pre-existing literature on the Defender, Prospector and Analyzer profiles in the context of Transformational leadership the parameters for the Reactor model were set as describing such individual profiles were no one of the values (Achieves or surpasses the settled goals, Succeeds as a leader and leadership corresponds with expectations and Creates entrepreneurship within the team) that correspond with the Defender, Analyzer or Prospector models are higher than 45%. These parameters were designed to be conservative estimates rather than liberal ones, to best separate those individual profiles that can most confidently be described as being Reactors, as defined by earlier literature.

As briefly described earlier in this chapter the values that are used to define the individuals variables concerning the Defender, Analyzer and Prospector models are found in the upper right corner of the visualized pyramid model used in the Transformational Leadership analysis (*Figure 16, Figure 17*).

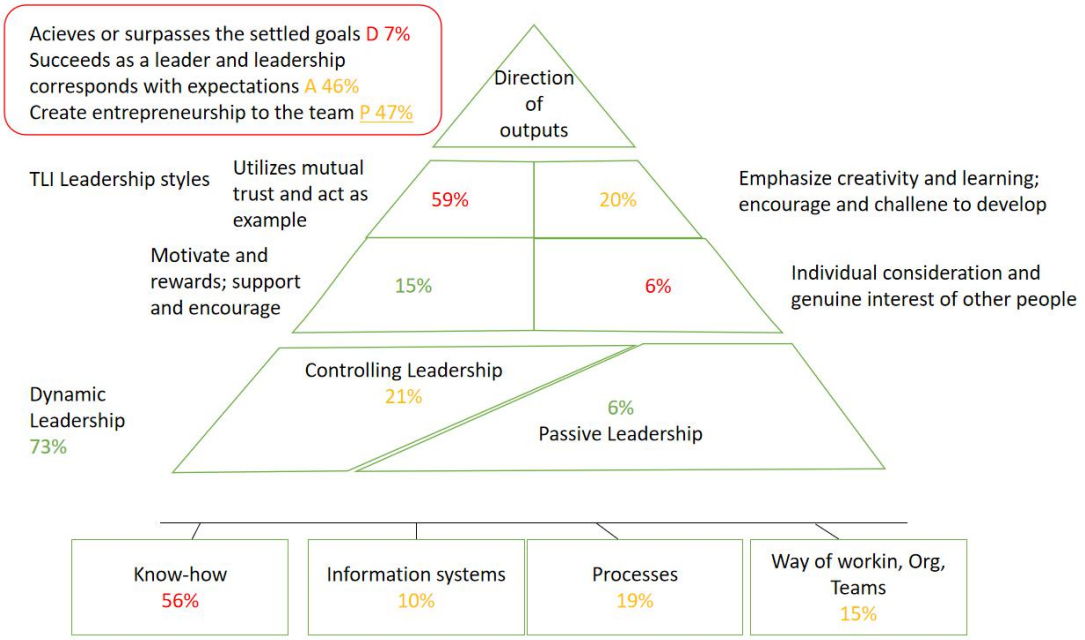


Figure 16. An example of the Pyramid Models used within this analysis with the location of the values tied to the Defender, Analyzer and Prospector mod els highlighted in red

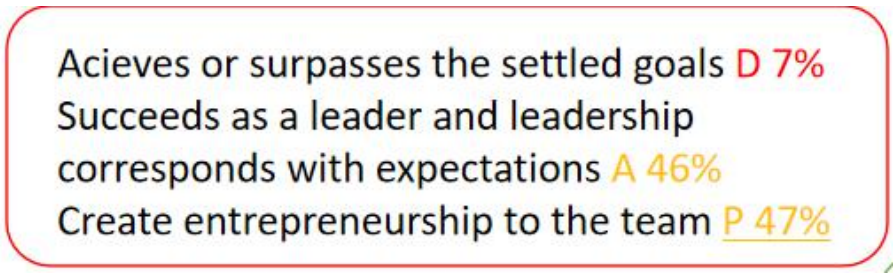


Figure 17. An example of a close-up of the location of the values tied to the Defender, Analyzer and Prospector presented as an examåle of how the values are presented

