Diploma Thesis

to obtain the academic degree of

Mag.rer.soc.oec.

in the diploma degree program

Business and Economics

Leadership Behaviour of Turkish Managers

Johannes Kepler University
Department of International Management
Altenberger Str. 69, 4040 Linz

Supervisor: a. Univ. Prof. Dr. Werner Auer-Rizzi

Author: Leitner Elisabeth

Submission: September, 2015
Sworn Declaration

“I hereby declare under oath that the submitted Diploma degree thesis has been written solely by me without any third-party assistance, information other than provided sources or aids have not been used and those used have been fully documented. Sources for literal, paraphrased and cited quotes have been accurately credited. The submitted document here present is identical to the electronically submitted text document”

September 2015
Abstract

Leadership behaviour in Turkey, the economic and political bridge between Europe and Asia, currently challenged by political instability and changes, is the core of this study. This diploma thesis investigates Turkish leadership behaviour, based on the Vroom/Yetton model (1973), taking into consideration a discussion of leading studies in intercultural differences of leadership behaviour and the current status quo of research in this field. Quantitative research enriched by application of a qualitative study showed stable more autocratic than participative Turkish leadership behaviour over time and demographic parameters.
# Table of contents

Introduction........................................................................................................................................................................4

1 Turkey and its cultural background..................................................................................................................................5
   1.1 Country information .................................................................................................................................................5
   1.2 Historical Background .............................................................................................................................................5
   1.3 Current Situation .....................................................................................................................................................6

2 Leadership behaviour .........................................................................................................................................................9
   2.1 Development of Research on Leadership Behaviour .............................................................................................9

3 Country specific leadership behaviour especially in the situation in Turkey.........................................................11

4 Interims Conclusion and design of my study of Leadership Behaviour of Managers in Turkey.................................................................14

5 The Vroom/Yetton model ...............................................................................................................................................15
   5.1.1 Basic structure of the model .................................................................................................................................16
   5.1.2 The normative aspect of the Vroom/Yetton model ............................................................................................18
   5.1.3 The descriptive approach of the model ................................................................................................................33
   5.1.4 Validity of the model ............................................................................................................................................34
   5.1.5 Limitations of the model ....................................................................................................................................35

6 Template Analysis ...........................................................................................................................................................37

7 Procedure .........................................................................................................................................................................39

8 Sample ............................................................................................................................................................................41

9 Data evaluation ...............................................................................................................................................................42
   9.1 Quantitative Data Evaluation ......................................................................................................................................42
      9.1.1 General data evaluation – data 2013 ..................................................................................................................42
      9.1.2 General data evaluation – data before 2000 .................................................................................................44
      9.1.3 Difference in results across gender ..................................................................................................................46
      9.1.4 Difference in results across age .......................................................................................................................48
Introduction

In order to finance my studies and to gain practical experience, I am working as a branch manager in the automotive sector. Every day I am confronted with leadership from different perspectives, either as a leader or a subordinate. From both points of view, leadership is a very difficult and challenging topic that I have always found interesting and exciting.

Although leadership theories in cross-cultural management were a part of my studies, my scientific interest was gained when I shared management experiences with international partners during an automotive conference where I took part in an interesting discussion about subordinates and their involvement in different processes evolved. Our strongly differentiated opinions on the matter piqued my attention and I started to do some research regarding the participation of employees in management in general, but especially in Turkey.

A profound research on Turkish leadership behaviour in general linked to Turkey’s historical background and its current political and economic situation builds the basis of this investigation on Turkish leadership behaviour. Starting with this general overview a combination of quantitative and qualitative research will enrich the current status quo on research in this field. This will be done by a longitudinal study based on Vroom/Yetton’s study concept of situational leadership, enhanced by application of a qualitative study. Stability or instability of Turkish leadership behaviour over the last 15 years based on research results conducted in 1996 will be shown in this diploma thesis as well as interview results will give a deeper insight in Turkish leadership behaviour.
1 Turkey and its cultural background

1.1 Country information

Turkey was often described as “the bridge between orient and occident”, as the Bosporus connects Europe and Asia. This unique location gives Turkey a special role and incredible power, not only in economical fields but also on a political map. The country is bordered by Georgia, Armenia, Iran, Iraq, Syria, Greece and Bulgaria and serves culturally, economically and politically as a bridge between East and West.

1.2 Historical Background

Today’s Turkish sovereign territory is located on the area of the former Byzantine Empire, which evolved from the eastern part of the Roman Empire. The Byzantine Empire was followed by the Ottoman Empire, which lasted from 1299 to 1923, and was defeated after World War I. An Independence War ended the occupation of the Allies and established the Turkish Republic as a subsequent state of the Ottoman Empire in 1923.

Mustafa Kemal Atatürk, a nationalist and the leader of the Independence War, was announced the first president of the newly formed Republic. His ideology was based on nationalism, secularism and statism in order to transform the society into a Western and secular structure. (Kabasakal/Bodur, 2007, p.838)

“Kemal Atatürk is the most effective leader that has emerged in Turkish society.” (Kabasakal/Bodur, 2007, p.850). Within a short period of time and with radical assertiveness he changed political, juridical, social and cultural bases. His principles, known as the “Kemalism” – republicanism, statism, populism, laicism, nationalism and reformism were incorporated in the constitution of 1937 (Mete, 2014), Mustafa Kemal established European legislation, gave women the same rights as men and announced monogamy. Moreover he introduced Turkish as official language, the Gregorian calendar and the Latin alphabet. (Maier-Bode, 2013)
The years after Atatürk’s death, government periods of single parties and multiparty were traversed and accompanied by military coups or interventions. Turkish military forces in 1960, 1972 and 1980 interrupted political instability (Kabasakal/Bodur, 2007, p.836-837) and provided constancy. The most recent coup took place in 1997 “the military again helped engineer the ouster – popularly dubbed a “Post – modern coup” of the then Islamic – oriented government”. (The World Factbook, 2014)

Nevertheless progress and the pro western approach continued. In 1945 Turkey joined the UN; in 1952 it became member of the NATO; in 1964 Turkey became an associate member of the European Community and began accession membership talks with the EU in 2005. (The World Factbook, 2014)

Today’s Turkish political, social and economical environment was mainly formed by Atatürk and his legacy, influenced by the military and its unique role in Turkey. Kemal Atatürk is still the Turkish symbol for progress, change and development, while the military, according to the public polls is still the “most trustworthy” institution (Kabasakal/Bodur, 2007, p.838).

1.3 Current Situation

The Republic of Turkey is a centrally organized, republican parliamentary democracy, currently majority governed by the conservative AKP (Justice and Development Party). As of August 2007 President Abdullah Gul is the chief of state and since March 2003 Prime Minister Recep Tayyip Erdogan is the head of government. (Wirtschaftskammer Österreich, 2013)

The main ethnic group is Turkish (70%) followed by Kurdish (20%) and other minorities. 99.8 % of the population belongs to Islam. (The World Factbook, 2014)

Economy is centred in the three main cities, Ankara, the capital, Istanbul and Izmir. Over the last few decades Turkey has managed to establish a stable, economical field that shows constant growth. Exports especially to Europe grew and the FDI increased within the last few years. From 2007 to 2010 Turkish economy grew an average 2.2%, mainly driven by the industrial and service sectors and their most important branch, the automotive and textile sector. (Wirtschaftskammer Österreich, 2013)
The constant economic growth, driven by the EU reform processes and the economic liberalization, lead to rise of new social groups, which are dedicated to Islam and whose lifestyle is traditionally conservative. At the same time, a strong Turkish middle class raised, who demands democracy and more individual autonomy. (Aydin, 2013) This clash between traditional social structure and democratic modernism highlights the continuous struggle of the Turkish society.

The current political, economical and social environment is strongly shaped by Recep Tayyip Erdogan, who is known for his autocratic, conservative and centralised politics. His decisions led to strong criticism and were the reason for protests and demonstrations which reached their maximum in June 2013, where thousands of Turks demanded Erdogan’s resignation and showed their dissatisfaction of the current situation in Turkey.

However giving a statement about the situation nowadays is more than difficult. The results of the last elections (10th of August, 2014), where Erdogan reached 52% of the vote, and became Turkey’s first popularly elected president, enhanced by what was shown during the last years, an overall political presence and almost unlimited power of Recep Tayyip Erdogan is hard to deny and might not have reached its maximum.

As president, officially in power since August 28th, elected for the following five years, Erdogan is obliged to hold an inner political neutral position. This could be seen in danger as he controlled with strong hand, ambition and passion his party for the last decades. Connecting this with the fact that the AKP still has 313 of 537 parliamentarian seats, one could suspect a tendency towards an authoritarian government structure, dominated by one person.

Erdogan already showed his ambition to drive the change in Turkey by using his newly gained power by interpreting Turkey’s constitution. Although Turkey’s constitution would not allow a political double function, Erdogan was Prime Minister and President at the same time. Such a constitutional bending or change is a precarious issue as the constitution directly affects the peoples’ fundamental rights. This kind of interventions could lead to uncertainty and caution, which is not only seen in social fields but might also effect on a long term perspective economic matters.
However, these possible economic impacts would only be seen and measurable in the future and will not be part of this study.
2 Leadership behaviour

Before going into more detail regarding Turkish leadership behaviour, the core of this research, a brief summary of the current status quo of research on leadership behaviour will be given to ensure a profound understanding of what will be investigated in this study.

2.1 Development of Research on Leadership Behaviour

At the beginning of the 20th century, research on leadership and leadership behaviour in general became a new field of scientific interest. The trait approach, in the 1930s and 1940s, was the first research on leadership. “This approach emphasised the personal attributes of leaders. Research studies looked for stable personality characteristics that distinguished leaders from other persons, and effective from ineffective leaders. (Szabo 2007, p.17)

The trait approach was overcome by the behaviour approach. Leadership theories using the behavioural approach emphasized task and relation oriented behaviour that should ensure leadership effectiveness (Yukl 2012, p.69). From 1950 to 1980 “the research on leadership behaviour was focused on how leaders influenced the attitudes and performance of individual subordinates (Yukl 2012, p.67)”.

By focusing only on the behaviour of leaders, scientists found that external, situational factors influencing effectiveness were missing. The situational approach takes this into consideration and “attempted to identify aspects of the situation that moderated the relationship between leader behaviours (or traits) and effectiveness” (Szabo 2007, p. 18). The most relevant theories in this field are Fielder’s contingency model of leadership (1967), the path-goal theory by House (1971) and the Vroom/Yetton model of decision making (1973).

The situational concept opened the door for a discussion of the consequences of cultural differences for leadership behaviour. The dominant pioneer of this approach was and is Geert Hofstede. In 1980 he published his studies with title “Culture’s Consequences: International Differences in Work-Related Values.” With his research within the international presence of the IBM Corporation he influenced researchers and parishioner overall the globe. He also documented this astonishing effect in a second edition: “Culture’s
Consequences, Company Values, Behaviours, Institutions and Organizations Across Nations” (2001). In this extensive second edition, he discussed all the relevant research contributions he was able to find and compared them with his conclusions.

In the time between 1980 and 2001 he changed his concept only in one dimension in cooperation with Bond in a Chinese setting by adding to his first configuration of leadership characteristics – “power distance, uncertainty avoidance, individualism and collectivism, masculinity and femininity, - the quality of long-versus short-term orientation.

This dominating concept of in its totality was challenged by an approach organized by Robert House. He had already published an independent leadership concept – the “path goal theory of leadership effectiveness” (1971) and the theory of charismatic leadership (1976) – and finally became attracted by the intercultural topic in gigantic effort. Beginning in the year 1994 he started a research program on a participative base by inviting “a team of 170 scholars to study societal culture, organizational culture, and attributes of effective leadership in 62 cultures and called it the GLOBE Study”. (House et al. 2004; Chhokar et al. 2007).

The GLOBE project started with an evaluation of Hofstede’s leaderships attributes and connected them to six partially new dimensions: Charismatic, value based, team oriented, participative, human oriented, autonomous, self-protective. Additionally House added the hypothesis that at least some aspects of leadership may transcend cultural boundaries and hence are universally accepted (House et al., 2001, 490).
3 Country specific leadership behaviour especially in the situation in Turkey

Only very few studies were conducted on culture specific attributes in Turkey, but the country was included in the most comprehensive intercultural studies: Hofstede’s original study and extension (1980) of 50 countries and their regions and the GLOBE Project with its 62 cultures.

According to Hofstede Turkey ranked above the average in values of power distance (20th); even higher on uncertainty avoidance index (16th) in individualism and collectivism Turkey is ranked in the second half of the countries and the masculinity/femininity index is located in the middle of the quartile of the 50 counties Hofstede (2001) quotes a finding by Imamoglu et al. (1993) compared Swedish and Turkish gender differences. These were larger in Turkey than in Sweden: “Turkish men had the most positive self-images and Turkish women the least positive; Swedish men and women were in between and did not differ from each other in this respect. (Hofstede, 2001, 310). In the dimension long-versus short-term orientation only 23 countries were studied, Turkey was not included. (Hofstede, 2001, 87, 151, 215, 286).

The empirical GLOBE Study is orientated on middle managers in three industries – food processing, banking and telecommunication – who were asked to respond to the questionnaire items concerning “what is” and “what should be” (House et al., 2004, 16). The empirical results of 25 societies were clustered in 10 groups in which Turkey is the only one which represents the Middle East (Chhokar et al., 2007, 833-874).

The qualitative study is based on 323 middle-level managers in only two industries: 150 employed in the financial sector and 173 in the food-processing sector. The “as is” results show that the highest orientation ranking leadership characteristics for Turkey were Decisive (as a subdimension of Charismatic), Team Inspirator (subdimension of Team), Autocratic (Subdimension of Participatvie); Diplomatic, Administrative Competition (Subdimension of Teamoriented), Visionary, Status Concnensus (Subdimension of Self-Conscious) over Collaborative Team Oriented (Subdimension of Teamoriented)” – (gender egalitarianism was not mentioned). The lowest absolute scores were obtained for Malevolent and Self-Centered.” (Kabasakal/Bodur, 2007, 859).
The original planning of the GLOBE – Project contained the inclusion of qualitative studies. Because of the dimension of the project this could not be materialized. Only Kabasakal/Bodur (2007) integrated a qualitative approach in the GLOBE study and included their results in their report about Turkey, parts of which were already published earlier in Pasa et al. (2001). This methodological extension reveals important shortcomings in the GLOBE – as well as in the Hofstede’s studies. The problem is the interpretation of the highly abstract terms in the questionnaires of the study by managers in different cultures. There are some examples of the interpretation of specific terms in Turkey:

Basically the terms leadership and management differ in meaning: “Respondents indicated that whereas management is learned through education and experience, leadership is innate and inborn, leadership is perceived to be about seeing the opportunities that come with change, involving innovation and creativity, having vision, and keeping the group together around a common task or goal. On the other hand, management is perceived to be a sales ambition task, technical, and administrating to rules and regulations. (Kabasakal/Bodur, 2007, 852).

“Participative roles of leaders in Turkey have a different meaning than in some other parts of the world. Participation is used more to make followers feel part of the group than incorporating their ideas into the decision making process or seeking consensus. Respondents indicate that outstanding leaders used consultations and participation very frequently. However, the described leaders using consolations and participation with purpose of showing the followers that they are valued rather than improving decision making.” (Pasa, et al. 2001, 580).

Within the GLOBE Study the problem of difference in the interpretation of meaning of terms was brought in the open and discussed in the cluster of the Middle East in which Turkey was included.

“There are a number of shrinking differences in comparison to other clusters. [...] Charismatic Value-Based and Team-Oriented leadership [...] have the lowest scores [...] and Participative leadership is viewed positively, but again scores low compared with other clusters’ absolute scores and ranks. The exception is the Self-Protective dimension. Clearly, this [...] profile is the most unusual among all the 10 clusters. Tow explanations, also speculative, come to mind. First, Middle Easterns may not requisite the same amount of leadership
from their leaders as do other clusters. However, this is unlikely, which leads to the alternative explanation that critical leadership attributes for this cluster were not part of the GLOBE attribute list. This alternative explanation gains credence from the findings of GLOBE researchers who administrated a version of the research in the Middle East containing additional leadership attributes not found in the final GLOBE-administered questionnaire. (Dastmalchian/Javidan/Alam, 2001).” (cited by Dorfman et al., 2004, p. 696) .
4 Interims Conclusion and design of my study of Leadership Behaviour of Managers in Turkey

The concentration on the most well-known studies of leadership in different cultures/countries was used to get an understanding of the challenges of such studies. These insights are very helpful in the development of this thesis. Based on these intensive studies I learned to avoid a start with a set of leadership attributes and use these in quantitative studies in the form of questionnaires. An alternative is provided by Vroom-Yetton model of leadership behaviour based on a situational concept of leadership studies. This model was originated by Vroom/Yetton and further developed by Vroom/Jago 1988/1991 and transformed from a normative approach for leadership training especially in North America and also transformed especially by Jago, Reber, Böhnisch, Szabo, Auer-Rizzi for descriptive studies of differences in leadership behaviour in 13 different countries. The application of this model was also done for two studies by Keser on the leadership characteristics of managers in Turkey. My study starts with the presentation of the Vroom/Yetton model. Then the model is applied to the situation in Turkey with the hypothesis

(1) that the Vroom/Yetton is suitable for such an application,

(2) is useful for longitudinal study with the special hypothesis that the leadership behaviour changed in Turkey the years between 1996 and 2014,

(3) that the quantitative study of Keser should be enriched by application of a qualitative study (triangulation).

The value of such an approach in connection of a comparison between the GLOBE -Study and the Vroom/Yetton model is demonstrated by Szabo 2007 and also – as quoted- by Kabasakal/Bodur in connection with the GLOBE-Study.
5 The Vroom/Yetton model

This chapter deals with the Vroom/Yetton model, which is the basis of this diploma thesis. The model was designed by Victor H. Vroom and Philip W. Yetton in 1973. The basic structure will be explained first, followed by a more detailed explanation of the two parts the model consists of.

The Vroom/Yetton model (1973) was designed to advise leaders to explain leadership effectiveness and, more specifically, the effectiveness of decisions made by leaders:

“The particular intersection of leadership and decision – making he explored in this book can now be identified. We are interested in the way in which leadership is reflected in the social process utilized for decision – making, specifically in leaders’ choices about utilized for decision – making specifically in leaders’ choices about how much and in what way to involve their subordinates in decision – making” (Vroom/Yetton, 1973, p.5)

Vroom/Yetton based their model on traditional studies of Lewin et al. (1939), Maier (1955) Tannenbaum/Schmidt (1958) and Fiedler (1967), which all concluded that not one leadership style will be equally adequate, effective and appropriate in different scenarios:

“No one leadership method is applicable to all situations; the function of a normative model should be to provide a framework for the analysis of situational requirements that can be translated into prescriptions of leadership styles.” (Vroom/Yetton 1973, p.16)

In comparison to other models with the same approach, such as Fiedler’s “Contingency Model of Leadership” (1976), the “Situational Leadership Theory” of Hersey and Blanchard (1977) and House’s “Path-Goal-Leadership theory” (1971), which also describe situational differences, the Vroom/Yetton model does not cover the whole field of leadership behaviour. Instead, it clearly focuses on only one aspect: decision making (Vroom/Jago 1991, p. 52).

They aimed to provide a tool for managers to improve and become more flexible in their leadership behaviour. They developed a rational model, as a training device, that enables leaders to choose, based on a situational analysis, the appropriate decision-making strategy.