The amount of individual profiles that had none of the Defender, Analyzer or Prospector variables higher than 45% and thus fell within the parameters set for the reactor model in this analysis was 11. With the full amount of individual profiles in the data set being 31, the percentage of those individuals that can be considered reactors

is at approximately 35.5%. Roughly a third of the individual profiles fitting the parameters of being reactors is perhaps surprising. In reference to the established paradigm in the literature concerning the reactor model a third of those surveyed being Reactors is not a positive statistic in terms of Transformational Leadership.

With the questionnaire data coming from four different global geographic regions of Company A (not identified here for reasons of privacy), it was possible to determine if any certain region has an outsized amount of reactors as compared to their share of profiles in the overall transformational leadership profile analysis. There was however no clear regional bias towards Reactors and any reason for small differences that might exist cannot be confidently determined with the limited amount of data from each region. The rest of the profiles that did not fit the Reactor model were made up of those that fit the Defender, Analyzer and Prospector.

With the 11 profiles that fall within the parameters of the reactor model now identified those individual profiles were then used as the basis for new spreadsheets that were used to easily identify similarities and differences between the separated Reactor profiles (*Figure 18*). After creating a visibly easy to comprehend chart of the necessary information averages were created arithmetically for all the Reactor profiles other Transformational Leadership values. These averages were then compared to the values of the entire data set.

Bad	Passable	Good											
Heart	Motivates	Utilizes	Emphasize	Individual	**Leadership**	Dynamic	Cotrolling	Passive	**Resources**	Know-How	Information	Processes	Team Work
Passable	33	26	35	6	ICR High				ICR High				
Good	34	25	21	20	Bad	15	47	38	Passable	28	10	48	14
Bad	36	20	38	6	Good	72	19	9	Bad	64	8	9	19
Passable	28	20	17	35	Bad	48	17	35	Good	39	20	24	17
Bad	20	52	21	7	Bad	47	8	44	Bad	24	4	61	11
Passable	43	15	25	17	Passable	68	8	24	Passable	55	10	24	11
ICR High					Bad	7	27	66	Bad	19	5	50	28
ICR High					Passable	59,5	25	15,5	Passable	44	15	26	16
Passable	30,5	44,5	15	10	ICR High				Passable	34	17	11	38
Bad	13,5	10,5	47	29,5	Bad	16	26	58	Passable	45,5	18	20,5	16
Good	24	34	32	10	Good	79	10	11	Passable	18	18	32	32
Average	**29,1**	**27,4**	**27,9**	**15,6**	**Average**	**45,7**	**20,8**	**33,4**	**Average**	**37,1**	**12,5**	**30,6**	**20,2**

Figure 18. Combined spreadsheet of the values of the Reactor Profiles other Transformational Leadership Values

The in depth results of both this analysis and the analysis of the Transformational Leadership profiles overall are described in chapter 7. “Analysis” of this paper, but the methodology used was found to be satisfactory and the analysis followed the planned structure.

5 Research results and analysis

"Attempt the end and never stand to doubt;
Nothing's so hard but search will find it out."

-Robert Herrick, Seeke and Finde, *Hesperides* (1648)

5.1 Transformational leadership questionnaire results

The Transformational Leadership research, analysis and results presented throughout this thesis was completed and considered a success on the goalpost set for it. The analysis that was gained by using the AHP OS tool in the manner described earlier in this paper produced results that were comparable to the results of earlier analysis of the same data from Company A done with different analytical hierarchy process tools. This is a positive development as it not only gives an indication of the reliability of both the method used in this analysis but also serves as what could be considered a confirmation or certainly a strong indication of the validity of the earlier AHP method as well.