According to Vroom/Yetton, the success of managers’ decision-making, measured by the extent to which organizational objectives are met, will be affected by the management
behaviour in different situations every day. This leads to two main facts, the effectiveness of decision-making depends on the decision maker and his or her ability to evaluate the situation and that there is not one most successful strategy that can be used in every situation (Kaltenbrunner 2010).

The basic hypotheses of the model were the following (Vroom (1981) in Böhnisch (1991) in Kaltenbrunner 2010, p.6):

“1. Reliance on the accuracy of the contingency approach

2. Different degrees of participation possibilities are evaluated according to their suitability to enhance the efficiency of the organization

3. Decision–making efficiency depends on two factors, namely quality of the decision and its acceptance by subordinates. “

5.1.1 Basic structure of the model

The model is operationalized in three dimensions: five leadership styles, seven diagnostic questions and seven rules.

The styles comprise five options (AI, AII, CI, CII, GII) (see Table 5.1.), which differ in their participation intensity, from “AI” (autocratic) to “GII” (participative). Strategy AI does not involve any subordinates in the decision-making process, while GII gives 100% decision-making power to the whole group in a participative and democratic process. Participation was defined “as a collective decision-making process of two or more people” (Vroom /Yetton 1973, 12). The diagnostic questions (see Table 5.2.) direct the decision-making process via a decision tree (see Figure 5.1) to the essential attributes of the situations that should be answered by a leader. These questions are based on the differentiation between quality and acceptance requirement defined by Maier (1955). The quality requirement refers to the manager’s professional technical and rational expertise based on hard facts and numbers, such as costs. Acceptance differentiates the commitment of the involved employees to master the challenge of the relevant tasks, and refers therewith to the social competences of a leader. Both requirements need to be taken into consideration in order to find the right strategy to ensure organisational effectiveness. The seven rules (see Figure 5.5) build the “normative” core of the model. They are based on the “analytical” part of the
decision-making process and advise the leader – after the diagnostic questions are answered – to avoid inadequate strategies. In some situations only one strategy is seen as effective; in others all five strategies are adequate. In order to be more precise, additional recommendations are given, thereby developing special models. One takes time efficiency into consideration (called Model A), while the other considers maximising participation (Model B).

Vroom/Yetton (1973, p.4) include Simon’s concept of “bounded rationality” in their model. Thereby they limit the numbers of variables to the intellectual capacity of the working memory of conscious decision-makers in the “magical” dimension of 7+/− 2 (Miller, 1956, p.81-97). The model used five dimensions for the differentiation of leadership style and seven for the diagnosis of situations and rules. According to Auer-Rizzi/Reber (2013, p.19), this leads to very general terms that reduce the complexity of the approach by facilitating empirically verifiable criteria and giving robustness and universal usability to the model (Auer-Rizzi/Reber, 2013, p.19).

The model also consists of two parts; a normative and a descriptive. The normative part describes the process of making effective decisions, which also provides the basis for leadership training. Intercultural comparison is grounded on the descriptive part of the model. A case set is used instead of questionnaires in order to ensure that the tacit knowledge of leadership behaviour is taken into consideration (Hersey/Blanchard, 1977). The concept of tacit knowledge assumes that people are not able to explain their leadership behaviour as it is part of their unconscious every day habits. Consequently, their answers in a normal questionnaire would be more “value based” or “far – from” instead of “close to action” (Locke/Latham, 1990, p.6) as in the case set (Szabo et al., 2001; Auer –Rizzi/Reber, 2013, p.13). In the case set participants are asked to evaluate each case and choose one of the five possible decision-making strategies the model provides. Results are returned to the participants as feedback in the training session and are also used for intercultural comparison.

The normative part describes the process of making effective decisions, and the descriptive part illustrates the actual behaviour of managers and links it with the normative part (Vroom/Jago 1991, p.52).
The normative model specifies the ideal behaviour of superiors in different situations in order to guarantee an effective decision. This effective decision a leader is supposed to make is based on an evaluation and specification of the most effective degrees of participation in various situations she or he is confronted with. The Vroom/Yetton model suggests the “correct” behaviour strategy of a leader is based on a situational analysis the leader has to undertake (Vroom/Jago 1991, p. 52).

The descriptive model considers the behaviour of managers in leadership positions in reality. In other words, it evaluates how and how often managers involve subordinates in the decision-making process (Vroom/Jago 1991, p. 52).

5.1.2 The normative aspect of the Vroom/Yetton model

Vroom and Yetton designed a normative model as a tool for managers:

“The normative model should be constructed in such a way as to be of potential value to managers or leaders in determining which leadership methods they should use in each of the various situations that they encounter in carrying out their formal leadership roles.” (Vroom & Yetton 1973, p.12)
According to the Vroom/Yetton model, every situation has a problem and needs a decision to solve it. Consequently, managers are confronted with multiple decision-making situations every day. Each of these decisions has specific characteristics that should influence the leader’s behaviour, meaning different approaches and strategies should be used in different situations (Vroom/Jago 1991, p.52).

The model differs between two types of problems: individual problems and group problems. Individual problems only affect one person, whereas various people are involved in group problems (Vroom/Jago 1991, p.30).

The model suggests five different decision-making strategies that can and should be applied in different situations. Which strategy needs to be chosen is defined by a situational analysis based on seven dichotomous questions and a decision tree (Vroom/Jago 1991, p.31).

5.1.2.1 Decision-making strategies

The model differentiates between five strategies to solve a problem or to make a decision. The Table 5.1 contains the five alternative strategies proposed by Vroom and Yetton. Each combination of a roman letter and a roman numeral represents one possible strategy. A stands for autocratic, C for consultative and G for group. The numbers I and II show the variants of the strategy (Vroom/Yetto, 1973).

Those strategies could be put on a “scale of participation”. AI is the strategy with the least participation of subordinates in the decision-making process and GII with the most, leading to the fact that from AI the influence of subordinates on the final decision increases to GII (Vroom/Jago 1991, p.31).

<table>
<thead>
<tr>
<th>AI</th>
<th>AII</th>
<th>CI</th>
<th>CII</th>
<th>GII</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Figure 5.2 Scale of participation
This scale is based on empirical research, which showed that AI is closer to AI then CII to CI:

“Empirical studies in which managers were asked to specify differences in the intensity of participation on a scale from one to ten revealed that AI attained the participation grade 0, All 1, CI 5, CII 8 and GII 10.” (Reber, 2011, p. 9)

The five strategies proposed the model are the following:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI</td>
<td>You reach a solution alone, employing what facts you have at hand.</td>
</tr>
<tr>
<td>All</td>
<td>You obtain any necessary information from subordinates, and then decide on a solution to the problem yourself. You may or may not tell subordinates the purpose of your questions or give information about the problem or decision you are working on. The input provided by them is clearly in response to your request for specific information. They do not play a role in the definition of the problem or in generating or evaluating alternative solutions.</td>
</tr>
<tr>
<td>CI</td>
<td>You share the problem individually with the subordinates, in order to get their ideas and suggestions without bringing them together as a group. Then you make the decision. This decision may or may not reflect your subordinates’ influence.</td>
</tr>
<tr>
<td>CII</td>
<td>You share the problem with your subordinates in a group meeting. In this meeting you obtain their ideas and suggestions. Then you make the decision which may or may not reflect your subordinates’ influence.</td>
</tr>
<tr>
<td>GII</td>
<td>You share the problem with your subordinates as a group. Together you generate and evaluate alternatives and attempt to reach agreement (consensus) on a solution. Your role is much like that of a chairman, coordinating the discussion, keeping it focused on the problem and making sure that the critical issues are discussed. You can provide the group with information or ideas that you have but do not try to “press” them to adopt “your” solution and are willing to accept and implement any solution which has the support of the entire group.</td>
</tr>
</tbody>
</table>

Table 5.1 Decision-making strategies (Kaltenbrunner 2010, p.9)

The choice of which decision-making strategy should be implemented is based on a situational analysis done by answering the following diagnostic questions (Vroom/Jago 1991, p.58).

5.1.2.2 Diagnostic questions

In order to determine the most effective decision-making strategy and process the manager evaluates the specific situation for quality and acceptance.
The following seven questions are based on the fact that quality and acceptance are the two main criteria influencing a leader’s effectiveness. A formula to visualize this would be the following:

\[ \text{A leader’s effectiveness} = \text{quality} \times \text{acceptance} \]

The Vroom/Yetton model evaluates this according to seven attributes. Those attributes are distinguished by seven analytic questions, which can be only answered with “yes” or “no” (Keser 1996, p.28):

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Does the problem possess a quality requirement?</td>
</tr>
<tr>
<td>B</td>
<td>Do I have sufficient information to make high quality decision?</td>
</tr>
<tr>
<td>C</td>
<td>Is the problem structured?</td>
</tr>
<tr>
<td>D</td>
<td>Is acceptance of decision by subordinates important for effective implementation?</td>
</tr>
<tr>
<td>E</td>
<td>If I were to make the decision by myself, is it reasonably certain that it would be accepted by my subordinates?</td>
</tr>
<tr>
<td>F</td>
<td>Do subordinates share the organizational goals to be attained in solving this problem?</td>
</tr>
<tr>
<td>G</td>
<td>Is conflict among subordinates over preferred solutions likely?</td>
</tr>
</tbody>
</table>

In order to be able to make a profound decision to answer with either “yes” or “no”, a manager needs, as already mentioned, to assess the situation with these dichotomous questions; therefore, the attributes connected with these questions need to be explained in more detail, which will be done in the next section.

### 5.1.2.3 Attributes

The following descriptions of attributes A to G are based off Vroom/Jago 1991.

- **Attribute A – the importance of the decision’s quality**

Attribute A covers the technical and professional quality of a decision. Quality requirements and their importance need to be evaluated by the manager. The leader needs to assess if different solutions would lead to the same level of success or if there are better solutions. A profound evaluation can be made if the manager knows the exact problem, all the alternative solutions and the rational differences between the alternatives.
The aforementioned question (*Does the problem possess a quality requirement?*) should be answered with “yes” in the following scenarios:

- If one solution would be faster, cost-efficient or failure-prone,
- If there are solutions which would lead to a better result,
- If the best solution is not found yet, but it is predictable that not all alternatives are equally successful.

“No” should be the answer under the following conditions:

- If all solutions would be equally successful,
- If quality is of minor importance and the result will be highly influenced by the subordinates,
- If quality is of high importance, but all the alternative solutions would lead to a result which is perceived to be equally successful.

- **Attribute B – the leader’s information level**

This attribute deals with the status of the manager’s information level. The manager needs to assess if he/she has sufficient rational and technical knowledge and information on his/her own to decide which alternative would be best. It is essential to mention that this means that the manager has the knowledge and information without asking any of the subordinates. Moreover, it is important to be aware of the fact that this attribute does not evaluate the manager’s knowledge in comparison to his/her employees or which strategy they would prefer. This attribute only refers to the manager’s knowledge in relation to the problem or decision that needs to be made. The question above (*Do I have sufficient information to make a high quality decision?*) should be answered with “yes” if the manager has satisfactory information about all the alternatives’ consequences, particularly the external consequences.

- **Attribute C – extent of the problem structure**
Attribute C elaborates if the problem the manager is facing is structured or unstructured. A problem is structured if the decision maker knows the present state, the desired state and the action steps to exchange them. This means that the solution process has to be as clear as the criteria to assess the potential solutions. In this case the question above (Is the problem structured?) should be answered with “yes”.

Sometimes managers face a situation where crucial information is clearly missing in order to assess which alternative solution would be the best one. In this case the key question is if the manager would know when, how and where he/she could get the missing knowledge without aggravating circumstances. In this case the problem would be considered as structured as the present state, the wanted state and the solution process would be known and therefore the above question should also be answered with “yes”.

In some cases it is clear how the information could be obtained, meaning the present status, the wished status and the process would be clear; however it is highly probable that the information could not be retrieved, then the question should be answered with “no”.

In general, if the situation and the problem are poorly defined or if it is not clear how, where and when to get missing but crucial information, then the answer should also be “no”.

- **Attribute D – Importance of subordinates’ acceptance of the decision for effective implementation**

Implementation and acceptance by the subordinates are first covered in attribute D. Situations might occur where objectively correct decisions fail due to the fact that the staff do not support it. This means that employees have an influence on the success of a decision, and at this certain point the manager also needs to evaluate the period of the decision’s implementation and its effect on the decision’s success.

The outcome of the implementation highly depends on the acceptance by the manager’s subordinates. To evaluate this, two aspects need to be considered: firstly the role of the subordinates in the implementation process and secondly, the subordinates’ engagement. Engagement gauges whether a simple, routine process is involved or judgement, creativity and autonomous thinking are necessary.
The aforementioned question *(Is acceptance of a decision by subordinates important for effective implementation?)* should be answered with “yes” under the following conditions:

- The subordinates are involved in decision implementation,
- There is no possibility to control the compliance of the subordinates,
- The success highly depends on how committed the subordinates are towards the decision,
- The acceptance by employees will be taken after the final decision is made.

The question should be answered with “no” if the points below are applicable:

- The direct subordinates do not have to implement the decision,
- They are not responsible for the success of the decision,
- The implemented decision only contains routine work process which they are executed by the subordinates automatically.

---

**Attribute E – Probability of subordinates’ acceptance of a manager’s decision**

Attribute E deals with the reaction of subordinates on an autocratic decision of their leader. The manager has to evaluate if his/her subordinates would accept an autocratic decision and, moreover, if they would be committed to this decision.

In general there are three types of power leading to acceptance.

Firstly legitimated power, which, for example, is given due to the fact that their superior has a higher position. Different reasons can lead to legitimated power:

- **Culture:** In some countries leaders are expected to make autocratic decisions, as hierarchy is seen as natural. A leader who is asking subordinates to participate is often seen as weak.
- **Working atmosphere:** Companies sometimes have a certain policy which does not allow involvement of employees in the decision-making process. In this case the manager would be seen as incapable of making decisions and therefore would be forced to give an order, otherwise the subordinate would not start working.
Secondly expertise power, which is held by managers that are seen as experts in their field.

Thirdly power of identification, which is based on trust and respect subordinates have in and for their leader. The main reason is typically the leader’s charisma.

If the manager came to the conclusion that he/she has one of these three powers the question *(If I were to make the decision by myself, is it reasonably certain that it would be accepted by my subordinates?)* should be answered with “yes”.

- **Attribute F – Goal congruence**

  The relation between the employee motivation and the organizational goals is covered in attribute F. Managers generally base decisions on company goals which need to be reached; this is not always the case for subordinates, where personal goals might outweigh organizational ones.

  The manager needs to assess how high or low the employees’ interest is in solving the problem, upon which a specific decision needs to be made according to the corporate goals instead of personal goals. It is important that the manager evaluates the personal interests of his/her subordinates and not information level, experience or expertise knowledge.

  The question from above *(Do subordinates share the organizational goals in solving this problem?)* should be answered with “yes” if the manager feels that his/her employees share the organizational goals and feel as part of a unit that can be stronger together. In this case, everybody works together for the organizational goals.

  “No” should be the answer if subordinates usually prefer solutions or decisions which are more convenient and easier to reach than a rational, necessary solution.

- **Attribute G – Conflicts and disagreements between subordinates**

  Attribute G deals with the disagreement between subordinates about the best solution of a common problem. In this case the question should be answered with “yes”.
The question *(Is conflict likely among subordinates over preferred solutions?)* should be answered with “no” if the manager expects that the whole group would share the same opinion, which could result in the entire group being in favour for one specific strategy or, alternatively, against one concrete solution.

Question G is often confused with question F, as managers wrongly attribute the potential of disagreement to the belief that subordinates are not interested in solving the problem and consequently, they do not share the organizational goals.

These attributes are based on quality and acceptance influencing leadership effectiveness. The Attributes A, B and C are related to quality, while D, E, F and G deal with the acceptance. The suggested questions are also related to each other. There are key question and sub questions, which can be disregarded if the key questions are answered with no. Key questions are questions A and D, while B, C, E, F and G are sub questions (Reber et al. 2000, p.156).

The seven diagnostic questions, in combination with the attributes lead, according to the model to a decision tree (Vroom/Yetton, 1973, p.20).

**5.1.2.4 Decision Tree**

The analysis of the problem or the situation that needs to be solved, according to one of the by the model suggested strategies, is done with the help of a decision tree (Figure 5.3).

The decision tree can only be used if the decision that needs to be analysed and made is in the manager’s area of responsibility and if more than one subordinate is involved (Vroom/Jago, 1991).

The manager facing the situation should start at the very left side at point A. By answering each of the questions from Table 5.2 with “yes” or “no,” the leader reaches the next node and question. After answering all the questions, the “end point” or result is reached. Each answering process results in one “problem type”, which is indicated by a number from 1 to
12, followed by one or more of the potential strategy alternatives AI to GII (Vroom/Jago, 1991).

The remaining strategies at the end of the decision tree indicate that neither quality nor acceptance are endangered by choosing a certain strategy; these are called “feasible set”. Some of the problem types do allow only one solution, but in general more strategies can be used (Vroom/Jago, 1991). The following table shows the feasible decision-making strategies according to the problem type.

<table>
<thead>
<tr>
<th>Problem type</th>
<th>Feasible decision making strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AI</td>
</tr>
<tr>
<td>1</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6A</td>
<td></td>
</tr>
<tr>
<td>6B</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.3 Feasible decision-making strategies (Böhnisch 1991, p.33)

As shown in the decision tree and table above, more than only one decision making strategy is possible. In order to decide which strategy would be the best fit in each case,
Figure 5.3 Decision Tree (Böhisch 1991, p.301)
Vroom and Yetton suggested two different ways to decide for one of the strategies. The decision can be made according to the “time efficient model” or the “time investment model”.

- Time efficient model

This model suggests choosing the less time-consuming decision-making strategy. In this situation, the more autocratic strategy should be taken, as they are generally more time-efficient. This means that the strategy on the left in Table 5.3 should be selected. This model is appropriate if short-term decisions are to be made.

- Time investment model

In comparison to the time efficient model, the time investment model recommends choosing the most participative strategy to guarantee employee participation. In other words the strategy on the right in 2.3 should be taken.

5.1.2.5 Process summary

The following figure gives a summary of the process to find the right decision-making strategy.
The normative model designed by Vroom and Yetton in 1973 shows that for any problem or situation, a leader is confronted with an adequate decision-making strategy. Before the right decision can be found, the leader needs to make an analysis of the problem he/she is facing. The problem situation will be evaluated by diagnostic questions, which are defined and explained by attributes. These questions will be answered with the help of a decision tree which shows at the endpoint the adequate decision or decisions a leader can use in order not to harm either the quality or the acceptance.

The feasibility of each of the five decision strategies AI, AII, BI, CI, CII and GII is defined by seven decision rules. These rules are the possible decision-making strategy’s “backbone” and originate from research in the field of decision-making and group dynamics (Keser, 1999, p 109). The following passage is related to these seven decision rules.

### 5.1.2.6 Decision rules

The following seven rules are, as already mentioned, the core of the model to be applied to the dichotomy of problem attributes, A to G. Each rule uses at least two problem attributes
to eliminate the decision-making strategy, endangering either the decision quality or the acceptance (Vroom/Jago 1991, p.58):

1. Leader Information Rule

If the quality of the decision is important, i.e. there are solutions providing differing levels of technical quality, and the leader does not possess sufficient information or expertise to be able to assess which solution would be best, then AI is eliminated from the feasible set.