If the first half of the first research question of this thesis paper "Is the TL questionnaire data analyzed by a different AHP tool comparable to the earlier results and if so what does that tell us? " can now be considered answered, the questionnaire data produced reliably similar results with only small if any differences from a different AHP tool, what can then be extrapolated from the that comparable data? The general answers are not entirely positive for Company A. While the group and Individual profiles on average showed decent to good percentages for the TL cornerstones and decent numbers for the TL resources as well there was tremendous variance throughout the whole data set regardless of roles or other unifying or separating factors. This was most obvious in the TL leadership styles section of the profiles where a general lack of enough dynamic leadership was common. Privacy concerns mean that the different group profiles themselves will not be more specifically analyzed here. In

conclusion the data analyzed through differing AHP tools was found to comparable and the results themselves can be described as mixed.

5.2 Reactor model analysis

The information on the Reactor profiles gathered and analyzed here was developed and grouped according to the processes described in the Methods and Methodology chapter. The first values from the profiles that fit the Reactor model parameters set here that were reviewed were the TL cornerstones. In making this analysis the same color coding system was used as in the TL profiles and defined specifically in *Figure 12*. *Figure 19* shows the TL cornerstone values for the Reactor profiles. In addition to the color coded each individual is set of values has been defined as Good, Passable or Bad. These terms are defined by the dominant color of each value set and should be understood as a descriptor of adherence to the standards used in this analysis not as an empirical statement in themselves.

Bad	Passable	Good		
Heart	Motivates	Utilizes	Emphasize	Individual
Passable	33	26	35	6
Good	34	25	21	20
Bad	36	20	38	6
Passable	28	20	17	35
Bad	20	52	21	7
Passable	43	15	25	17
ICR High				
ICR High				
Passable	30,5	44,5	15	10
Bad	13,5	10,5	47	29,5
Good	24	34	32	10
Average	**29,1**	**27,4**	**27,9**	**15,6**

Figure 19. The Transformational Leadership Values Concerning the Transformational Leadership Cornerstones for the Reactor Profiles

The values shown in *Figure 19* could be described as positive. The optimal value for the cornerstones as defined by Takala et al and mentioned earlier in this paper is 25% each and the Reactor profiles get rather close to this, with three of the four cornerstone values being within 5 points of 25%. The Reactors do not meaningfully differentiate themselves for either better or worse in the TL cornerstone values from the overall averages of the entire data set as illustrated in *Figure 20*. There are small differences of a few percentage points between the Reactors and the larger group they are a part of but considering the size of the data set, these are not likely statistically significant.

Bad	Passable	Good		
Heart	**Motivates**	**Utilizes**	**Emphasize**	**Individual**
Average For Reactors	29	27	28	16
Average For Complete Data Set	30	31	26	14

Figure 20. The Transformational Leadership Values Average Concerning the Transformational Leadership Cornerstones for Reactors compared to the Average of the Entire Data

The second aspect of the Transformational Leadership profile of the Reactors that was analyzed was their Leadership Style within TL. As defined earlier in this thesis Dynamic leadership is highly valued in TL. As seen in *Figure 21* the Average distributions in the TL leadership styles are not nearly as good as in the TL cornerstones for the Reactors. The variance is also higher with two green or “good” percentages of 79% and 72% among the group, but also a dismal 7% dynamic leadership from one individual Reactor profile as well very high Passive leadership percentages overall.

Bad	Passable	Good	
Leadership	Dynamic	Cotrolling	Passive
ICR High			
Bad	15	47	38
Good	72	19	9
Bad	48	17	35
Bad	47	8	44
Passable	68	8	24
Bad	7	27	66
Passable	59,5	25	15,5
ICR High			
Bad	16	26	58
Good	79	10	11
Average	**45,7**	**20,8**	**33,4**

Figure 21. The Transformational Leadership Values Concerning the Transformational Leadership Leadership Styles for the Reactor Profiles

Though the percentage averages in the TL styles section of the profile are not very good for the Reactor profile, it is however once again the case that the Reactors do not differ from the average of the entire data set much at all as seen in *Figure 22*. In fact the differences between the averages of the Reactors and the entire data set are smaller than for the TL cornerstones and considering the size of the data set could be almost described as non existent. The Reactors of Company A are not dynamic leaders nearly enough by the standards of this analysis, but they also do not differ from Defenders, Analyzers and Prospectors in this much at all.