2. Goal Congruence Rule

If the quality of the decision is important, and subordinates do not share the same organizational goals that are to be achieved by the solution of this problem, then GII is eliminated from the feasible set.

3. Unstructured Problem Rule

There are situations, in which the quality of the decision is important, but the leader lacks the sufficient information or expertise to solve the problem alone, and it is not clear which information he/she needs or how to obtain missing information. In such a situation, the method of solving the problem should provide for information among subordinates likely to possess relevant information. Accordingly, AI, AII and CI which provide no interaction among subordinates, are eliminated from the feasible set.

4. Acceptance Rule

If acceptance of the decision by the subordinates is important for effective implementation and if it is not reasonably certain that an autocratic decision will be accepted, then AI and AII are eliminated from the feasible set.

5. Conflict Rule

If the acceptance of the decision is important, but an autocratic decision is not reasonably certain to be accepted and disagreement among subordinates over possible solution is likely, the methods used in solving the problem should enable those in disagreement to resolve their differences with full knowledge of the problem. Accordingly, under this condition, AI, AII and CI which permit no interaction among subordinates and therefore provide no opportunity for those in conflict to resolve their differences, are eliminated from the feasible set. Their use runs the risk of leaving some of the subordinates with less than the needed commitment to the final decision.

6. Fairness Rule
If the quality of the decision is not important, but the acceptance of the decision is important and is not reasonably certain to result from an autocratic decision, the decision process used must generate the needed acceptance. The decision process should permit the subordinates to interact with one another and negotiate among themselves over the method of resolving any differences with full responsibility on them for determining what is fair and equitable. Accordingly, under these circumstances, AI, AII, CI and CII are eliminated from the feasible set.

7. Acceptance Priority Rule

If acceptance is important, not reasonably certain to result from an autocratic decision and if subordinates are motivated to pursue the organizational goals presented in the problem, then methods which provide equal partnership in the decision-making process can generate far greater acceptance without risking decision quality. Accordingly, AI, AII, CI and CII are eliminated from the feasible set.

These seven rules give a clear definition of which decision-making strategies are not feasible in the relevant situation. Rules 1-3 are quality rules. The technical qualification is ensured by applying those rules, whereas rules 4-7 are acceptance rules which ensure acceptance by subordinates and avoid conflicts (Auer Rizzi et.al, 2007 p. 95).

Table 5.4 gives a comprehensive summary of the decision rules and their function. It should be read the following way: if there is a need for quality (A=yes) and the superior does not have enough information (B=no), then according to rule number 1, strategy AI is not feasible as a better decision is endangered.
<table>
<thead>
<tr>
<th>Conditions for decision</th>
<th>Decision rules</th>
<th>Unfeasible decision strategies</th>
<th>Reasons for inadmissible decision strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>A + B</td>
<td>1 Information rule</td>
<td>AI</td>
<td>Endangering a better decision</td>
</tr>
<tr>
<td>A + G</td>
<td>2 Goal congruence rule</td>
<td>GII</td>
<td>Neglecting the organizational goals</td>
</tr>
<tr>
<td>A + B + C</td>
<td>3 Unstructured problem rule</td>
<td>AI, AII, CI</td>
<td>Difficult information gathering</td>
</tr>
<tr>
<td>D + E</td>
<td>4 Acceptance rule</td>
<td>AI, AII</td>
<td>No solving of conflicts</td>
</tr>
<tr>
<td>D + E + G</td>
<td>5 Conflict rule</td>
<td>AI, AII, CI</td>
<td>Avoiding conflicts</td>
</tr>
<tr>
<td>A + D + E</td>
<td>6 Fairness rule</td>
<td>AI, AII, CI, CII</td>
<td>Lacking acceptance</td>
</tr>
<tr>
<td>D + E + F</td>
<td>7 Acceptance priority rule</td>
<td>AI, AII, CI, CII</td>
<td>Lacking participation</td>
</tr>
</tbody>
</table>

Table 5.4 Decision rules of the Vroom /Yetton model (Böhnisch 1991, p.32 in Kaltenbrunner 2010, p.22)

5.1.3 The descriptive approach of the model

The descriptive part deals with the actual behaviour of managers in different situations (Vroom/Jago 1991, p.88). The descriptive approach of the Vroom/Yetton model does not give advice for the leaders as to how they should handle different situations by applying a situational analysis and rules. It is a tool or technique to test how a leader reacts in a special situation and can be compared with the recommendations of the normative model and other leaders or a group of leaders from the same culture. This enables in the second step cross cultural comparison of leadership behaviour (Auer Rizzi et.al., 2007 p.95).

A case set of 30 cases, Case Set #5, handed out to a manager, is used to analyse the descriptive part of the model:

“The technique involves the development of a standardized set of administrative problems or cases, each of which depicts a leader faced with some organizational requirement for action or decision-making.” (Vroom & Jago, 1991, p.93)
The manager is asked to put his/her thoughts in each of the 30 cases and to choose the one decision-making strategy he/she would use in this specific case. The task for the manager is to solve the problem without being educated in leadership training about the normative aspects of the model, but to select one of the strategies from Table 5.1., AI to GII (Vroom/Jago, 1991 p.88).

### 5.1.3.1 Standard case set – Case set # 5

As already mentioned, a standard case set is used to analyse and compare actual leadership behaviour. It consists of 30 different cases developed by Vroom and Yetton. The case set # 5 evolves from case set # 3 and # 4, which were revised several times by Jago (Keser, 1996, p.44).

The assortment of the final 30 questions was found according to a systematic process and consists of real problem situations from different sectors (e.g. service sector, public administration and industry) (Keser, 1996, p.44). Each of the described situations is different and varies in form and intensity (Vroom/Jago 2007, p.5).

The case set contains an instruction manual, the 30 cases including multiple-choice options corresponding to one of the decision-making strategies AI to GII, and a page to transfer the results and a form for demographic data acquisition.

### 5.1.4 Validity of the model

Vroom and Jago stated in 2007:

> “Six studies summarized in Vroom and Jago (1988) and other subsequent studies support the validity of the prescriptive model and its component rules.” (Vroom/Jago 2007, p.5)

During the 40 years of the model’s existence, hundreds of managers were trained in different countries, with different positions and various backgrounds. The training results show and prove the validity of the model (Vroom/Jago 2007, p. 6).
Additionally, in 2011 Reber, focusing specifically on the descriptive part, proved that the descriptive approach of field studies leads to even higher model validity than a laboratory study would:

“At the time of the data collection, participants are unaware of the theories behind the Vroom/Yetton model. Thus, the data collection cannot be influenced. However, despite the lack of theoretical knowledge, the earnestness to prepare for an intensive management training program may help to explain findings by House/Aditya (1997) that the validity of the model is even higher in field settings than in laboratory studies.” (Reber 2011, p.10)

5.1.5 Limitations of the model

Although the validity of the model is proven, several limitations need to be considered. The most important limitations will be shown in the next paragraphs.

- The model does not differentiate between multiple feasible strategies

Advice on what leaders should avoid in specific situations is easily found within the model, however the model does not give useful instructions on how to distinguish between different possible decision-making strategies. The only options the model gives, if multiple strategies are feasible, are time-efficiency and time investment. (Vroom/Jago, 1991, p.80).

- The model does not distinguish between different unfeasible strategies

Also, the unfeasible strategies are differentiated in an imprecise way. All strategies are seen equally no matter how many rules they harm. Therefore the model is again too vague for managers to properly distinguish between the potential strategies (Vroom/Jago, 1991, p.80)

- The model does not consider all the attributes’ peculiarities

The dichotomous questions only allow yes and no answers to analyse a problem or situation. Answers such as “maybe” or “uncertainly” are not possible. Relevant information and ambiguous aspects of different attributes are likely to be overseen and not considered in the decision-making process and final strategy (Vroom/Jago, 1991, p. 82).

- The model does not consider important situational characteristics
Due to practical reasons, Vroom and Yetton restricted the model to seven attributes. Another variable and an eighth rule would have led to empty end points in the decision tree, which would have resulted in no advice for managers in some cases. According to research, the following situational characteristics, which would have been of possible interest, are therefore unnoticed: information level of subordinates, time restrictions and geographic restrictions (Vroom/Jago, 1991, p.83).

Based on these limitations Vroom/Jago developed an extension of the model, but for the practical application this extension with five additional situational factors and using linear equations rather than decision rules resulted in only incremental improvements (Brown/Finstuen, 1993; Field 1998).
6 Template Analysis

Analysing data from qualitative research interviews is particularly challenging as it is difficult to cope with the gained flexible and open data, which is the main aim of qualitative research. However, although there is a wide range of approaches, King outlines four main categories: Content analysis, Template analysis, Grounded Theory and Immersion (King, 1994, p.25-27).

The template approach covers the field between content analysis (Weber, 1985) and grounded theory (Glaser/Strauss, 1967). Defined categories are analysed statistically in the content analysis approach, which guarantees objectivity, systematization and quantification. Hence grounded theory develops theory grounded in qualitative data.

Template analysis allows statistical as well as qualitative analysis of the same data. “The essence of the approach is that the researcher produces a list of codes (a “template”) representing themes identified in their textual data [...] on the whole the technique is more flexible with fewer specified procedures, permitting researchers to tailor match their own requirements” (King, 1998, p.118-119).

The codes, which could be special themes or issues, are defined by the researcher according to his or her interpretation. Before analysing the data, the researcher develops an “initial template”, with codes useful for his or her research goal. This initial template is used for the first study of the text to provide a guideline and give a structure. The template will be further developed by the ongoing data analysis. Initial codes will be deleted, inserted changed in their order and hierarchy, this process leads to the final template. After the codes are clearly defined, different text passages from the interview data can be assigned to one or more codes (King, 1998, p. 122-124).

Literature does not offer any general rules for interpreting data, as the researcher has to find an interpretation strategy that fits the research goals and the content of the examined study (King, 1998, p.130). Coding the text helps the researcher to interpret and later to present the rich data in an organized way.
King (1998, p.132) suggests three common approaches of presenting results of interpretation:

- “A set of individual case studies, followed by a discussion of differences and similarities between cases
- An account structured around the main themes identified, drawing illustrative examples from each transcript (or other text) as required
- A thematic presentation of the findings, using a different individual case study to illustrate each of the main themes”

Although there is the danger of producing complicated and over-descriptive templates, or overseeing single individual “voices”, the given flexibility and the option to modify template analysis to any needs in almost every particular area is the biggest advantage of this approach. Moreover, it is a relatively simple but well-structured approach to take phenomenological and experiential research (King, 1998, p.132-133).
7 Procedure

The whole study was possible due to cooperation with Besim Tarablus and his family. The Family owns three different companies “Groupauto Turkey”, “Karat Guc Sistemleri Sanayi & Ticaret AS” and “Delta Oto Aksami Sanayi & Ticaret AS”, all based in Istanbul. “Delta” is a middle-sized, family-owned company that sells spare parts all over Turkey and collaborates with suppliers all over the world. The company is owned by Besim Tarablus and his sons and managed by Eijal Tarablus. “Karat” is a Turkish car battery seller, that is majority owned (51%) by Besim Tarablus and his sons and managed by Ethan Tarablus. “Groupauto Turkey” is a purchasing cooperative, which has members all over Turkey including “Delta”. “Groupauto Turkey” is managed and owned by Besim Tarablus.

Figure 7.1 Tarablus Family Tree

Figure 7.2 Business relation family Tarablus
As previously explained, this empirical study consists of a quantitative and a qualitative part, which were accomplished one after the other. As a first step, the quantitative study, based on the already explained Vroom/Yetton model (1973) was conducted. Therefore, the “Case Set No.5” (Appendix) developed by Vroom and Yetton (1973) was handed out to Turkish managers, business partners of Family Tarablus, in their language. There, the same translation as in Keser’s study (1996) was used. Together with a cover letter that asks to support the thesis and guarantees anonymity, the case set was sent to each of the participants. Thirty participants were asked to read each case and put his/her decision strategy (AI, AII, CI, CII, GII) (see Table 5.1). The task for the manager was to solve the problem, by selecting one of the decision-making strategies suggested by Vroom/Yetton. Together with the “case package,” an answer sheet was delivered, which was in each case returned within two months. As a result, the initial goal was met as 30 managers took part in the study and sent back their answer sheets.

The data of these 30 participants were used as a basis for the second step, theme-focused, semi structured interviews, to provide deeper insight, and were conducted in Istanbul by the researcher. Again, support was given by Besim Tarablus and his team.
8 Sample

The sample consists of 30 Turkish managers. All of the managers are living and working in Istanbul and were born, raised and educated in Turkey. The managers were of both genders and within the age group of 30-60 years. People participating in the study hold management positions as middle managers and are mainly working in the automotive sector. Middle management means that they are leading a team of a minimum of three people and are reporting to at least one superior management level.

For the longitudinal study on stability or change of leadership behaviour in Turkey, data conducted before 2000 by Keser, as part of her doctoral thesis, were kindly provided by the Department of International Management (Johannes Kepler University).
9 Data evaluation

9.1 Quantitative Data Evaluation

The results of the quantitative research are structured according to the elements of the Vroom/Yetton model, decision making strategies (their distribution), mean level of participation, agreement with the model recommendations and rule violations.

The statistical analysis of the data was made by using ANOVA. Three conditions need to be applied in order to allow an ANOVA test:

- The populations of interest should be normally distributed;
- the populations should have equal standard deviations;
- samples should be randomly and independently selected from each population.

These three conditions are fulfilled so the reliability of the results can be assumed.

To test the significance of correlations by means of one–way ANOVA the significance level of 0.05 will be used.

9.1.1 General data evaluation – data 2013

Table 9.1 shows the results overview of the study conducted in 2013 in Turkey. This table indicates that Turkish managers use strategy CII with a percentage of almost a quarter of the total use of strategies, namely 24.33%. CII is closely followed by Al (21.78%), GII (19.44%) and CI (18.33%). The strategy which is used least is All (16.11%).

The most relevant or informative result is the figure MLP – mean level of participation, which amounts 4.97 on the measuring scale from 0 to 10.

The results show that at 64.33% an agreement with the feasible set was met.

The percentage in rule violations varies from 14.72% for the leader information rule to 71.67% for the acceptance priority rule.
### General overview of respondents’ results 2013

<table>
<thead>
<tr>
<th>Variable</th>
<th>All respondents 2013 (n=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequencies in %</strong></td>
<td></td>
</tr>
<tr>
<td>AI – Autocratic</td>
<td>21.78</td>
</tr>
<tr>
<td>All – Autocratic</td>
<td>16.11</td>
</tr>
<tr>
<td>CI – Consultative</td>
<td>18.33</td>
</tr>
<tr>
<td>CII – Consultative</td>
<td>24.33</td>
</tr>
<tr>
<td>GII – Group Decision</td>
<td>19.44</td>
</tr>
<tr>
<td><strong>MLP</strong></td>
<td>4.97</td>
</tr>
<tr>
<td>mlp sd</td>
<td>3.62</td>
</tr>
<tr>
<td><strong>Agreement with Feasible Set in %</strong></td>
<td>64.33</td>
</tr>
<tr>
<td><strong>Rule Violations in %</strong></td>
<td></td>
</tr>
<tr>
<td>Rule 1 – Leader Information</td>
<td>14.72</td>
</tr>
<tr>
<td>Rule 2 – Goal Congruence</td>
<td>15.28</td>
</tr>
<tr>
<td>Rule 3 – Unstructured Problem</td>
<td>46.11</td>
</tr>
<tr>
<td>Rule 4 – Acceptance</td>
<td>23.33</td>
</tr>
<tr>
<td>Rule 5 – Conflict</td>
<td>55.33</td>
</tr>
<tr>
<td>Rule 6 – Fairness</td>
<td>60.00</td>
</tr>
<tr>
<td>Rule 7 – Acceptance priority</td>
<td>71.67</td>
</tr>
<tr>
<td>Quality Rules (1-3)</td>
<td>21.22</td>
</tr>
<tr>
<td>Acceptance Rules (4-7)</td>
<td>43.65</td>
</tr>
</tbody>
</table>

Table 9.1 General overview of respondents’ results 2013

### 9.1.2 General data evaluation – data before 2000

In comparison to the results of 2013 Table 9.2 shows the results of the data conducted before 2000. This data shows that CII was used the most, namely in 25.01% of the cases,
followed by CI (21.45%) and AII (18.99%). The answer options which are chosen the least are GII and AI which show almost the same percentage (17.34% and 17.13%).

The MLP is 5.00 and the agreement with the feasible set shows 67.60%. As rule violations are concerned, the range shows the result of 10.25% violation of Rule 1—Leader Information and 73.92% of Rule 7—Acceptance priority.

The comparison between results obtained before 2000 and results gained in 2013 show that there is almost no difference in the MLP. Moreover, the general difference in strategy choice shows no statistical significance in any of the five options. The rule violation results show that there is significant difference in the violation of Rule 5 (F= 7,728; p<0,01). Moreover, the results show that there is also a significant difference in the violation of the quality rules (F= 4,732; p<0,05).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Respondents before 2000 (n=139)</th>
<th>Respondents 2013 (n=30)</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies in %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI – Autocratic</td>
<td>17.13</td>
<td>21.78</td>
<td>2,967 +</td>
</tr>
<tr>
<td>AII – Autocratic</td>
<td>18.99</td>
<td>16.11</td>
<td>1,995 n.s.</td>
</tr>
<tr>
<td>CI – Consultative</td>
<td>21.46</td>
<td>18.33</td>
<td>2,029 n.s.</td>
</tr>
<tr>
<td>CII – Consultative</td>
<td>25.01</td>
<td>24.33</td>
<td>0,079 n.s.</td>
</tr>
<tr>
<td>GII – Group Decision</td>
<td>17.34</td>
<td>19.44</td>
<td>1,152 n.s.</td>
</tr>
<tr>
<td>MLP</td>
<td>5.00</td>
<td>4.97</td>
<td>0,012 n.s.</td>
</tr>
<tr>
<td>mlp sd</td>
<td>3.43</td>
<td>3.62</td>
<td>2,318 n.s.</td>
</tr>
<tr>
<td>Agreement with Feasible Set in %</td>
<td>67.60</td>
<td>64.33</td>
<td>3,695 +</td>
</tr>
<tr>
<td>Rule Violations in %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule 1 – Leader Information</td>
<td>10.25</td>
<td>14.72</td>
<td>3,875</td>
</tr>
<tr>
<td>Rule 2 – Goal Congruence</td>
<td>12.95</td>
<td>15.28</td>
<td>1,123</td>
</tr>
<tr>
<td>Rule 3 – Unstructured Problem</td>
<td>42.93</td>
<td>46.11</td>
<td>0.446</td>
</tr>
<tr>
<td>Rule 4 – Acceptance</td>
<td>18.42</td>
<td>23.33</td>
<td>1.987</td>
</tr>
<tr>
<td>Rule 5 – Conflict</td>
<td>40.86</td>
<td>55.33</td>
<td>7.728**</td>
</tr>
<tr>
<td>Rule 6 – Fairness</td>
<td>53.24</td>
<td>60.00</td>
<td>0.976</td>
</tr>
<tr>
<td>Rule 7 – Acceptance priority</td>
<td>73.92</td>
<td>71.67</td>
<td>0.248</td>
</tr>
<tr>
<td>Quality Rules (1-3)</td>
<td>17.87</td>
<td>21.22</td>
<td>4.732*</td>
</tr>
<tr>
<td>Acceptance Rules (4-7)</td>
<td>37.65</td>
<td>43.65</td>
<td>3.770</td>
</tr>
</tbody>
</table>

* p<=0.05;  ** p<0.01;  *** <0.001

Table 9.2 Comparison respondents’ results before 2000 and in 2013

### 9.1.3 Difference in results across gender

For the next step of data evaluation, the analysis in combination with demographic parameters (gender, age, hierarchical level, job function) of the data gained before 2000 and the data of the current study will be combined, in order to get a meaningful and reliable statement. The parameters will be related to the elements of the Vroom/Yetton model.

First the differences in gender and age, the demographical data, will be examined. This will be followed by criteria which do not belong to the relevant demographical data, but could be helpful for the analysis of the data. Data such as functional area, industry and managerial level the respondents are working in and the tenure of employment.

Table 9.3 shows the differences in results between male and female participants. The MLP shows for men 4.92 and for women 5.28. This could lead to the assumption that women are more participative then men, however this difference is statistically not significant (F= 1.87).

Results also show that the usage of Strategy CII shows a significant difference (F= 5.36; p<0.05). If it comes to the agreement with the feasible set the results show that the results of the female participants do agree more often with the feasible set and that this difference is statistically relevant (F= 6.016; p< 0.05). Concerning the rule violation, it is shown as
statistically significant (F= 4,081; p<0.05) that men do violate the quality rules more often than women.

<table>
<thead>
<tr>
<th>Turkish Manager Male vs Female</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Male</td>
<td>Female</td>
<td>F Value</td>
</tr>
<tr>
<td>N=</td>
<td>136</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Use AI%</td>
<td>18,65</td>
<td>14,95</td>
<td>1,997</td>
</tr>
<tr>
<td>Use All%</td>
<td>18,80</td>
<td>17,31</td>
<td>0,538</td>
</tr>
<tr>
<td>Use CI%</td>
<td>20,83</td>
<td>21,61</td>
<td>0,126</td>
</tr>
<tr>
<td>Use CLI%</td>
<td>23,92</td>
<td>29,35</td>
<td>5,355*</td>
</tr>
<tr>
<td>Use GII%</td>
<td>17,79</td>
<td>16,77</td>
<td>0,284</td>
</tr>
<tr>
<td>MLP</td>
<td>4,92</td>
<td>5,28</td>
<td>1,870</td>
</tr>
<tr>
<td>mlp sd</td>
<td>3,50</td>
<td>3,30</td>
<td>2,843+</td>
</tr>
<tr>
<td>% Agree. Feas.Set</td>
<td>66,25</td>
<td>70,32</td>
<td>6,016*</td>
</tr>
<tr>
<td>% Rule 1 Viol.</td>
<td>11,58</td>
<td>8,06</td>
<td>2,462</td>
</tr>
<tr>
<td>% Rule 2 Viol.</td>
<td>13,91</td>
<td>10,75</td>
<td>2,116</td>
</tr>
<tr>
<td>% Rule 3 Viol.</td>
<td>44,00</td>
<td>41,94</td>
<td>0,193</td>
</tr>
<tr>
<td>% Rule 4 Viol.</td>
<td>20,51</td>
<td>14,19</td>
<td>3,382</td>
</tr>
<tr>
<td>% Rule 5 Viol.</td>
<td>43,82</td>
<td>40,65</td>
<td>0,365</td>
</tr>
<tr>
<td>% Rule 6 Viol.</td>
<td>54,78</td>
<td>54,84</td>
<td>0,000</td>
</tr>
<tr>
<td>% Rule 7 Viol.</td>
<td>75,00</td>
<td>68,55</td>
<td>2,238</td>
</tr>
<tr>
<td>% Qual.Rules Viol.</td>
<td>19,00</td>
<td>15,91</td>
<td>4,081*</td>
</tr>
<tr>
<td>% Acct.Rules Viol.</td>
<td>39,71</td>
<td>34,72</td>
<td>2,699</td>
</tr>
</tbody>
</table>

+ p<0.1;  *p<0.05;  ** p<0.01;  *** <0.001

Table 9.3 Results of Turkish respondents based on gender
9.1.4 Difference in results across age

Table 9.4 shows the different leadership styles based on age. Results show that young managers are more participative than older managers. CII is mostly taken by managers from the age group 20 to 39, in comparison to managers over 60. However, this statistically shown significant difference might be because of the fact that the age group 60 to 69 covers only two participants. The assumption that younger managers are more participative than their older counterparts is also shown in the MLP results (MLPs 5.36; 5.08; 5.32; 4.30; 3.88; p<0.05). Significant differences are shown in the use of strategy AII (F= 5.500; p<0.001), CII (F=7.24; p<0.001) and GII (F=4.40; p<0.01).

<table>
<thead>
<tr>
<th>Turkish Manager by Age Group</th>
<th>20 to</th>
<th>30 to</th>
<th>40 to</th>
<th>50 to</th>
<th>60 to</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>N=</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 to 29</td>
<td>16</td>
<td>62</td>
<td>50</td>
<td>37</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Use AI%</td>
<td>14.58</td>
<td>19.52</td>
<td>14.93</td>
<td>20.27</td>
<td>30.00</td>
<td>1.867</td>
</tr>
<tr>
<td>Use AII%</td>
<td>18.54</td>
<td>15.38</td>
<td>17.73</td>
<td>24.59</td>
<td>23.33</td>
<td>5,500***</td>
</tr>
<tr>
<td>Use CI%</td>
<td>19.37</td>
<td>19.84</td>
<td>22.73</td>
<td>21.35</td>
<td>18.33</td>
<td>0.604</td>
</tr>
<tr>
<td>Use CII%</td>
<td>27.29</td>
<td>29.78</td>
<td>22.87</td>
<td>19.64</td>
<td>5.00</td>
<td>7.235***</td>
</tr>
<tr>
<td>Use GII%</td>
<td>20.21</td>
<td>15.48</td>
<td>21.73</td>
<td>14.14</td>
<td>23.33</td>
<td>5.239**</td>
</tr>
<tr>
<td>MLP</td>
<td>5.36</td>
<td>5.08</td>
<td>5.32</td>
<td>4.30</td>
<td>3.88</td>
<td>4.398**</td>
</tr>
<tr>
<td>mlp sd</td>
<td>3.24</td>
<td>3.42</td>
<td>3.56</td>
<td>3.49</td>
<td>3.93</td>
<td>1.186</td>
</tr>
<tr>
<td>% Agree. Feas. Set</td>
<td>66.25</td>
<td>67.20</td>
<td>67.73</td>
<td>66.49</td>
<td>58.33</td>
<td>0.687</td>
</tr>
<tr>
<td>% Rule 1 Viol.</td>
<td>10.94</td>
<td>11.42</td>
<td>11.33</td>
<td>9.68</td>
<td>8.33</td>
<td>0.180</td>
</tr>
<tr>
<td>% Rule 2 Viol.</td>
<td>11.98</td>
<td>10.89</td>
<td>17.67</td>
<td>11.71</td>
<td>20.83</td>
<td>3.424*</td>
</tr>
<tr>
<td>% Rule 3 Viol.</td>
<td>46.87</td>
<td>44.62</td>
<td>40.67</td>
<td>44.14</td>
<td>50.00</td>
<td>0.339</td>
</tr>
<tr>
<td>% Rule 4 Viol.</td>
<td>20.63</td>
<td>21.61</td>
<td>17.40</td>
<td>15.95</td>
<td>50.00</td>
<td>2.428*</td>
</tr>
<tr>
<td>% Rule 5 Viol.</td>
<td>48.75</td>
<td>46.13</td>
<td>33.20</td>
<td>47.57</td>
<td>80.00</td>
<td>3.606**</td>
</tr>
<tr>
<td>% Rule 6 Viol.</td>
<td>59.38</td>
<td>58.06</td>
<td>b45.00</td>
<td>60.81</td>
<td>50.00</td>
<td>1.581</td>
</tr>
<tr>
<td>% Rule 7 Viol.</td>
<td>71.88</td>
<td>76.61</td>
<td>67.50</td>
<td>78.38</td>
<td>75.00</td>
<td>1.784</td>
</tr>
<tr>
<td>% Qual. Rules Viol.</td>
<td>18.54</td>
<td>17.85</td>
<td>19.73</td>
<td>17.39</td>
<td>21.67</td>
<td>0.694</td>
</tr>
<tr>
<td>% Acct. Rules Viol.</td>
<td>40.77</td>
<td>41.40</td>
<td>33.33</td>
<td>39.64</td>
<td>61.90</td>
<td>3.453*</td>
</tr>
</tbody>
</table>

* p<=0.05; ** p<0.01; *** <0.001

Table 9.4 Results of Turkish respondents based on age
9.1.5 Difference in results across functional area

The differences in the behaviour of Turkish managers according to their job function is shown in Table 9.5. The MLP varies from 4,62 for the managers in General Management to 5,70 for managers in Research/Engineering, however this variation is not statistically significant. The only significant difference could be found in the use of strategy AI (F=3,204; p<0,01). The results of the rule violation show no significant difference.

<table>
<thead>
<tr>
<th>Turkish Manager by Functional Area</th>
<th>Use AI%</th>
<th>Use All%</th>
<th>Use CI%</th>
<th>Use CII%</th>
<th>Use GII%</th>
<th>MLP</th>
<th>MLP sd</th>
<th>%Agree. Feas.Set</th>
<th>% Rule 1 Viol.</th>
<th>% Rule 2 Viol.</th>
<th>% Rule 3 Viol.</th>
<th>% Rule 4 Viol.</th>
<th>% Rule 5 Viol.</th>
<th>% Rule 6 Viol.</th>
<th>% Rule 7 Viol.</th>
<th>% Qual.Rules Viol.</th>
<th>% Acct.Rules Viol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product/Operations</td>
<td>14,17</td>
<td>20,21</td>
<td>25,83</td>
<td>24,58</td>
<td>15,21</td>
<td>4,98</td>
<td>3,13</td>
<td>65,62</td>
<td>6,77</td>
<td>14,58</td>
<td>42,71</td>
<td>18,13</td>
<td>41,25</td>
<td>59,38</td>
<td>81,25</td>
<td>17,08</td>
<td>39,58</td>
</tr>
<tr>
<td>Research/Engineering</td>
<td>12,50</td>
<td>15,00</td>
<td>21,94</td>
<td>30,28</td>
<td>20,28</td>
<td>5,70</td>
<td>3,33</td>
<td>71,67</td>
<td>6,94</td>
<td>14,58</td>
<td>34,72</td>
<td>11,67</td>
<td>33,33</td>
<td>50,00</td>
<td>70,83</td>
<td>15,56</td>
<td>31,75</td>
</tr>
<tr>
<td>Sales/Marketing</td>
<td>14,47</td>
<td>18,46</td>
<td>23,25</td>
<td>26,67</td>
<td>17,15</td>
<td>4,80</td>
<td>3,31</td>
<td>66,83</td>
<td>9,55</td>
<td>14,43</td>
<td>43,50</td>
<td>15,85</td>
<td>47,80</td>
<td>59,76</td>
<td>73,17</td>
<td>18,29</td>
<td>38,56</td>
</tr>
<tr>
<td>Finance</td>
<td>25,00</td>
<td>15,83</td>
<td>16,04</td>
<td>23,75</td>
<td>19,38</td>
<td>4,62</td>
<td>3,70</td>
<td>63,75</td>
<td>12,50</td>
<td>14,33</td>
<td>41,67</td>
<td>17,50</td>
<td>42,50</td>
<td>62,50</td>
<td>76,56</td>
<td>20,83</td>
<td>38,99</td>
</tr>
<tr>
<td>General Management</td>
<td>21,76</td>
<td>20,18</td>
<td>18,55</td>
<td>23,09</td>
<td>16,42</td>
<td>5,44</td>
<td>3,62</td>
<td>66,48</td>
<td>13,79</td>
<td>10,00</td>
<td>48,48</td>
<td>24,00</td>
<td>44,00</td>
<td>52,73</td>
<td>73,18</td>
<td>19,21</td>
<td>40,87</td>
</tr>
<tr>
<td>Personnel</td>
<td>13,33</td>
<td>17,06</td>
<td>23,33</td>
<td>26,27</td>
<td>20,00</td>
<td>4,88</td>
<td>3,43</td>
<td>70,20</td>
<td>8,82</td>
<td>14,22</td>
<td>42,16</td>
<td>18,24</td>
<td>32,94</td>
<td>38,24</td>
<td>77,94</td>
<td>20,00</td>
<td>35,01</td>
</tr>
<tr>
<td>Other</td>
<td>20,67</td>
<td>18,00</td>
<td>20,00</td>
<td>21,67</td>
<td>19,67</td>
<td>3,204**</td>
<td>2,464*</td>
<td>67,00</td>
<td>13,33</td>
<td>13,33</td>
<td>35,00</td>
<td>24,00</td>
<td>54,00</td>
<td>60,00</td>
<td>60,00</td>
<td>17,67</td>
<td>41,43</td>
</tr>
</tbody>
</table>

* p<=0.05;  ** p<0.01;  *** <0.001

Table 9.5 Results of Turkish respondents based on functional area
9.1.6 Difference in results across industry

Table 9.6 shows the correlation between industry and the gained results. The differences in MLP do not show any significance. However it differs from 4,30 for managers in working in transportation to 5,43 for technical development managers. Concerning strategies, results show significant difference in the usage of strategy AI (F= 4,12; p<0,001) and in CI (F= 2,76; p< 0,05). Managers in the governmental field do use AI in 25% of the cases in comparison to managers working in processing who choose this only in 11,19% (”H= Others” excluded). Violation of Rules 1 (F= 2,54; p<0,05) and Rule 4 (F= 2,62; p<0,05) do also show significant difference.

<table>
<thead>
<tr>
<th>Turkish Manager by Industry</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=</td>
<td>20</td>
<td>14</td>
<td>8</td>
<td>44</td>
<td>30</td>
<td>7</td>
<td>27</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Use AI%</td>
<td>16.17</td>
<td>11.19</td>
<td>13.33</td>
<td>13.48</td>
<td>25.00</td>
<td>16.67</td>
<td>18.77</td>
<td>26.27</td>
<td>4.117***</td>
</tr>
<tr>
<td>Use AII%</td>
<td>21.17</td>
<td>22.86</td>
<td>15.83</td>
<td>17.20</td>
<td>18.89</td>
<td>24.76</td>
<td>17.53</td>
<td>14.90</td>
<td>1.499</td>
</tr>
<tr>
<td>Use CI%</td>
<td>22.17</td>
<td>27.14</td>
<td>23.33</td>
<td>23.18</td>
<td>16.89</td>
<td>27.62</td>
<td>18.27</td>
<td>16.47</td>
<td>2.759*</td>
</tr>
<tr>
<td>Use CII%</td>
<td>23.33</td>
<td>22.14</td>
<td>32.50</td>
<td>26.36</td>
<td>22.22</td>
<td>20.95</td>
<td>25.80</td>
<td>26.86</td>
<td>1.130</td>
</tr>
<tr>
<td>Use GII%</td>
<td>17.17</td>
<td>16.67</td>
<td>15.00</td>
<td>19.77</td>
<td>17.00</td>
<td>10.00</td>
<td>19.63</td>
<td>15.49</td>
<td>1.389</td>
</tr>
<tr>
<td>MLP</td>
<td>4.90</td>
<td>5.02</td>
<td>5.43</td>
<td>5.42</td>
<td>4.51</td>
<td>4.30</td>
<td>5.12</td>
<td>4.67</td>
<td>1.892</td>
</tr>
<tr>
<td>mlp sd</td>
<td>3.46</td>
<td>3.27</td>
<td>3.37</td>
<td>3.23</td>
<td>3.80</td>
<td>3.22</td>
<td>3.55</td>
<td>3.65</td>
<td>3.040**</td>
</tr>
<tr>
<td>% Agree. Feas. Set</td>
<td>66.17</td>
<td>70.48</td>
<td>72.50</td>
<td>67.35</td>
<td>64.11</td>
<td>64.29</td>
<td>68.02</td>
<td>66.27</td>
<td>1.570</td>
</tr>
<tr>
<td>% Rule 1 Viol.</td>
<td>9.17</td>
<td>3.57</td>
<td>7.29</td>
<td>10.23</td>
<td>15.83</td>
<td>4.76</td>
<td>12.96</td>
<td>13.24</td>
<td>2.542*</td>
</tr>
<tr>
<td>% Rule 2 Viol.</td>
<td>15.83</td>
<td>14.29</td>
<td>7.29</td>
<td>13.07</td>
<td>11.94</td>
<td>11.90</td>
<td>15.43</td>
<td>12.75</td>
<td>0.743</td>
</tr>
<tr>
<td>% Rule 3 Viol.</td>
<td>46.67</td>
<td>33.33</td>
<td>37.50</td>
<td>43.94</td>
<td>48.33</td>
<td>52.38</td>
<td>41.36</td>
<td>42.16</td>
<td>0.863</td>
</tr>
<tr>
<td>% Rule 4 Viol.</td>
<td>18.00</td>
<td>8.57</td>
<td>15.00</td>
<td>16.59</td>
<td>26.67</td>
<td>10.00</td>
<td>22.22</td>
<td>25.29</td>
<td>2.618*</td>
</tr>
<tr>
<td>% Rule 5 Viol.</td>
<td>40.00</td>
<td>34.29</td>
<td>40.00</td>
<td>44.09</td>
<td>42.67</td>
<td>54.29</td>
<td>41.48</td>
<td>52.94</td>
<td>0.814</td>
</tr>
<tr>
<td>% Rule 6 Viol.</td>
<td>57.50</td>
<td>42.86</td>
<td>56.25</td>
<td>51.14</td>
<td>60.00</td>
<td>64.29</td>
<td>51.85</td>
<td>61.76</td>
<td>0.641</td>
</tr>
<tr>
<td>% Rule 7 Viol.</td>
<td>72.50</td>
<td>78.57</td>
<td>78.13</td>
<td>70.45</td>
<td>71.67</td>
<td>89.29</td>
<td>73.15</td>
<td>76.47</td>
<td>0.884</td>
</tr>
<tr>
<td>% Acct.Rules Viol.</td>
<td>37.38</td>
<td>31.29</td>
<td>36.90</td>
<td>36.69</td>
<td>42.22</td>
<td>40.82</td>
<td>39.33</td>
<td>45.10</td>
<td>1.301</td>
</tr>
</tbody>
</table>

* p<=0,05;  ** p<0,01;  *** p<0,001
Note: A = Manufacturing, B = Processing, C = Technical Development, D = Service, E = Government, F = Transportation, G = Utility, H = Other

Table 9.6 Results of Turkish respondents based on industry
9.1.7 Difference in results across tenure

Results of difference across tenure are shown in Table 9.7. The results show that there is almost no statistically relevant difference in any aspect, except the general violation of quality rules (F= 2.776; p< 0.05). The MLP differs from 4.62 in the tenure group 15 to 20 and 5.25 in the group 11 to 15.