Bad	Passable	Good	
Leadership	Dynamic	Cotrolling	Passive
Average For Reactors	46	19	34
Average For Complete Data Set	45	19	36

Figure 22. The Transformational Leadership Values Average Concerning the Transformational Leadership Styles for Reactors compared to the Average of the Entire Data

The third and final aspect of the Reactors TL profile that was analyzed was transformational leadership resource distribution. As with the TL cornerstones the optimal value defined for these percentages by Takala et al. (2008) is 25%. *Figure 23* illustrates the Reactor profiles values for the TL resources. Overall the Reactors seem inclined to slightly over value Know-how and underInformation, but generally the values are not all bad from the point of view of this analysis. It should however be mentioned that variance is quite high between the different Reactor profiles in TL resources as well.

Bad	Passable	Good		
Resources	Know-How	Information	Processes	Team Work
ICR High				
Passable	28	10	48	14
Bad	64	8	9	19
Good	39	20	24	17
Bad	24	4	61	11
Passable	55	10	24	11
Bad	19	5	50	28
Passable	44	15	26	16
Passable	34	17	11	38
Passable	45,5	18	20,5	16
Passable	18	18	32	32
Average	**37,1**	**12,5**	**30,6**	**20,2**

Figure 23. The Transformational Leadership Values Concerning the Transformational Leadership Resources for the Reactor Profiles

As with the two earlier aspects of Transformational Leadership the Reactors, as shown in *Figure 24*, do not vary all that much from the average of the entire data set. However uniquely to the TL resources section there is one noticeable difference between the Reactors and the overall average, with the Reactors having a slight preference for processes as opposed to Team Work and the overall average skewing the other way.

Bad	Passable	Good		
Resources	**Know-How**	**Information**	**Processes**	**Team Work**
Average For Reactors	37	13	31	20
Average For Complete Data Set	31	15	21	30

Figure 24. The Transformational Leadership Values Average Concerning the Transformational Leadership Resources for Reactors compared to the

Average of the Entire Data

A point of interest that was discovered in the analysis of the Reactor profiles was the relatively high amount of Reactor profiles who had answered the questions that made up a certain section of the TL profile, but had done so at such a high rate of inconsistency that those aspects of their questionnaires could not be used. This is visible in the Reactor profile value overviews illustrated in this chapter in *Figures 19,21 and 23*. To compare the rate of inconsistency among Reactors to the Defenders, Analyzers and Prospectors identified in this thesis there is the graphic as seen in *Figure 25*. With eleven Reactor profiles overall, there are four that have one or more TL profile value missing due to a too high ICR (Inconsistency Ratio). Out of the twenty toal profiles that are not Reactors on the other hand, six have at least one profile value missing due to a too high ICR. While there is a difference in the percentage of high ICR between the two groups it not necessarily large enough to be basis for any conclusions at this time