<table>
<thead>
<tr>
<th>Turkish Manager by Tenure Group</th>
<th>1 to 5</th>
<th>6 to 10</th>
<th>11 to 15</th>
<th>15 to 20</th>
<th>21 to 40</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group N=</td>
<td>45</td>
<td>42</td>
<td>32</td>
<td>29</td>
<td>18</td>
<td>45.13</td>
</tr>
<tr>
<td>Use AI%</td>
<td>19.78</td>
<td>14.60</td>
<td>15.31</td>
<td>20.46</td>
<td>21.48</td>
<td>1.819</td>
</tr>
<tr>
<td>Use AII%</td>
<td>16.67</td>
<td>19.13</td>
<td>17.29</td>
<td>20.23</td>
<td>20.37</td>
<td>0.881</td>
</tr>
<tr>
<td>Use CI%</td>
<td>17.78</td>
<td>24.37</td>
<td>21.98</td>
<td>21.26</td>
<td>18.70</td>
<td>2.270</td>
</tr>
<tr>
<td>Use CII%</td>
<td>25.11</td>
<td>26.03</td>
<td>28.13</td>
<td>22.53</td>
<td>21.30</td>
<td>1.400</td>
</tr>
<tr>
<td>Use GII%</td>
<td>20.67</td>
<td>15.87</td>
<td>17.29</td>
<td>15.52</td>
<td>18.15</td>
<td>1.886</td>
</tr>
<tr>
<td>MLP mlp sd</td>
<td>5.13</td>
<td>5.08</td>
<td>5.25</td>
<td>4.62</td>
<td>4.66</td>
<td>1.377</td>
</tr>
<tr>
<td>% Agree. Feas.Set</td>
<td>65.33</td>
<td>67.62</td>
<td>67.29</td>
<td>68.62</td>
<td>67.41</td>
<td>0.776</td>
</tr>
<tr>
<td>% Rule 1 Viol.</td>
<td>13.89</td>
<td>8.93</td>
<td>9.11</td>
<td>10.06</td>
<td>12.96</td>
<td>1.503</td>
</tr>
<tr>
<td>% Rule 2 Viol.</td>
<td>15.37</td>
<td>11.71</td>
<td>14.32</td>
<td>11.21</td>
<td>13.43</td>
<td>0.955</td>
</tr>
<tr>
<td>% Rule 3 Viol.</td>
<td>48.52</td>
<td>43.65</td>
<td>43.23</td>
<td>38.51</td>
<td>37.96</td>
<td>1.108</td>
</tr>
<tr>
<td>% Rule 4 Viol.</td>
<td>20.67</td>
<td>20.95</td>
<td>15.63</td>
<td>16.55</td>
<td>21.11</td>
<td>0.762</td>
</tr>
<tr>
<td>% Rule 5 Viol.</td>
<td>43.56</td>
<td>43.33</td>
<td>41.25</td>
<td>44.83</td>
<td>41.11</td>
<td>0.098</td>
</tr>
<tr>
<td>% Rule 6 Viol.</td>
<td>50.00</td>
<td>58.33</td>
<td>56.25</td>
<td>55.17</td>
<td>55.56</td>
<td>0.349</td>
</tr>
<tr>
<td>% Rule 7 Viol.</td>
<td>73.33</td>
<td>76.79</td>
<td>71.88</td>
<td>75.86</td>
<td>66.67</td>
<td>0.812</td>
</tr>
<tr>
<td>% Qual. Rules Viol.</td>
<td>21.41</td>
<td>16.98</td>
<td>18.02</td>
<td>16.21</td>
<td>18.15</td>
<td>2.776*</td>
</tr>
<tr>
<td>% Acct. Rules Viol.</td>
<td>38.94</td>
<td>40.48</td>
<td>36.31</td>
<td>38.26</td>
<td>37.83</td>
<td>0.358</td>
</tr>
</tbody>
</table>

*p<0.1  **p<0.05;  ***p<0.01;  ****p<0.001

Table 9.7 Results of Turkish respondents based on tenure
9.1.8 Difference in results by managerial level

Table 9.8 shows the difference in correlation with the managerial level. The MLP varies from 4.74 for managers working in the first supervisory level and 6.29 for those who are working in no specific level (excluding G="Other"), however the difference is statistically not significant. “no specific level” appears in this figure due to the fact that it is a combination of data gained before 2013 and the data conducted by the current research. Statistical significance is given in the violation of Rule 4 (F= 4.994; p<0.001) and violation of Rule 1 (F=2.447; p<0.05). First level supervisors do break Rule 4 in 27.59%, which is excluding G = “Others”, much more than the others do. Moreover, the usage of strategy AI shows significant difference (F=2.201; p<0.05). Al is only chosen in 4.76% of the cases for managers working at no specific level, whereas managers who are working as individual contributors do choose this strategy in 21.67% (excluding G="Other”).

<table>
<thead>
<tr>
<th>Turkish Manager by Managerial Level</th>
<th>Use AI%</th>
<th>Use AII%</th>
<th>Use CI%</th>
<th>Use CII%</th>
<th>Use GIII%</th>
<th>MLP</th>
<th>mlp sd</th>
<th>% Agree. Feas. Set</th>
<th>% Rule 1 Viol.</th>
<th>% Rule 2 Viol.</th>
<th>% Rule 3 Viol.</th>
<th>% Rule 4 Viol.</th>
<th>% Rule 5 Viol.</th>
<th>% Rule 6 Viol.</th>
<th>% Rule 7 Viol.</th>
<th>% Qual. Rules Viol.</th>
<th>% Acct. Rules Viol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Group, N]</td>
<td>[A, 29]</td>
<td>[B, 36]</td>
<td>[C, 46]</td>
<td>[D, 38]</td>
<td>[E, 2]</td>
<td>[F, 7]</td>
<td>[G, 8]</td>
<td>[F Value]</td>
<td>[20.57, 63.91]</td>
<td>[19.23, 69.35]</td>
<td>[18.74, 68.48]</td>
<td>[22.07, 70.53]</td>
<td>[18.39, 65.53]</td>
<td>[4.74, 66.00]</td>
<td>[3.52, 2.93]</td>
<td>[62, 165]</td>
<td>[12.64, 63.38]</td>
</tr>
</tbody>
</table>

* p<=0.05;  ** p<0.01;  *** <0.001
Note: A= 1st level Supervisor; B= Manger of Supervisors; C= Unit/ Dpt. Manager; D= General Executive Manager; E= Individual Contributor; F= Non Specific Level; G= Other
9.1.9 Differences between Austrian and Turkish Managers

The following table 9.9 compares Austrian and Turkish managers. The data of Austrian manages was also conducted in the year 2013 and kindly provided by the Department of International Management (Johannes Kepler University).

<table>
<thead>
<tr>
<th>Group</th>
<th>Turkey</th>
<th>Austria</th>
<th>Oneway ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=</td>
<td>30</td>
<td>95</td>
<td>F</td>
</tr>
<tr>
<td>Use A1%</td>
<td>21.78</td>
<td>23.68</td>
<td>n.s.</td>
</tr>
<tr>
<td>Use A1I%</td>
<td>16.11</td>
<td>16.56</td>
<td>n.s.</td>
</tr>
<tr>
<td>Use C1%</td>
<td>18.33</td>
<td>15.68</td>
<td>n.s.</td>
</tr>
<tr>
<td>Use C1I%</td>
<td>24.33</td>
<td>27.30</td>
<td>n.s.</td>
</tr>
<tr>
<td>Use G1I%</td>
<td>19.44</td>
<td>16.77</td>
<td>n.s.</td>
</tr>
<tr>
<td>MLP</td>
<td>4.97</td>
<td>4.81</td>
<td>n.s.</td>
</tr>
<tr>
<td>mlp sd</td>
<td>3.62</td>
<td>3.79</td>
<td>5.47*</td>
</tr>
<tr>
<td>% Agree. Feas.Set</td>
<td>64.33</td>
<td>70.53</td>
<td>10.49**</td>
</tr>
<tr>
<td>% Agree. Model A</td>
<td>29.67</td>
<td>39.75</td>
<td>16.67***</td>
</tr>
<tr>
<td>% Agree. Model b</td>
<td>22.78</td>
<td>26.04</td>
<td>n.s.</td>
</tr>
<tr>
<td>% Rule 1 Viol.</td>
<td>14.72</td>
<td>11.93</td>
<td>n.s.</td>
</tr>
<tr>
<td>% Rule 2 Viol.</td>
<td>15.28</td>
<td>7.11</td>
<td>17.97***</td>
</tr>
<tr>
<td>% Rule 3 Viol.</td>
<td>46.11</td>
<td>40.88</td>
<td>n.s.</td>
</tr>
<tr>
<td>% Rule 4 Viol.</td>
<td>23.33</td>
<td>22.21</td>
<td>n.s.</td>
</tr>
<tr>
<td>% Rule 5 Viol.</td>
<td>55.33</td>
<td>43.58</td>
<td>5.65*</td>
</tr>
<tr>
<td>% Rule 6 Viol.</td>
<td>60.00</td>
<td>36.84</td>
<td>10.16**</td>
</tr>
<tr>
<td>% Rule 7 Viol.</td>
<td>71.67</td>
<td>66.32</td>
<td>n.s.</td>
</tr>
<tr>
<td>% Qual.Rules Viol.</td>
<td>21.22</td>
<td>15.79</td>
<td>11.80**</td>
</tr>
<tr>
<td>% Acct.Rules Viol.</td>
<td>43.65</td>
<td>37.09</td>
<td>3.90*</td>
</tr>
</tbody>
</table>

+ p<0.1;    * p<=0.05;    ** p<0.01;     *** p<0.001

Table 9.9 Results Comparison Austrian and Turkish Managers

The comparison between the application of decision strategies does not show significant differences. In both countries the participants understand the necessity of situational adjustment in order to be successful in their function as leader. This flexibility is demonstrated in their MLP as an aggregate measure of leadership style Preference.

A first differentiation becomes visible in the dimension of individual flexibility; here the Austrian managers show a significantly higher sensitivity.
Stronger differences become visible in the agreement with the „Feasible Set“ and the agreement with Model A. Here it becomes obvious that the overall agreement with the decision rules runs into difficulties especially in the setting of Model A.

The real differences of the leadership quality becomes obvious in the seven decision rules; the first three with the target of securing the quality of the leadership decision. Here the Turkish managers have problems with the Rule No. 2 in which the most participative leadership style (GII) should be avoided if the subordinates do not share the organizational goals. In these situations the Turkish managers are not concentrated on the goal discrepancies to a much higher degree than their Austrian colleagues.

In the context of the Acceptance Rules the leaders should provide the opportunity of interaction among the subordinates and therefore the strategies AI, AII and CI should be eliminated from the feasible set. In this situation also the Turkish managers show a significantly higher degree of rule violations.

In the summary of the Quality and Acceptance Rules the international tendency of managers becomes confirmed that the Acceptance Rules show a much higher degree of rule violations than the Quality Rules. The Turkish managers have more of a problem with the application of the seven rules than the Austrian.

Interesting that the differences are higher in the area of Quality Rules; This is especially caused by the violation of Rule No. 2.

9.2 Qualitative Data

During the interview the interviewees were asked to read through the first five cases of the “Case Set No 5” (Appendix), to choose a decision-making strategy and explain why they made their choice. Within two weeks not all of the 30 managers could be interviewed, however 20 managers who already participated in the quantitative study were interviewed. By interviewing 20 people the maximum was reached, as some of the managers who took place in the quantitative study changed their job and were not reachable anymore and
others were out of town in the time period when the interviews took place. Most of the interviews were conducted in English; if it was not possible to conduct the interview in English, a translator supported. One interview was held in German. A detailed overview of the interviewees, their company, job position, gender and language is shown in Table 9.11.

All the conducted interviews were audio recorded and transcribed. Out of these 20 interviews 18 could be used for further analysis. To analyse and evaluate the transcript data template analysis was used. In order to do template analysis no special computer software was used, it was done by the researcher.

In the first initial step the answers were structured and evaluated by answer options according to “Case Set No 5”, meaning A1, A2, C1, C2 and G2. These were used as clusters in the initial template, shown in Table 9.10.

<table>
<thead>
<tr>
<th>Initial Template</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Answer option A1</td>
</tr>
<tr>
<td>- Answer option A2</td>
</tr>
<tr>
<td>- Answer option C1</td>
</tr>
<tr>
<td>- Answer option C2</td>
</tr>
<tr>
<td>- Answer option G2</td>
</tr>
</tbody>
</table>

Table 9.10 Initial template

The interviews showed much more relevant information, which could not directly be linked with A1, A2, C1, C2 or G2 but found special relevance in all interviews and justified assessment:

- Prototype of a manager
- Challenges of group decisions

One topic, which was given importance in all interviews, were the attributes, behaviours and skills of ideal managers or leaders. Additionally the pros and cons of group decisions, their impact and meaning, occupied the participants’ minds.

Therefore the initial template (Table 9.10) was extended by three more clusters to the final template which was used to conduct template analyses to reach meaningful results.
The results of the qualitative research are structured according to the elements of the final template (Table 9.11).

Firstly the general data of the interviews will be showed and summed up, followed by a detailed analysis of each of “cluster” out of the final template.

Table 9.12 gives an overview about the interviewees. It shows their position, company and gender and shows in which language each interview was conducted. All of the interviewees are manager either directly working in the automotive sector or working in the financial sector but are responsible for automotive sector clients. The majority of the participants were man and out of the 20 interviews which were mainly held in English or Turkish, one could be held in German.

<table>
<thead>
<tr>
<th>No</th>
<th>Position</th>
<th>Company</th>
<th>Gender</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Marketing Manager</td>
<td>Karat</td>
<td>F</td>
<td>E</td>
</tr>
<tr>
<td>2</td>
<td>Sales Manager</td>
<td>Karat</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>3</td>
<td>Accounting Manager</td>
<td>Karat</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>4</td>
<td>IT Manager</td>
<td>Delta</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>5</td>
<td>Production Director</td>
<td>Karat</td>
<td>M</td>
<td>E</td>
</tr>
<tr>
<td>6</td>
<td>Sales Manager</td>
<td>Dynamic</td>
<td>M</td>
<td>E/T</td>
</tr>
<tr>
<td>7</td>
<td>Sales Manager</td>
<td>Gates</td>
<td>M</td>
<td>E</td>
</tr>
<tr>
<td>8</td>
<td>Sales Manager</td>
<td>Sogefi</td>
<td>M</td>
<td>E</td>
</tr>
<tr>
<td>9</td>
<td>GM Assistant</td>
<td>Finansbank</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>10</td>
<td>Purchasing Manager</td>
<td>GAU</td>
<td>M</td>
<td>E</td>
</tr>
<tr>
<td>11</td>
<td>Export &amp; Import Specialist</td>
<td>Karat</td>
<td>F</td>
<td>E</td>
</tr>
<tr>
<td>12</td>
<td>Accounting Manager</td>
<td>Karat</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>13</td>
<td>Selfemployed</td>
<td></td>
<td>M</td>
<td>E</td>
</tr>
<tr>
<td>14</td>
<td>Portfolio Assistant</td>
<td>Türkiye Finans</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>15</td>
<td>Portfolio Manager</td>
<td>Turklandbank Bank</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>Position</td>
<td>Name</td>
<td>Gender</td>
<td>Language</td>
</tr>
<tr>
<td>---</td>
<td>------------------------</td>
<td>--------</td>
<td>--------</td>
<td>----------</td>
</tr>
<tr>
<td>16</td>
<td>Regional Manager</td>
<td>Maye Yemek</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>17</td>
<td>GM Assistant</td>
<td>GAU</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>18</td>
<td>VSM Manager</td>
<td>SKF</td>
<td>F</td>
<td>E</td>
</tr>
<tr>
<td>19</td>
<td>HR Manager</td>
<td>SKF</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>20</td>
<td>Sales Specialist</td>
<td>Bosch</td>
<td>M</td>
<td>T</td>
</tr>
</tbody>
</table>

Note: M = male, F = female, T = Turkish, E = English, G = German

Table 9.12 Demographic data of interviewees

### 9.2.1 General data evaluation

Out of the 20 conducted interviews, 18 could be used for further research. Due to language issues and a lack of time and to many interruptions two interviews needed to be excluded for template analysis. 18 interviews mean a total of 90 possible answers.

The next table gives an overview about the chosen answer options in the interviews. The first column shows the answer option, the second how often the interviewees chose each answer option and in the third column the percentage is shown.

<table>
<thead>
<tr>
<th>Answer Option</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>5</td>
<td>0,056</td>
</tr>
<tr>
<td>A2</td>
<td>11</td>
<td>0,122</td>
</tr>
<tr>
<td>C1</td>
<td>14</td>
<td>0,156</td>
</tr>
<tr>
<td>C2</td>
<td>31</td>
<td>0,344</td>
</tr>
<tr>
<td>G2</td>
<td>25</td>
<td>0,278</td>
</tr>
<tr>
<td>no answer</td>
<td>4</td>
<td>0,044</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td><strong>90</strong></td>
<td><strong>1,000</strong></td>
</tr>
</tbody>
</table>

Table 9.13 Overview of interviewees results

C2 was the answer which was chosen the most, namely in 34,4% of the possible answers. Linked with the quantitative data evaluation before 2000 and in 2013 this, results show that Turkish managers use C2 as an answer in most of the cases (see Table 9.1 and 9.2).

The most autocratic answer option A1 was taken only 5 times, which is not enhanced by quantitative data results conducted in 2013, where more participants used A1 as an answer option, but evaluated data before 2000 showed again the same result, A1 was taken the least.
Table 9.13 gives a combined overview about the given answers and shows consistency and differences in results. It illustrates, as already mentioned, that C2 is the preferred answer option, in quantitative research before 2000 and after 2013 and the qualitative study conducted in 2013. Moreover it could be seen that A1 is ranked last in quantitative data evaluation before 2000 and qualitative data evaluation, while it is ordered 2nd in quantitative data evaluation in 2013.

<table>
<thead>
<tr>
<th></th>
<th>Quantitative Data Evaluation</th>
<th>Qualitative Data Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before 2000</td>
<td>2013</td>
</tr>
<tr>
<td>1st</td>
<td>C2</td>
<td>C2</td>
</tr>
<tr>
<td>2nd</td>
<td>C1</td>
<td>A1</td>
</tr>
<tr>
<td>3rd</td>
<td>A2</td>
<td>G2</td>
</tr>
<tr>
<td>4th</td>
<td>G2</td>
<td>C1</td>
</tr>
<tr>
<td>5th</td>
<td>A1</td>
<td>A2</td>
</tr>
</tbody>
</table>

Table 9.14 Sumary and Ranking of Answer Options

In order not to endanger neither quality nor acceptance by breaking one of the models seven rules, designed by Vroom and Yetton in 1973 (see Figure 5.5), should be applied. A detailed evaluation of which rule was broken by which interviewee in which case and why was not part of this study, as the interviewees’ did not give any answer which would show a concrete rule violation. So this could not be used for further qualitative research.

<table>
<thead>
<tr>
<th>Problem Set#5</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>Problem Type</th>
<th>Decision Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case 1</td>
<td>yes</td>
<td>yes</td>
<td>-</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>6A</td>
<td>C2</td>
</tr>
<tr>
<td>Case 2</td>
<td>yes</td>
<td>yes</td>
<td>-</td>
<td>no</td>
<td>-</td>
<td>yes</td>
<td>yes</td>
<td>3A</td>
<td>A1-G2</td>
</tr>
<tr>
<td>Case 3</td>
<td>no</td>
<td>-</td>
<td>yes</td>
<td>no</td>
<td>-</td>
<td>no</td>
<td>no</td>
<td>2B</td>
<td>G2</td>
</tr>
<tr>
<td>Case 4</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>-</td>
<td>no</td>
<td>no</td>
<td>9B</td>
<td>C2</td>
</tr>
<tr>
<td>Case 5</td>
<td>no</td>
<td>-</td>
<td>yes</td>
<td>no</td>
<td>-</td>
<td>yes</td>
<td>2A</td>
<td>G2</td>
<td></td>
</tr>
</tbody>
</table>

Table 9.15 Expert Analysis - Right Decision Strategy
By combining the experts analysis, the feasible set - the ideal decision making strategy in each case (Table 9.15), with the evaluation of the answers given during the interviews (Table 9.16), an agreement of 55.81% with the feasible set could be seen. In Case 1 (see Appendix) for example the right decision strategy would be C2. Out of the 18 interviews 9 participants chose the correct decision making strategy while nine others chose, according to the expert analysis, wrong. Out of the 18 interviews and the 86 answer options Table 9.16 shows that in 38 given answers one of the rules was violated. The results did not show any specific conspicuousness concerning rule violations. Slightly more answers did case a rule violation then they did not.

In Case 1, 50% of the answers did violate a rule, in Case 3, 44.44%, in Case 4, 58.82% and in Case 5, 68.75%. The only exception were the rule violations of case number 2, were 100% of the given answers were totally correct and did not break any rule. Reason therefore is that in Case 2 all answer options are possible so there is no wrong answer which could violate any rule.

<table>
<thead>
<tr>
<th></th>
<th>Agreement with feasible set</th>
<th>No Agreement with feasible set</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case 1</td>
<td>9</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Case 2</td>
<td>17</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Case 3</td>
<td>10</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>Case 4</td>
<td>7</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Case 5</td>
<td>5</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Sum</td>
<td>48</td>
<td>38</td>
<td>*86</td>
</tr>
</tbody>
</table>

*out of 90 possible answers 4 times interviewees did not chose any answer option

Table 9.16 Results Interview Answers
9.2.2 Answer option A1

Answer option A1 was chosen in five cases by five different people. Each of these five persons answered only once in the interview with A1, which is a percentage of 5.6. The only similarity shown in the evaluated data was that answer A1 was chosen three times in case number five (see Appendix). The given answers, to explain why A1 was chosen were too different to see any connection.

Interviewee number three for example says, that he would have to use A1 as he cannot give the decision to his subordinates as they would not be able to make a reasonable decision, which would be needed in this case (Interviewee No.3, p.1). So in order to reach a meaningful decision the manager has to take it himself.

In comparison to this Interviewee number 8 chose A1 because it would be to complicated and take to much time to ask every subordinate (Interviewee No.8, p.5). In this case the time efficiency was the reason to choose A1.

Another reason given by one person was that the issue was so simple to solve that nobody else needs to be asked (Interviewee No. 19, p. 4).

One factor that could be seen as similarity is the fact that a fast procedure is possible and useful. However as already said the answer options differed to much to make a profound statement.

9.2.3 Answer option A2

Nine different interviewees chose A2 eleven times, four times in case number 1 (see Appendix). This means in 12.2% of the cases A2 was chosen as an answer option. Out of the given answers one could see that A2 was chosen if the issue was given a certain amount of importance, no matter in which context.

Importance was shown in the answers by statements like “the expert for the issue” (Interviewee No. 14, p. 2) or “This report can bring the company in an uncomfortable condition I should do something to stop the situation.” (Interviewee No. 9,p. 5). Both answers taken as examples here give an insight into what makes this issue important. An
expert for example is only needed if you deal with an essential issue otherwise anybody could take a decision, and the fact that the company could be in an prickly situation also shows that it has to be an important issue otherwise nobody would care about it. Other reasons given in the interviews that showed this importance was that one has to deal with a technical or complicated issue or that everybody’s information would be needed (Interviewees No., 10 p.2/ Interviewee No. 19, p. 3).

9.2.4 Answer option C1

C1 was chosen as an answer option in 14 cases by nine different managers, which is a percentage of 15,6. In case 2 (see Appendix) C1 was chosen four times as a possible solution strategy. The managers showed similarities in their answers. Out of the given reasons for choosing C1 one subject was more present then others, the necessary involvement of subordinates, due to different reasons. One reason for example was the qualification of their personnel “there is four salesmen who are high quality personnel [...] I have to look at their opinions but so I chose C1 as a group together. I will get their opinion face to face in meetings and then I will decide on my own.” (Interviewee No. 10, p.3). Another reason for involving the subordinates was the fact that they know best about the problems and processes and mostly have good ideas and solutions (Interviewee No. 3, p. 2).

Almost all of the managers explained that the knowledge, ideas or general input of their subordinates would be a key factor in this case, and this is why they chose C1. The question that appeared is why C1 was preferred over G2, if subordinates’ involvement is crucial or necessary. Reasons therefore were either the lack of time or the missing trust in the people and their ability to find a proper democratic solution. “If you get people together to discuss about the subject it gets really hard to get a common decision. Everybody is different. So one can argue the other and influence.” (Interviewee No. 2, p.3).

9.2.5 Answer option C2

In most of the cases, in 34,4%, C2 was chosen as an answer option. 17 managers used C2 in 31 cases, nine times as a decision-making strategy in case 1 (see Appendix). One of the
interviewees even chooses C2 in each of the five cases. Although this answer option is quite popular in Turkish management behaviour, there is no clear picture what the reasons for choosing C2 are. The explanations do not only vary they seem to be contrasting. Contradiction between importance and unimportance, high risk and no risk and the question if subordinates need to be involved is shown in the given answers.

While some interviewees mention the importance or seriousness of an issue as a reason for choosing C2 (Interviewee No. 4, p.2) others explain that they choose C2 as it is an unimportant problem that does not need special attention (Interviewee No. 6, p.2).

Moreover some of the managers choose C2 because there situation is according to their evaluation not risky. “The risk is not so high […] This is not a main part of business. It’s not a lot of money involved.” (Interviewee No. 13, p.4). On the other hand some chose C2 because the situation seems to be risky. “I would take the decision myself, because this is a very risky situation.” (Interviewee No. 13, p. 2). This example even shows that one manager is choosing C2 in a risky and in a not very risky situation which is good example for this ambiguity.

The given answers also showed no clear picture about the question how the involvement of subordinates could lead or not lead to the answer option C2. One interviewee mentioned that C2 was chosen because it is a personal issue and therefore subordinates should be involved (Interviewee No. 1, p.7). While Interviewee No. 9 said “He has the experience and he knows the situation of the customer and their desires so he knows the best. I have the best communication with the customers so he knows the best for the final decision.” (Interviewee No. 9, p. 1).

To sum it up about answer option C2 no clear picture could be given as the answers are to contrary.

### 9.2.6 Answer option G2

Answer option G2 was chosen in 24 different cases by 14 different managers, which means that in 27,8% G2 was given as answer option. In case 3 (see Appendix) G2 was seen as the best decision-making strategy nine times. In general the answers showed that G2 is chosen if the managers evaluate the problem as “not risky” on numbers or hard facts.
The risk which is relevant in cases where G2 is chosen is the risk of declining motivation or people’s unhappiness. One manager points out, that it is very dangerous for several processes and the company in general if people are unhappy and it gets even worse if there is a whole group of unhappy subordinates (Interviewee No. 1, p.4).

What one could also get from the given answers was that several manages would use this group meeting in order to give necessary explanations, to motivate the subordinates or to convince them to take the, on their viewpoint, right decision. However this aspect will be explained further in the next chapter.

### 9.2.7 Prototype of a manager

As the whole study focuses on leadership behaviour obviously the interviews gave insight in what kind of attributes are seen as necessary for an effective and successful leader. The given answers by all interviewees gave a similar ideal or prototype of a Turkish manager in leading positions, who are assumed to be effective leaders.

According to the interview results Turkish managers are strong characters who are experts on their fields and do have a lot of experience. Ideally work experience in many fields for several years but working for a long time in only one specific field in one particular position could also be seen as perfect requirement. The manager is expected to know answers, to give directions and orders and to clearly show the way, in other words to take responsibility and make decisions. Following this attributes and expectations he or she should not be questioned. No subordinate would challenge a leader and the leader does not expect criticism.

So in general the manager is the one who takes decisions and the subordinates trust in experience and expertise and follow. “Employees ask managers don’t” (Interviewee No. 11, p. 3). Subordinates might be asked for input but the final decision will be made by the manager, which is expected by the subordinates, everything else would be seen as weakness.
9.2.8 Challenges of group decisions

The difficulty or challenge of group decision was somehow discussed in all conducted interviews. Some of the interviewees agreed in the fact that group decisions are ineffective as people are not as honest as they should be and influence each other which mean that this option only works in theory (Interviewee No.2, p.3).

Others argued that group decisions can work but only if all the group members share the same ideas and do already have a common idea in advance, meaning that it is more a formal talk than a fruitful discussion of advantages and disadvantages pros and cons ending in a democratic process where anybody can have an own voice.

As already explained in 9.2.6 group decisions are not seen as process where at the end a whole group comes to a final result and takes the decision together. It is seen as a meeting in which the leader passes on the decision to subordinates, who get a formal chance to tell their arguments and opinion but in fact, due to the expected expert role of a leader no subordinate would challenge the leader’s decision.
Conclusion

Turkey’s constant economic growth driven by the EU Reform process and the economic liberalization and on the contrary recent political events, the elections and accompanied excesses, were an initial point of this study. These two contrasts, on the one hand liberalization and international convergence, on the other hand political radicalization caused by one person, lead to the assumption that leadership behaviour under this conditions might have changed over the last 15 years.

Former conducted research on Turkish leadership behaviour, such as Hofstedes study on “Culture’s Consequences: International Differences in Work-Related Values” or the GLOBE Project showed that Turkey is ranked above average in values of power distance (20th), uncertainty avoidance (16th) and among others decisive and autocratic are leadership characteristic assigned to Turkey. These results of autocratic leadership behaviour in Turkey are enhanced by Keser’s two studies conducted in 1996 and 1999.

Keser’s investigation results 15 years ago, like this study built on the descriptive application of the Vroom-Yetton model to study differences in leadership behaviour, served as basis for the longitudinal study, enriched a qualitative study.

Comparison in Turkish leadership behaviour over time, between data conducted before 2000 and in 2013 showed no statistical significant difference. None of the examined parameters, the five answer options or difference in rule violations changed significantly over time, meaning that leadership behaviour did not change over time. Data evaluation in combination with democratic parameters showed 2013 again no significant difference. This leads to a profound general interpretation of Turkish management behaviour, no matter which gender, age or working field, which is more autocratic than participative.

Results of the quantitative part enrich the already mentioned study results of the quantitative part of this diploma thesis and enhance the few studies conducted on culture specific leadership behaviour in Turkey. Effective leaders are, due to their experience experts on their fields who clearly show the way and take decisions which are not challenged by any subordinate. Turkish leaders are charismatic, autocratic and participation is used to make followers of the autocratic made decisions.
List of references


List of figures

Figure 5.1 Descriptive and normative (prescriptive) approach (Vroom/Jago, 1991, p. 87) .... 18
Figure 5.2 Scale of participation........................................................................................................... 19
Figure 5.3 Decision Tree (Böhnisch 1991, p.301)............................................................................. 28
Figure 5.4 Summary process decision-making strategy........................................................................ 30
Figure 5.5 Decision rules (Vroom/Yetton 1973 in Kaltenbrunner 2010, p.22)................................. 32
Figure 7.1 Tarablus Family Tree ........................................................................................................ 39
Figure 7.2 Business relation family Tarablus...................................................................................... 39
Figure 7.3 Organizational chart GROUPAUTO international............................................................ 40
List of tables

Table 5.1 Decision-making strategies (Kaltenbrunner 2010, p.9) ......................................................... 20
Table 5.2 Analytic questions (Böhnisch 1991, p.301) ............................................................................. 21
Table 5.3 Feasible decision-making strategies (Böhnisch 1991, p.33) .................................................. 27
Table 5.4 Decision rules of the Vroom /Yetton model (Böhnisch 1991, p.32 in Kaltenbrunner 2010, p.22) ................................................................................................................................. 33
Table 9.1 General overview of respondents’ results 2013 ................................................................. 44
Table 9.2 Comparison respondents’ results before 2000 and in 2013 ................................................. 46
Table 9.3 Results of Turkish respondents based on gender ............................................................... 47
Table 9.4 Results of Turkish respondents based on age .................................................................... 48
Table 9.5 Results of Turkish respondents based on functional area ................................................. 49
Table 9.6 Results of Turkish respondents based on industry ............................................................. 50
Table 9.7 Results of Turkish respondents based on tenure ............................................................... 51
Table 9.8 Results of Turkish respondents based managerial level ..................................................... 52
Table 9.9 Results Comparison Austrian and Turkish Managers ....................................................... 53
Table 9.10 Initial template .................................................................................................................... 55
Table 9.11 Final template ..................................................................................................................... 56
Table 9.12 Demographic data of interviewees .................................................................................... 57
Table 9.13 Overview of interviewees results .......................................................................................... 57
Table 9.14 Sumary and Ranking of Answer Options ......................................................................... 58
Table 9.15 Expert Analysis - Right Decision Strategy ........................................................................ 58
Table 9.16 Results Interview Answers ................................................................................................ 59
Appendix

PROBLEM SET #5

© Victor H. Vroom
Philip W. Yetton
Arthur G. Jago
will be provided with a very detailed analysis of your leadership style based on your responses to these problems. This analysis will be performed by a computer and, from past experience with several thousand managers who have worked on this or comparable sets of problems, we believe that you will find it an informative and personally rewarding experience.

It is important that you do not regard this as a test or examination in which your objective is to get the "right" answer. Rather, you should look at this exercise as an opportunity to learn about your reactions to managerial situations. Accordingly, you and you alone will receive the analysis of your behavior. No copy or report will go to anyone else in your company.

There is a space on the answer sheet for your name, but any other identifying code (mother's birthday, car license number, etc.) which you will be sure to remember would serve just as well. We just need some identification to make sure that we get the analysis back to the right person. The answer sheet also contains some factual questions which are not for identification purposes but rather to enable comparison among organizations and functions within them.
Decision Processes

AI You reach a solution alone, employing what facts you have at hand.

AII You obtain any necessary information from subordinates, then decide on a solution to the problem yourself. You may or may not tell subordinates the purpose of your questions or give information about the problem or decision you are working on. The input provided by them is clearly in response to your request for specific information. They do not play a role in the definition of the problem or in generating or evaluating alternative solutions.

C I You share the problem with the relevant subordinates individually, getting their ideas and suggestions without bringing them together as a group. Then you make the decision. This decision may or may not reflect your subordinates' influence.

CII You share the problem with your subordinates in a group meeting. In this meeting you obtain their ideas and suggestions. Then you make the decision which may or may not reflect your subordinates' influence.

GII You share the problem with your subordinates as a group. Together you generate and evaluate alternatives and attempt to reach agreement (consensus) on a solution. Your role is much like that of a chairman, coordinating the discussion, keeping it focused on the problem and making sure that the critical issues are discussed. You can provide the group with information or ideas that you have but do not try to "press" them to adopt "your" solution and are willing to accept and implement any solution which has the support of the entire group.
Problem Nr. 1:

Setting: Nuclear Plant
Your Position: Maintenance Supervisor

A defect in the seating surface of a steam generator hand hole cover has been discovered during removal of the cover. The defect is serious and will require repair when you can gain access to it in about five days. Repair will be made difficult by high radiation levels in the area and the inaccessibility of the fault. It will be necessary to send in a team of two men to effect the repair. Time will be critical since any delay will prevent restoration of the nuclear plant and significantly increase start-up costs.

As maintenance supervisor, your problem is to select the team members for the assignment. You have six maintenance men reporting to you. They vary both in experience and in qualifications for this particular job. You know all your men well, and selecting two who have the capacity to do the job is possible.

In the past, when a problem involving significant risks due to high radiation levels has come up, you have brought the men together as a group and shared the problem with them and let them make the decision as to who should carry out the assignment. This procedure has not been entirely satisfactory since the group has tended to choose the more junior members on the grounds that they needed experience. You believe that such poor decisions have increased the amount of time to effect repairs such as this one.

However, it is apparent to you that the group members have been accustomed to having a part in decisions such as this one and might resent it if you were to choose the two men yourself. Since the location and nature of the job and high radiation levels make any close supervision impossible, the time taken to effect the repairs could be seriously affected by the willingness of the men selected to carry out the assignment.

AI  AII  CI  CII  GII
Problem Nr. 2:

Setting: Corporate Headquarters

Your Position: Vice-president

As a marketing vice-president, non-routine requests from customers are frequently sent to your office. One such request, from a relatively new customer, was for extended terms on a large purchase ($2,500,000) involving several of your product lines. The request is for extremely favorable terms which you would not normally consider except for the high inventory level of most product lines at the present time due to the unanticipated slack period which the company has experienced over the last six months.

You realize that their request is probably a starting point for negotiations and you have proven your abilities to negotiate the most favorable arrangements in the past. As preparation for this negotiation, you have familiarized yourself with the financial situation of the customer using various investment reports you regularly receive.

Reporting to you are four sales managers, each of whom has responsibility for a single product line. They know of the order and, like you, believe that it is important to negotiate terms with minimum risks and maximum return to the company. They are likely to differ on what constitutes an acceptable level of risk. The two younger managers have developed a reputation of being "risk takers" whereas the two more senior managers are substantially more conservative.

AI  AII  CI  CII  GII
Problem Nr. 3:

Setting: Applied Research Group
Your Position: Senior Engineer

The parent company for which you work has been taken over and the new parent company has replaced your boss. The parent company has moved in a department manager to whom you now report, a man with little management experience and for whom you have little respect. He has sent you, as senior engineer in a small applied research group, a directive to the effect that some changes must be made in general work habits -- primarily in the area of dress and office etiquette. Long hair and no ties are only few of his complaints. You have argued in defense of the present practices and have informed him that the nature of the changes he is requesting is likely to cause a lot of resentment, a fall in morale, and may even result in some of your best junior staff leaving.

He is willing to concede the fact that your group has an excellent performance record and that changes are not likely to result in improved performance, but he is unwilling to reconsider his position. He did state that he didn't really care exactly what rules were adopted as long as a business-like appearance resulted. He has given you a month, after which he expects to see some results. In the event you do not introduce the necessary changes, he will issue a detailed set of rules and regulations to cover all personnel in your section. The problem you have to resolve is to see what rules to adopt to bring behavior into line with his general directives.

Nearly all the personnel in your section are under thirty and have degrees in engineering, mathematics, or the physical sciences. These common factors of age and training, plus the group's success, have resulted in a highly cohesive team with some strongly held group norms. These norms sanction the dress and office etiquette behavior that is now under review. For instance, your personnel believe that the length of a person's hair or his sideburns, or whether he wears a tie is a question of the individual's personal taste.

AI  AII  CI  CII  GII
Problem Nr. 4:

Setting: Toy Manufacturer
Your Position: Vice-President, Engineering & Design

You are vice-president of a large toy manufacturer with responsibilities that include the design of new products that will meet the changing demand in this uncertain and very competitive industry. Your design teams, each under the supervision of a department head, are therefore under constant pressure to produce novel, marketable ideas.

At the opposite end of the manufacturing process is the Quality Control Department which is under the authority of the Vice-President, Production. When Quality Control has encountered a serious problem that may be due to design features, their staff has consulted with one or more of your department heads to obtain their recommendations for any changes in the production process. In the wake of consumer concern over the safety of children's toys, however, Quality Control responsibilities have recently been expanded to insure not only the quality but the safety of your products. The first major problem in this area has arisen. A preliminary consumer report has "black-listed" one of your new products without giving any specific reason or justification. This has upset you and others in the organization since it was believed that this product would be one of the most profitable items in the coming Christmas season.