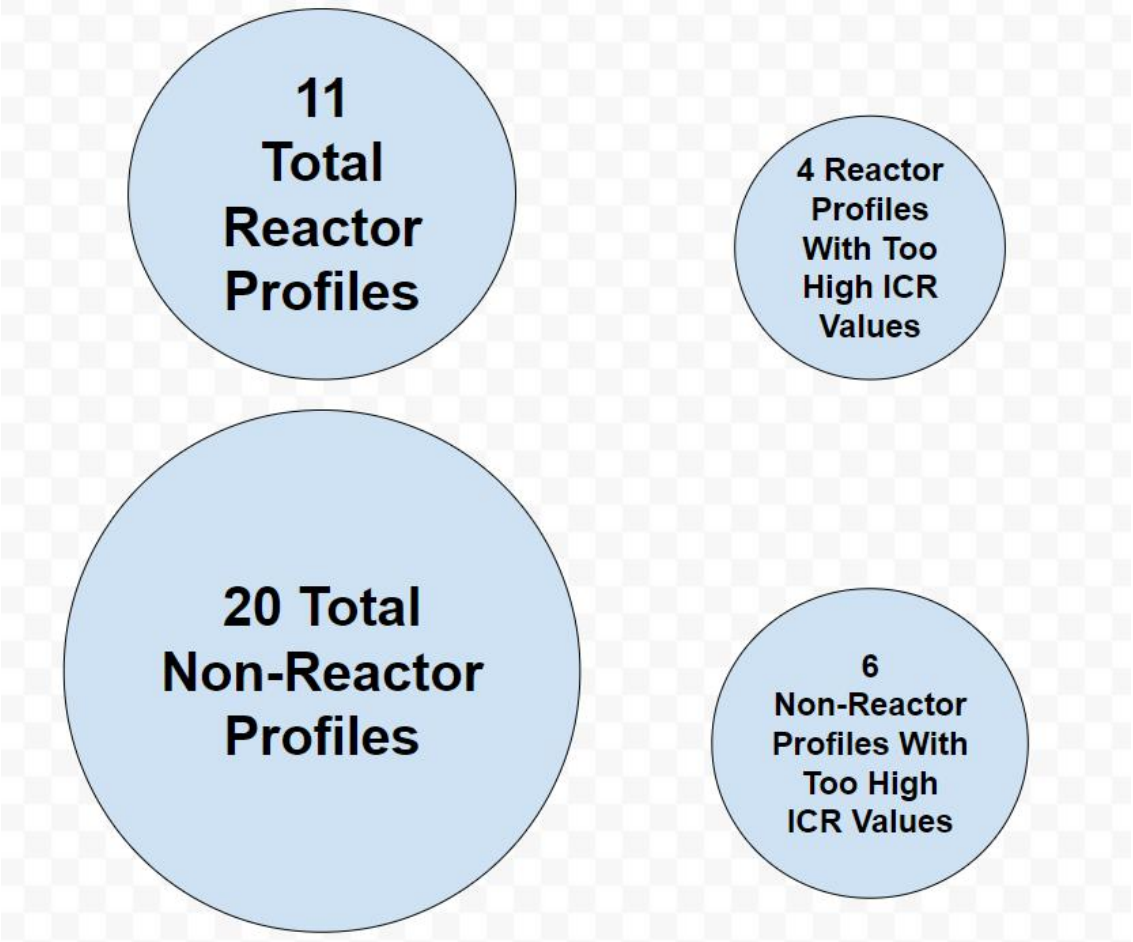


Figure 25. A Graph Showing the Difference Between the Relative Amount of Profiles with Too High ICR Values

Overall this analysis of the Reactor profiles identified in the data set from Company A used in this thesis has perhaps told us the most in how little differences there have shown to be. As mentioned earlier in this chapter the overall values concerning those attributes that make up success in Transformational Leadership are lacking in many of the individual and group profiles from Company A. It is however noteworthy that there is little indication that the Reactors as identified by this analysis are doing any worse or better than the other three more traditional models of Prospector, Analyzer and Defender. It is also hard to identify any distinct attributes that could be said to be perhaps typical of Reactors based on this analysis as any attributes where there was common ground among the reactors that common ground was also reflected among

the data set as a whole and where there was delineation among the Reactors that wide array of different values was reflected once again in the data set as a whole.

Conclusions

When comparing two different tools, programs or methods that theoretically are meant to achieve the same thing there is perhaps no better method to ensure there comparability then entering the same complex inputs into both and then analyzing the comparability of the results. The AHP OS tool and the other methods used in this analysis and described in this thesis paper proved in fact to be comparable to the earlier methods that had been used to analyze them and produced similarly mixed results concerning the data itself from the perspective of Transformational Leadership. Those profiles developed in this process also served as the basis for further analysis into the Reactor model, that perhaps did not show anything terribly dramatic, but nonetheless produced interesting results.