The consumer group has provided your company the opportunity to respond to the report before it is made public. The head of Quality Control has therefore consulted with your design people, but you are told that they became somewhat defensive and dismissed the report as "overreactive fanatic nonsense." Your people told Quality Control that, while freak accidents are always possible, the product is certainly safe as designed. They argued that the report should simply be ignored.

Since the issue is far from routine, you have decided to give it your personal attention. Because your design teams have been intimately involved in all aspects of the development of the item, you suspect that their reponse is itself extreme and perhaps governed more by their emotional reaction to the report than by the facts. You are not convinced that the consumer group is totally irresponsible, and you are anxious to explore the problem in detail and recommend to Quality Control any changes that may be required from a design standpoint. The firm's image as a producer of high quality toys could suffer a serious blow if the report is made public and public confidence is lost as a result.

You will have to depend heavily on the background and experience of your design departments to help you in analyzing the problem. Even though Quality Control will be responsible for the decision to implement any changes you may ultimately recommend, your own subordinates have the background of design experience that could help set standards for what is "safe" and to suggest any modifications that would meet these criteria.

AI AII CI CII GII
Problem Nr. 5:

Setting: Manufacturing Organization
Your Position: Assistant Vice-President

Your New York office has recently appointed you an assistant vice-president responsible for the firm's midwest manufacturing operations. Your office will be located in a new plant which is presently under construction outside of Chicago. Your team of five department heads has been selected and they are now working with you in selecting their own staff, purchasing equipment and generally anticipating the problems that are likely to arise when you move into the new plant in three months.

Yesterday you received from the architect a final set of plans for the building, and for the first time you examined the parking facilities that are available. There is a large lot across the road from the plant intended primarily for hourly workers and lower level supervisory personnel. In addition, there are seven spaces immediately adjacent to the administrative offices, intended for visitor and reserved parking. Company policy requires that a minimum of three spaces be made available for visitor parking, leaving you only four spaces to allocate among yourself and your five department heads. There is no way of increasing the total number of such spaces without changing the structure of the building.

Up to now, there have been no obvious status differences among your team who have worked together very well in the planning phase of the operation. To be sure, there are salary differences, with your Administrative, Manufacturing and Engineering Managers receiving slightly more than the Quality Control and Industrial Relations Managers. Each has recently been promoted to his new position, and expects reserved parking privileges as a consequence of his new status. From past experience you know that people feel strongly about things which would be indicative of their status. So far you and your subordinates have been working together as a team and you are reluctant to do anything which might jeopardize these relationships.
Problem Nr. 6:

Setting: Manufacturing Plant
Your Position: Chief of Security

It seems as if plant security has "fallen apart at the seams". Six burglaries and cases of trespassing on company property have occurred in the past six weeks. In addition to these known instances, you suspect that more cases have in fact taken place. While each case has been investigated both by your staff and by the local police, you feel that the time has come to look at the total picture. What is the cause of these burglaries and what actions can be taken to prevent them in the future?

You are a highly respected retired police sergeant now in charge of a small team of security men responsible for the plant. None of these men have the extensive police experience you do, but they are sure to have some first hand knowledge from their daily rounds of the premises that you may lack and that would certainly be helpful in solving the present problem.

You have unqualified trust in your hand picked team of men. Your men have responded to this trust by working well with you and with one another. They take pride in their work and recognize your authority and expertise in complex security problems. You are sure, from the facts you do know, that the burglaries were not "inside jobs" -- at least not involving any of your personnel.

Your problem is to determine those areas where plant security needs to be increased and to decide on the new measures likely to decrease the incidence of crime. Any measure chosen, however, must have the support of your men since they will be responsible for implementing any new procedures, and close supervision of each man on his rounds is virtually impossible.

You further feel that no one measure alone will solve your security problems. You may need to implement a whole new program that incorporates several widely diverse ideas.
Problem Nr. 7:

Setting: Construction project for a land developer
Your Position: Site Manager

You are the site manager on a private housing-development project employed by a large firm with real estate interests in the west and midwest. The development is near completion and your present task is to coordinate the final details which involve electrical, plumbing, plastering, and painting work and the installation of carpeting, drapes and kitchen equipment. Each of these is under the direction of a separate subcontractor, an independent businessman from the community with whom your firm has contracted to perform the necessary services.

At present, the whole development is ahead of schedule and if this occurs, the contract provides for you and the subcontractors to get a substantial bonus. The bonus increases the further ahead of schedule the site is put into the hands of the company's brokers. It appears that these tasks can be completed in less than the originally contracted time, but this will necessitate the establishment of a schedule to which everyone agrees to adhere. Everyone is keen to make the bonus as large as possible. Also, the building industry is booming in the area, and all the contractors have other jobs waiting on the completion of this one. Therefore, it is in everyone's interest to get the project completed as soon as possible.

To prepare the work schedule for the conclusion of the project, it will be necessary to have estimates of the time requirements for each of the remaining jobs and a statement of any conditions which must be met before work can be started on a particular job. For example, the carpeting and drapes cannot be installed in a house before the interior painting has been completed. Your subcontractors will have this information by the end of the week and then this "jigsaw puzzle" can be put together.

You have not worked in this area or with these contractors before; however, the contractors have worked together on a number of local projects and, while independent as people, they get on well together both personally and in the work situation. Since you are a manager and not an expert in any of the trades, you will need to depend heavily on your subcontractors' cooperation, if the task is to be completed as quickly as possible.

AI  AII  CI  CII  GII
Problem Nr. 8:

Setting: Parts manufacturer
Your Position: President

You are president of a small manufacturing company which produces various parts and subassemblies for radio, television and other electronics. You have been in your present position for two years during which time the company went through a major reorganization brought about by five years of increasing losses in its operations and a steadily diminishing share of the market. While the electronics industry is growing rapidly, your company and other smaller producers have had difficulties in adapting to the rapid technological developments and strong competition from the larger companies in the field.

One of your first projects as president was to direct a larger proportion of your productive capacity to specialty orders in which the unit-profit margin is somewhat larger and in which there is less competition from the larger companies in the field. This change has been successful to the extent that it has brought the company into "the black" for the first time in 8 years but it is not without its problems. The shifting demands of the specialty market call for unusual flexibility of manufacturing processes and the present four-story, thirty-year-old building lacks the flexibility needed for efficient change-overs.

You have become convinced that the next step is to expand your productive capacity by building or acquiring a new plant. It has been necessary to turn down two or three orders in the past few months because of insufficient capacity to meet production deadlines. A new facility would prevent such problems as well as significantly reduce unit costs.

The other members of your management team are divided on the wisdom of expansion. Since each owns a sizeable number of shares of common stock in the firm, there is no question about their interest in making the company profitable. While you may disagree with some of them on particular views, you have no doubt about their interest in getting the company "back on its feet". For example, your controller is worried that, since the company reserves are low, the necessary funds for expansion would have to be raised from stock sales or mortgage loans and the present financial condition of the company does not place it in an advantageous position for such financing. Furthermore, it would be some time before returns from expansion would begin to pay off and an early business slump could ruin the company. Your manufacturing vice-president is concerned that the costs of both real estate and new equipment are highly inflated, and any serious consideration of expansion should await the next "buyer's market".

On the other hand, your marketing and industrial relations vice-presidents seem to share your conviction that expansion is the better course to follow. Although your conversation with each person has been casual and informal, you have become convinced that each of them feels strongly about his position. You have proceeded slowly since you believe that ultimately their support is necessary to the success of this venture. In the past you have tried to give them a major voice in important decisions such as this one and they have responded well to it.

Yesterday, you learned that a new plant built by an aerospace firm has been put up for sale due to cutbacks in the industry. You collected all of the necessary data on the phone and are convinced that it is ideal for your needs. Furthermore, the price is quite reasonable for a plant of this size. The sellers agreed to wait a week for your decision.

AI  AII  CI  CII  GII
Problem Nr. 9:

Setting: Travel Organization
Your Position: Tour Supervisor

As tour supervisor with a large international travel company, it is your job to put together packages involving airfare, hotel accommodations and sightseeing which can be marketed in other areas. You are in the London office which is an important location for the company because of the large volume of incoming tourists from places like New York, Germany, Italy, and increasingly from the Middle East. If tourists commit themselves to travel as part of a group on one of the package tours that you arrange, they can effect very substantial savings not only in airfare but in all other aspects of travel.

You have a small staff reporting to you who make sure that the necessary arrangements have been made for an arriving tour and oversee the group of tourists while they are in London.

One of your best selling tours has been an 8-day trip from New York to London. It departs New York on Saturday night and returns the next Sunday. While this tour has been offered many times before without serious difficulties, last Saturday the flight (on a regularly scheduled commercial 747) lost an engine three hours out over the Atlantic. The pilot decided to return to Kennedy Airport during which time a second engine went out. Fortunately, they made it back safely but it was 24 hours before another 747 could be obtained to make the trip and the passengers had to spend the night at a New York hotel.

When the two hundred and fifty participants in the tour finally reached London on Monday afternoon, many of them were upset and angry. Your office was flooded with complaints. Some people wanted an extension of the tour to make up for the lost time in New York; others could not stay over an extra day but wanted a special reimbursement for the portion of the tour they had missed. Still others indicated that, because of the scare, they would not fly back on the airline that brought them over. Any concessions that are made to these requests will cost the company money since it will have to pay for services over and above those originally contracted for.

You suspect that your staff is receiving other complaints and special requests as well, most of which are probably legitimate and understandable given the circumstances. You have called the headquarters of the parent company to inform them of the situation and ask for instructions, but because of the need to respond to passenger complaints quickly and efficiently, they could only tell you to make the decision yourself keeping in mind both the cost involved in your decision and the public relations value of keeping customers satisfied in this new service offered by the company.

Your staff is as eager as you to solve the problem, making appropriate compensation and special arrangements where possible. While all certainly have the best interest of the company in mind, you know from previous discussions that some place more emphasis on minimizing direct costs than on those indirect costs such as public relations. In any case, the complexity of the problem makes any one simple solution unlikely. Frankly, not having encountered this kind of problem before, you just don't know how to begin to decide what is and is not appropriate. Once this difficult decision is reached, however, it should be easy for you to make the arrangements and inform your clients, all of whom are lodged at the same West End hotel.

AI  AII  CI  CII  GII
Problem Nr. 10:

Setting: Manufacturing Company
Your Position: Comptroller and Chief Counsel

Your company contracted with a die manufacturer for the supply of a special die at a price of $25,000. In December, 1995, the supplier was five months late in delivery, had encountered several problems and had notified you that it would be months before he could deliver the completed die.

Your company agreed to take the unfinished die in its present state and to withhold $10,000 from the payment. It was agreed that the difference between the cost of finishing and the $10,000 would be returned to the die manufacturer.

The cost of putting the die in working condition has turned out to be $40,000. As the Comptroller and Chief Counsel, you have been asked by the president of the company, to whom you report, to proceed with a legal investigation to determine the advisability of going ahead with legal action to recover the $30,000 excess costs.

Three of your brightest young lawyers have been working on this, and two of them are keen to go ahead while the other is steadfastly opposed. The enthusiasm may stem from the fact that the two are actively involved in a local political group considered to be quite liberal and in the past both have expressed antagonism toward the supplier whose president is an officer in, and a vociferous spokesman for, a prominent rightwing group.

Whatever decision is reached, the support of your staff is required. If the decision is to prosecute, they will be responsible for representing the company in the court proceedings and from past experience you know that their commitment to the issue may contribute to any outcome. If the decision is for no legal action, their strong feelings about the case may be channeled in subtle ways against you.

You know that there are only two factors which determine the wisdom of proceeding with legal action. One of these is the cost of going to court which you have estimated from past experience at $10,000. The second is the probability of winning the case which you cannot estimate since you have not been involved personally in researching it. The research, carried out by your three subordinates, has involved studying a large number of legal briefs. Apparently, the question is covered by existing decisions. No complex legal questions are involved, and the case will not set any legal precedents.
Problem Nr. 11:

Setting: Corporate Headquarters
Your Position: Vice-President

The sales executives in your home office spend a great deal of time visiting regional sales offices. As marketing vice-president, you are concerned that the expenses incurred on these trips are excessive - especially now that the economic outlook seems bleak and general belt tightening measures are being carried out in every department.

Having recently been promoted from the ranks of your subordinates, you are keenly aware of some cost saving measures that could be introduced. You have, in fact, asked the accounting department to review a sample of past expense reports, and they have agreed with your conclusion that several highly favored travel "luxuries" could be curtailed. Your executives, for example, could restrict first-class air travel to only those occasions when economy class is unavailable, airport limousine service to hotels could be used instead of taxis where possible, etc. Even more savings could be made if your personnel carefully planned trips in such a way that multiple purposes could be achieved where possible.

The success of any cost saving measures, however, depends on the commitment of your subordinates. You do not have the time (nor the desire) to closely review the expense reports of these executives. You suspect, though, that they do not share your concerns over the matter. Having once been in their position, you know they feel themselves deserving of travel amenities.

The problem is to determine which changes, if any, are to be made in current travel and expense account practices in the light of the new economic conditions.
Problem Nr. 12:

Setting: Manufacturing Firm
Your Position: Vice-President

The original design for a high temperature pump, vital to the manufacturing process of your firm, has proved ineffective. The company president, to whom you report, has asked you to find an efficient solution to this problem taking into account both short-term and long-term cost considerations. You have been working on this problem for the last two weeks and have collected all the information that seems to be both available and pertinent to the problem.

One alternative is to purchase from an outside source a similar type of pump without the known deficiencies. Certain costly modifications to some of your other equipment would be necessary, and two or three would be required for the contractor to complete the installation. Resumption of production, however, could be guaranteed within four weeks, though at a rate five percent lower than that provided by the present pump.

Another alternative involves the modification of the present design to meet the necessary specifications. Several of your department heads have studied the problem and have indicated that such modifications are feasible and that production rates would not necessarily require reduction. They cannot, however, give you an estimate of when these proposed modifications could be completed.

You are concerned, however, that your subordinates' optimism about the existing pump may be influenced by some unrelated, though understandable, factors. The amount of work required of these departments had been falling in recent months, and you suspect that the department heads fear layoffs of some of their personnel. Modification of the existing pump would keep a substantial number of their engineers occupied, and, if successful, would also enhance the image of the entire engineering section. The purchase of the pumps from the outside source, on the other hand, would be seen has taking work away from these departments. Only the department heads themselves, in supervising the work of the outside contractor to insure that specifications are met, would be directly involved in the installation and testing of the entirely new pumps.

You must decide which of the two alternatives is to be chosen. Though you know your subordinates would not like the idea of seeking outside help for the present problem, their high regard for you will help them understand any decision that is made.
Problem Nr. 13:

Setting: Screw manufacturer
Your Position: Owner-Manager

You are owner-manager of a screw manufacturing company. Since you bought the company two years ago, you have been searching for ways of increasing efficiency and productivity. To this end, you have recently installed new machines in a portion of the work flow that simplified the entire production system. To the surprise of you and your staff, however, the expected increase in productivity was not realized. In fact, production has begun to drop, quality has fallen off, and the number of employee separations has risen.

You do not believe that there is anything wrong with the machines. You have had reports from other companies who are using them and they confirm this opinion. You have also had representatives from the firm that built the machines go over them and they report that they are operating at peak efficiency.

You suspect that some parts of the new work system may be responsible for the change but this view is not widely shared among your immediate subordinates, four section managers and a supply manager. The drop in production has been variously attributed to poor training of the operators, lack of an adequate system of financial incentives and poor morale. Your subordinates share your concerns for falling production, but clearly this is an issue about which there is considerable depth of feeling within individuals and potential disagreement among your subordinates. Your problem is to decide what steps should be taken to rectify the situation.
Problem Nr. 14:

Setting: Industrial Movie Company
Your Position: President

You are president of a small but growing company that specializes in the production of industrial movies for clients that wish a visual display of some product or technical process. Such films are typically used for marketing or public relations purposes.

Many of your prospective clients wish to visit your office before signing a contract in order to better understand what technical support your company can offer, and to discuss with you and your staff of producers possible ideas they may have. You generally handle such visits personally, and they have proved quite productive and profitable.

One prospective client has asked for such a visit next week, but unfortunately you will be out of town that day consulting with another customer. To coordinate the visit, one of your producers must be designated to spend the day with the new client in your absence. Whoever is chosen will be required to meet the client, show him your facilities, take him to lunch, and lead the afternoon meeting with the other producers to generate ideas for the proposed film.

None of your producers will be filming on the day in question, and you are sure that any one of them could easily handle the responsibilities of the visit and probably obtain the contract if he tried. They all have the necessary skill and expertise to explain the process, exploring the available alternatives with the client, and, in fact, have performed this role effectively in the past. Their interest in this assignment is, unfortunately, another matter. Most of those involved in producing films view themselves as "creative artists" and look with attitudes ranging from indifference to contempt at the necessary process of "wining and dining" prospective clients. There is only one of your producers who does not hold such an attitude, and he has in fact expressed an interest in greater involvement in marketing the services of your company. You are sure that all of your subordinates hope you choose him for this assignment. You are furthermore confident that all of your staff would be pleased (and in some cases relieved) if he were chosen for this assignment and that they would respect his leadership in the afternoon idea meeting.
Problem Nr. 15:

Setting: New Division

Your Position: Purchasing Agent

Recently a new division has been established made up of three plants recently bought from three other companies. You are purchasing agent for that division, and as such have coordinating responsibility for the three plant purchasing agents. The job specifications and organization chart for the new division, however, give you no formal authority over the agents, who report directly to their own plant managers.

Two weeks ago at a meeting which you attended, concern was expressed by the plant purchasing agents about the problems which have been occurring in inter-plant purchases. The different coding procedures and formats used by the different companies prior to acquisition are still in use and are causing, as a result of misunderstanding, errors in shipment between plants. At the meeting, feelings were running high, and each agent was attributing the blame for the errors to the other agents. The outcome of the meeting, however, was a view that the problem could be solved by a universal format of implementation in all of the plants. Naturally, each agent would prefer the system to which he has been accustomed and, in recognition of their likely inability to resolve this issue without further disagreement, they asked you to resolve this issue by selecting a universal format for use in all plants.

You have examined each of the formats in use and can see no advantage in retaining any particular system either for technical reasons or because any plant handles substantially more inter-plant purchases than any other. The next meeting of this group is on Friday. It would be highly desirable if the issue could be resolved at that time.
Problem Nr. 16:

Setting: University
Your Postion: Dean of a college

Two years ago, you accepted an appointment as dean of an important college located within one of our larger universities. The role requires you to work closely with the president and trustees of the university. Your appointment had the unanimous support of the five department heads who report directly to you, and you feel that you have not let them down. You have been successful in attracting substantial funds from federal and private sources, which have enlarged both the scope and the influence of your college and of each of the five department heads. In return they have given you their active support.

Recently, the problem of administering the funds has increased substantially the burdens of your office. Furthermore, you have just accepted an assignment on an important federal committee which will require your spending one day a week in Washington. You have discussed informally with your subordinates the possibility of appointing an assistant dean who would assume many of the more routine functions of your office. All concurred that such an appointment would make a great deal of sense and felt that you should proceed with the appointment without delay.

Since the position is a new one, it is not clear what the job description should be or what qualities the candidate should possess. You also believe that it is important that the person holding it have the respect of the department heads since they might otherwise bypass him and insist on seeing you.