While the results found in this thesis paper concerning the reactor model are relatively novel, seeing as their focus is on fleshing out the reactor model as defined in earlier literature, it is also true that this is only a single analysis based on a healthy but limited amount of core data. Future research if undertaken could perhaps benefit from a larger sample size and perhaps other specifications to ensure the inclusion of more individuals, teams or groups that fit the defined parameters of being identifiable as reactors in the term Transformational Leadership context. Further analysis and data gathering could for example be done of Reactors within a larger already existing or connected pool of Transformational Leadership data. In any case it seems likely that if Transformational Leadership continues to gain in popularity and ubiquity, there is value in understanding clearly and defining with specificity and based on an empirical basis the concepts that exist within Transformational Leadership itself.

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Attachements

The AHP survey used in this research to gather data.

AHP Survey

FILLING THE QUESTIONNAIRE (please read this chapter carefully)

Please evaluate the following criteria in every pair wise comparison what are more important in your opinion. There are two different situations to consider, first situation is in normal operation, where pressure to get something ready and into markets are in the schedule and still reached. The second situation is where product development is seen to be in crisis and there is more pressure to get products ready to markets and product cost and time schedule are not reachable any more without radical actions. When giving the answers usually the first intuition is the best answer.

Please fill your information. Information is used to target answers to right sites and organizations. Name is needed if any additional data or more focused interviews are needed to clarify answers.

Background information:
Name of the Answerer:
Country and site:
Main business area:
Position and area in charge:

PRODUCT DEVELOPMENT STRATEGY QUESTIONNAIRE

Cost = Cost of product development

Quality = Quality of product development (resulting of the bad project execution and bad product quality)

Delivery = Keep the product development in the time schedule

Flexibility = Flexibility of product development

Please mark your answers using BOLD RED, or other well seen method.

Before Crisis (Normal situation)

Cost	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Quality
Cost	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Delivery

Cost	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Flexibility
Quality	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Delivery
Quality	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Flexibility
Delivery	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Flexibility

During Crisis

Cost	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Quality
Cost	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Delivery
Cost	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Flexibility
Quality	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Delivery
Quality	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Flexibility
Delivery	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Flexibility

For validity and reliability checking, please also specify roughly the priority weights of Q(Quality), C(Cost), T(Time/Delivery) and F(Flexibility).

	Quality %	Cost %	Delivery %	Flexibility %
Before crisis	45	15	20	20
During crisis	50	0	20	30

Note: Percentage of Quality, Cost, Delivery and Flexibility altogether is 100%, which means the sum of every row in above table should be 100%.

DESCRIBE YOUR OWN LEADERSHIP AT THIS MOMENT (or the leadership of the person evaluated) by comparing the following:

Utilizes individual 9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9 Supports and encourages

Consideration

Utilizes individual consideration	9 8 7 6 5 4 3 2 1 2 3 4 5 **6** 7 8 9	Emphasize creativity and learning
Utilizes individual consideration	9 8 7 6 5 4 3 2 1 2 3 4 **5** 6 7 8 9	Acts as an example
Supports and encourages	9 8 7 6 5 4 3 2 1 2 **3** 4 5 6 7 8 9	Emphasize creativity and learning
Supports and encourages	9 8 7 6 5 4 3 2 **1** 2 3 4 5 6 7 8 9	Acts as example
Emphasize creativity and learning	9 8 7 6 5 4 3 2 1 2 **3** 4 5 6 7 8 9	Acts as example
Utilizes genuine interest of other people	9 8 7 6 5 **4** 3 2 1 2 3 4 5 6 7 8 9	Motivates and rewards
Utilizes genuine interest of other people	9 8 7 6 5 **4** 3 2 1 2 3 4 5 6 7 8 9	Encourages and challenges to develop
Utilizes genuine interest of other people	9 8 7 6 5 4 3 2 1 2 3 4 **5** 6 7 8 9	Utilizes the mutual trust
Motivates and rewards	9 8 7 6 5 4 3 2 1 **2** 3 4 5 6 7 8 9	Encourages and challenges to develop
Motivates and rewards	9 8 7 6 5 4 3 2 1 2 3 4 5 6 **7** 8 9	Utilizes the mutual trust
Encourages and challenges to develop	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 **8** 9	Utilizes the mutual trust
Operational business processes and work flows	9 8 7 6 5 4 3 2 1 2 3 **4** 5 6 7 8 9	Utilize the know-how
Operational business processes and work flows	9 8 7 6 5 4 3 2 **1** 2 3 4 5 6 7 8 9	Utilizes the information systems
Operational business processes and work flows	9 8 7 6 5 4 **3** 2 1 2 3 4 5 6 7 8 9	Utilizes different organizing practices like teams, matrixes, projects etc.
Utilizes the know-how	9 8 7 6 **5** 4 3 2 1 2 3 4 5 6 7 8 9	Utilizes the information

		systems
Utilizes the know-how	9 8 7 6 **5** 4 3 2 1 2 3 4 5 6 7 8 9	Utilizes different organizing practices like teams, matrixes, projects etc.
Utilize the information systems	9 8 7 6 5 4 3 2 1 2 3 **4** 5 6 7 8 9	Utilize different organizing practices like teams, matrixes, projects etc.
Achieves the settled goals	9 8 7 6 5 4 3 2 1 2 3 4 **5** 6 7 8 9	Succeeds as a leader
Achieves the settled goals	9 8 7 6 5 4 3 2 1 2 3 4 5 **6** 7 8 9	Creates entrepreneurship to the team
Succeeds as a leader	9 8 7 6 5 4 3 2 1 2 3 **4** 5 6 7 8 9	Creates entrepreneurship to the team
The goals are often even surpassed	9 8 7 6 5 4 3 2 1 2 3 4 5 **6** 7 8 9	Leadership corresponds to the expectations
The goals are often even surpassed	9 8 7 6 5 4 3 2 1 2 3 4 5 6 **7** 8 9	People are willing to do even extra effort
Leadership corresponds to the expectations	9 8 7 6 5 4 3 2 1 2 3 **4** 5 6 7 8 9	People are willing to do even extra effort
The decisions can be made slightly late and by avoiding problem situations	9 8 7 6 5 4 3 2 1 2 3 4 5 **6** 7 8 9	Mistakes must be examined, corrected and sometimes those who are responsible must be punished
The decisions can be made slightly late and by avoiding problem situations	9 8 7 6 5 4 3 2 1 2 3 4 5 6 **7** 8 9	Creativity, learning and "as an example" behavior must be emphasized
Mistakes must be examined, corrected and sometimes those who is responsible must be punished	9 8 7 6 5 4 3 2 1 2 3 4 5 **6** 7 8 9	Creativity, learning and "as an example" behavior must be emphasized

The work can be done alone independently and intervene only if necessary	9 8 **7** 6 5 4 3 2 1 2 3 4 5 6 7 8 9	The job tasks must be monitored and done as much as possible by yourself
The work can be done alone independently and intervene only if necessary	9 8 7 6 5 4 3 2 1 2 3 4 5 6 **7** 8 9	Stimulating, encouraging and utilizing individual consideration is important
The job tasks must be monitored and do as much as possible by yourself	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 **8** 9	Stimulating, encouraging and utilizing individual consideration is important
Leadership is focused on the organization of things, order and stabilizing operations	9 8 7 6 5 4 3 2 1 2 **3** 4 5 6 7 8 9	Leadership is focused on the improvement of sustaining cooperation and relationships between staff and the well-being of everyone
Leadership is based on measuring of things, analysis of collected data and interpretation as well as to the based on the correct data	9 8 7 6 5 4 3 2 1 2 3 4 5 6 **7** 8 9	Leadership is based on influencing other people the and directing towards correct direction to the decision good communication