You have given some thought to the definition and scope of the job and also to who might be interested and available to fill this position, but so far you have "drawn a blank". You approached two people from your former university, only to learn that they were unavailable. You have concluded that the most likely place from which to fill the position is within your own organization. There are probably suitable candidates within your faculty, and if so, your department heads would know of them.

None of your department heads is likely to be interested since the position would pay less and offer less status than their own. However, you wish to guard against the possibility that each department head might view the opening as an opportunity for one of his junior faculty who does not meet the usual criteria for teaching and scholarship. A department head who was successful in getting the position filled in this manner by one of his people would "free up" a faculty position for the appointment of someone from the outside and might also feel he was acquiring some special influence in the dean's office.
Problem Nr. 17:

Setting: Publishing Company

Your Position: President

You are president of a book publishing company located in New York City. For the past few years, there have been rumors that Congress will liberalize copyright laws making it possible for libraries, professors and students to make multiple photocopies of books or sections of books for their own use. You and others feel that this would have a disastrous result on your industry and you have agreed to spearhead an effort to oppose this new legislation.

It will be necessary for you to devote two mornings a week away from your office to this activity. You have complete freedom to choose which mornings you will use, but once a decision is made, it is necessary to be consistent from week to week.

Little useful consultation can take place between you and your subordinates during those mornings spent out of the office. Planning in advance to be in the office when your subordinates are most likely to need you, seems impossible as their demands on your time are unpredictable.

Though no compelling reason exists to prefer any one day over another, a choice must be made before you can finalize your schedule for next month. The problem is which mornings to choose.
Problem Nr. 18:

Setting: Manufacturing Plant
Your Position: Engineering Supervisor

You have recently received an assignment as engineering supervisor in one of the largest plants in the company. You did not relish this assignment since this plant is widely recognized as being the "trouble spot" in the organization. Antagonism between management and workers abounds. There have been several costly strikes and even the engineers, including those you supervise, are union members and evidence antagonism toward management and identify with the workers. The feelings of distrust between management and workers have become more acute within the last year as a result of management's unsuccessful efforts to decertify the union.

This is your first supervisory assignment and you are anxious to do well. However, during your first month on the new job, you have not had much success in gaining the acceptance of the eight engineers who report to you. They seem friendly in their relations with one another but noticeably cool and suspicious toward you.

Today, you had a meeting with your own supervisor. One of the projects on which your group is working is six months overdue and unless it is completed soon, the entire contract may be in jeopardy. You were previously unaware that this problem was quite so severe and assured your boss that it would receive your immediate attention. You must first identify the causes of the delay and then determine the necessary steps to take to complete the project as soon as possible, even if it means dropping all other projects on which your group is presently working.
Problem Nr. 19:

Setting: Industrial organization
Your Position: Vice-President

You will leave on Sunday night to attend a nine-week senior executive course at one of the leading business schools. One of your subordinates must be selected to act for you in your absence. You can arrange to phone the office two or three times a week, but whoever acts for you may need to make a number of important decisions.

The principal responsibility of your replacement will be to coordinate the work of your other subordinates in the preparation of some important reports. In this area, he will need to rely on persuasion rather than formal authority. If the group lacked confidence in the person chosen, coordination would be difficult and the quality of the reports would definitely suffer.

You have two people in mind who could handle the assignment. The one thing about which you are uncertain is the nature of their work loads for the next month. The nature of the work does not easily permit its redistribution among members of the group and the person chosen cannot be one who already has a heavy volume of other work to be carried out during this period.

The person who assumes your position during your absence would acquire some status within the group and for this reason, each person would want the job. On the other hand, each of your subordinates realizes that the reports are critical and they all want to prove to you that the job can be done even during your absence.

On the two previous occasions when you have had to be absent for significant periods, the people you selected were accepted by everybody and performed the job conscientiously and well. It appears that once you have decided who should do the job, your judgement is accepted without question.
Problem Nr. 20:

Setting: University
Your Position: Associate Professor

You are an associate professor for economics at a large midwestern university and have taught there for the past five years. Since you have been there, you have demonstrated your effectiveness as a teacher and, next semester, have been assigned responsibility for the large introductory economics course. Roughly 600 undergraduate students will take the course, and they will be taught in 6 sections of 100 students each. You will teach two of the sections yourself, and two will be taught by each of two young assistant professors just hired after completing their Ph.D.s at a nearby university.

It is now two months before the start of the semester. You have had one meeting with the members of your "team". It was the first time that you have done more than exchange greetings in the hall and you were impressed by the outline for the course that they both advocated. In many ways it differed from the approach you have developed over the years, but it is clear that this difference is a result of their academic training rather than their lack of teaching experience.

You were surprised by their outspoken opposition to a common textbook and a common examination for all six sections. You explained that this practice is a matter of long-standing university policy with regard to the introductory courses, and they accepted that this policy would apply to the course but gave you clearly to understand that your explanation had not affected their views on the subject.

Today you received a phone call from the campus bookstore wanting to know which textbook to order for the course. After telling them that your order will be in by the end of the week, you mentally review the alternatives. There are at least a dozen textbooks available, but of these, only three or four are worthy of any consideration. Your familiarity with each has left you with a fairly strong preference for one of them.

You strongly believe that it is important for the students to have a good textbook towards which the professor is confident and committed. This is particularly true when the professor has little teaching experience. The major factor which bothers you and prevents you from making an immediate decision is the fact that university policy requires a common textbook, and it is possible, if not likely, that your two assistant professors in the course would prefer, and therefore be more successful with, one of the other textbooks.
Problem Nr. 21:

Setting: Engineering Lab
Your Position: Project Leader

You are a chemical engineer with technical experiences in the design of life-support systems. You are project leader of a team that recently developed a working model of a new type of waste recovery system for use in manned space flights and your section leader has asked your help in the preparation of a new contract proposal for further development and testing of the system.

You have strong competition in this field and estimating the cost of the proposed work is therefore critical if your firm is to win the contract. One problem you have, however, is estimating the computer expenses that will be required in fulfilling the extensive analytical portion of the contract. These expenses include both processing time and the purchase of additional "software" with capabilities to handle the specific problem. You must admit that you come from the "old school" of engineers, and have not had much experience in the modern applications of computers in areas of modeling and simulation that would certainly help you in preparing such an estimate.

Fortunately, your younger subordinates are more knowledgeable than you in this matter and can easily provide the necessary information from which estimates can be calculated. They do not, however, share your concerns that the estimate be as low as technically feasible since they would, if given a choice, prefer a budget that could also accommodate other more interesting work that may only be marginally related to the contract.

You further suspect that your subordinates would disagree on the particular software packages that would require purchase. There may in fact be several programs that could handle the proposed work, but each engineer would probably favor the package that would best serve his pet projects. Fortunately, you need only determine a cost estimate at this time. You can deal with your subordinates’ differences of opinion later - pending approval. Though your subordinates are doubtful, you are convinced such funds will be available.
Problem Nr. 22:

Setting: Bank
Your Position: Vice-President

You are an administrative vice-president with a staff of several senior officers in a large metropolitan bank. Because you and your staff are particularly familiar with bank security operations, you have been given the responsibility to plan the measures to be taken when a threatened police strike begins the day after tomorrow. The bank has a total of 48 branches in the area to be affected by such a strike, and all rely mainly on the police force to provide security and protection. It is known that there are dissident elements in the population, and it is believed that these are likely to take advantage of the situation.

During the previous nine months of the year, the bank has suffered approximately 25 armed robberies of its branches in the city. You have reports of studies on the distribution and timing of such robberies, but there are several potentially explosive political and social situations that may complicate matters even more.

When a similar though less threatening situation occurred several years ago, you successfully hired an outside security agency to provide the necessary protection and act as a deterrent. You have contacted this agency again, but feel the present situation calls for even stronger measures - among them assigning your senior staff officers to the security office to help your security chief manage the assignment and duties of the outside personnel. Such administrative help will include Saturdays, even though your staff usually has this day off, and you feel it would be potentially disastrous if the subordinate assigned for a given day did not take his responsibility seriously (or worse yet, did not show up).

Your problem now is to determine a rotation schedule for your subordinates' assignments to the security office that will minimize the disruption of other work performed by your staff. You are aware of the current status of their other projects and know who at the moment is already overloaded with work or involved with other critical bank matters. You are especially concerned, however, about your coverage on this Saturday. An important football game is being played, and your entire staff bought a block of tickets months ago and had planned on attending. While no one would want to be the one selected for Saturday duty, you know they are all as concerned as you about the present problem and recognize the need for the special precautions. Each would certainly put the job first if asked, but would also prefer to be assigned a day other than Saturday.

AI AII CI CII GII
Problem Nr. 23:

Setting: Manufacturing firm
Your Position: President

As president of a small family-owned business involving the manufacture of toothpaste tubes, you are facing your first major "catastrophe" since taking over the presidency from your father sixteen months ago. Last week, three of the production lines making lead tubes for fluoride toothpaste went "down" due to a major failure in the paint dryer which the three lines share. A new dryer was ordered but it will be a month before it can be delivered and installed. You were beginning to worry about your ability to meet a large shipment of lead tubes from one of your most important customers. Fortunately, when you last checked, there was a reasonable stock of finished tubes available in inventory which, when combined with expected output from the remaining lines, would probably meet the requirements.

Then, this morning, two of the remaining three "lead lines" went down due to minor faults in each of the presses. A decision will have to be made shortly about whether to convert one, two or three lines from producing aluminum toothpaste tubes to producing lead tubes. The conversion is a costly one and exceeds the capabilities of your small engineering staff. It would require the services of an outside firm, both to make the conversion to the production from aluminum to lead and the reconversion back to aluminum.

Before the decision is made, accurate estimates of the present stock levels and the repair time for the presses are needed. Your shipping and your maintenance managers, both of whom know about and are concerned about the problem, should be able to provide you with these estimates. You must balance the substantial costs associated with conversion against any possible damage to your business reputation if you miss the shipment.
Problem Nr. 24:

Setting: Corporate Headquarters
Your Position: Departmental Administrative Assistant

As a result of declining profits, all departments in the company have been asked to trim non-essential expenditures. You are the administrative assistant in one department, having responsibility for the secretarial staff and their equipment, and you have decided to investigate the department’s need for its present large, fast, and highly flexible copier. If it could be replaced by one of several cheaper machines on the market, a substantial cost saving could be effected. You have the specifications for both the present and smaller machines, and the salesman have advised you of various factors which should govern the choice of the machine, including utilization rates, number of copies required and fidelity of reproduction necessary. The secretarial staff can easily provide you with these data.

The secretaries would like to retain the present machine. They are much less concerned than you about costs, and are very cognizant of the many advantages the larger machine offers in ease of operation. If you installed the smaller machine, they might need to improvise on some jobs or take the work over to another department which would waste a lot of time. The staff could make life difficult for you by using any excuse to go over to the other department. The potential waste of time involved would mean that you would have to rule on each individual case, as no general set of regulations could be established to cover all contingencies.

Even though they will obviously be affected, all the secretaries know what a substantial amount of money is involved and believe that making these decisions is what you are paid for. It is an office joke that none of them would want your job and its responsibilities.
Problem Nr. 25:

Setting: Bank
Your Position: President

You are president of a small but growing midwest bank, with its head office in the state's capital and branches in several nearby market towns. The main banking functions are all related to agriculture. The location and type of business are factors which contribute to the emphasis on traditional and conservative banking practices at all levels.

You have recently acquired funds to permit the opening of a new branch. You believe there is no sure way to be certain that a new site will be successful, but you know from past experience that there are common sense criteria that can be applied to its selection. Your staff has provided you with a survey of suitable real estate opportunities in a number of communities in which you are interested. You have also received the results from a modest market survey of these areas performed by an outside agency at your request. Your experience in banking tells you this information, once integrated, is sufficient to make the decision.

Given their field experience, your branch managers are also quite knowledgeable about the areas in question. Many of the prospective sites, however, are sure to acquire some of the business now given these existing branches - an outcome your current managers would unilaterally oppose. You think they might all favor one distant site sure to have minimum impact on their status quo operations. In terms of the bank's overall profitability, however, this might not be the most favorable site.

Your branch managers, nonetheless, realize that this decision is part of your responsibility. They are also aware that their roles in setting up the new facility will be minimal. No major reassignment of personnel is expected.
Problem Nr. 26:

Setting: Manufacturing company
Your Position: Systems Engineering Supervisor

Within the relatively large manufacturing company, "systems engineering" is a small group of technical analysts that exists within the operations department. As systems engineering supervisor, you have received a request from someone in the marketing department for advice concerning a computer program to analyze some data on advertising. You told him you knew of several programs which would do the job but that you would like to give it a little more thought before making a final recommendation. The problem is a relatively simple one, although the amount of data raised some interesting questions about information storage and retrieval. It was apparent that marketing was particularly concerned about the cost of the necessary computer time because of the very large quantity of data to be processed. As soon as you have a spare hour to work on it, you feel sure that you can determine the program which would best suit their particular requirements.

You have two systems analysts working for you, both of whom recently joined the company after graduation from a university. While they are technically very qualified, you are happy that he brought the problem to you rather than to one of them since they have a tendency, common to many recent graduates, to recommend more complex and sophisticated approaches than are really required to do the job. You believe that this may be due to the fact that it reinforces their position as "high priests" of some advanced science. Your two subordinates' "desire to prove themselves" is reflected in competitiveness, particularly in their relations with one another. On the few occasions in which they have had to work together, each seemed to you to be trying to "show the other one up".

AI  AII  CI  CII  GII
Problem Nr. 27:

Setting: Manufacturing Plant  
Your Position: General foreman

Seven product lines involving four of your eight foremen will have to be disrupted to satisfy an emergency request from an important client. You are the general foreman and you naturally wish to disrupt these lines as little as possible. No additional personnel are available, and time limits to complete the new project are restrictive.

The plant is new and is the only industrial plant in an economically depressed area which is dominated by farming. You can count on everyone pulling his weight. The wages in the plant are substantially above farm wages, and their jobs depend on the profitability of this plant - the first new industrial development in the area in the last 15 years.

Your subordinates are relatively inexperienced, and you have been supervising them more closely than you might if the plant had been in a well-established industrial area and your subordinates more experienced. The changes involve only standard procedures and are routine to someone of your experience. Effective supervision poses no problem. Your problem is how to reschedule the work so as to meet this emergency within the time limit, with minimum disruption of the existing product lines. Your experience in such matters should enable you to figure out a way of meeting the request in a way which would minimize the disruption of existing product lines.
Problem Nr. 28:

Setting: Research and Development Laboratory
Your Position: Project engineer

You are a mechanical engineer heading a project concerned with the development and testing of turbine engines. Among your subordinates is a team of draftsmen assigned to the project to prepare technical drawings of turbine components. All are highly competent technicians, and you are quite pleased with their work.

However, a problem exists with the way in which these draftsmen list the technical specifications of certain components on the drawings. While they do include all the necessary data, each person has his own method of documenting the information. Differences include placement of the specification list on the drawing (e.g., Kwhr., Kwh. vs. kilowatt hour), etc. You feel that some standardization of procedure regarding such specifications is needed. Not only will this make the comparison and integration of drawings easier, it is also expected as a matter of professionalism. Choice from among the different styles, however, is not governed by technical considerations; there are no compelling reasons to prefer any one format over any other.

Your draftsmen profess that they are not at all concerned about the question. In the same breath, however, each argues that his method has some superiority over the others. You suspect that some question of professional judgement is felt to be involved, although not to the extent that it would seriously interfere with your subordinates' effectiveness, if one method was chosen over another. Whatever the format, it will be relatively easy to insure subordinates' compliance with the decision. As a matter of routine, all drawings are submitted to you for final approval.
Problem Nr. 29:

Setting: Import-Export Company
Your Position: Accountant

You are an accountant in a large, multi-national import-export company.

On arriving in your new position in Singapore from Taiwan, you have found that each of your subordinates has the title Assistant Accountant and has no clearly defined allocation of responsibility. This was made possible by the fact that your predecessor spent a large part of his time supervising all of their work.

One of the most difficult problems is processing the accounts of the many small, often one-man businesses that supply you with carvings and other native products for export. Your predecessor has attempted to deal with these problems by mail. This has proved ineffective, and you have decided that it would be better for one of your subordinates to visit the firms concerned and sort out the various problems.

The problem is which subordinate to use. Transportation is no problem as they all ride to work on scooters and all visits would be within a 30-mile radius of Singapore. Bad business practices with respect to these small firms has been cutting heavily into profits. It is very important that whoever is chosen understands all the procedures involved in the various business transactions concerned and is also able to explain them to a wide variety of people.

The oldest man is 48, the second 44, and the youngest man is 25. All three are Chinese, and the older men are quite traditional in their outlook, highly deferential to you, and would naturally expect the oldest to receive the assignment. You know that the younger man has been to school in England, and as a result, he might show more initiative and be less dependent upon supervision. He may also be more likely than the other two to believe that the position should be assigned on the basis of merit rather than age.

Whoever is given the job will be given an expense account. This is considered a symbol of high status and is of financial benefit, as the company will cover the costs of operating the scooter.

Finally, whoever is chosen will be dependent upon the other two subordinates for information as to which firms to call on. You could supervise this, but your other commitments at the present time rule this out.

You have given the matter careful thought and it appears clear to you that one of the candidates would be much more effective than the other two in this position.

A I  A II  C I  C II  G II
Problem Nr. 30:

Setting: Department Store
Your Position: Floor Manager

You are the floor manager for the women's sportswear section of a large department store and responsible for several sales people. You must decide which items in your line are to be given special spring sale display positions. The proper display mix of reduced items and regular stock is required to insure good sales performance and profitability during the promotion period.

The timing of the sale makes it one of your more important events. Success, however, will depend in large part on the cooperation of your sales people. You cannot possibly give good display to all the items you would wish, and must therefore rely on your clerks to "talk up" non-display items of potentially high volume that may otherwise go unnoticed by the customer.

Your past performance has been of a very high level, and it is recognized in your chain that you have a real flair for predicting - and influencing - fashion trends. Your sales people, all of whom receive a commission in addition to their hourly wage, are counting on you to repeat last year's success.
**PROBLEM SET #5 ANSWER SHEET**

PLACE AN X OVER THE DECISION MAKING PROCESS YOU WOULD USE IN EACH PROBLEM (e.g. A1 AII CI CII GII).

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
<td>A1</td>
<td>AII</td>
<td>CI</td>
<td>CII</td>
<td>GII</td>
</tr>
</tbody>
</table>

PLEASE CHECK ONE ITEM IN EACH OF THE FOLLOWING CATEGORIES THAT DESCRIBES YOUR ORGANIZATION, YOUR LEVEL IN THE MANAGEMENT HIERARCHY, AND YOUR MANAGEMENT FUNCTION:

**A. Type of Organization**
- [ ] Manufacturing
- [ ] Processing (Chemicals, Paper, etc.)
- [ ] Technological Development
- [ ] Service
- [ ] Government
- [ ] Transportation
- [ ] Utility
- [ ] Other

**B. Level of Management**
- [ ] First Level Supervisor
- [ ] Manager of Supervisors
- [ ] Unit/Department Manager
- [ ] General/Executive Manager
- [ ] Individual Contributor
- [ ] Not Related to a Specific Level
- [ ] Other

**C. Managerial Function**
- [ ] Production/Operations
- [ ] Research/Engineering
- [ ] Sales/Marketing
- [ ] Finance
- [ ] General Management
- [ ] Personnel
- [ ] Other

**D. Age**
- [ ] Under 20
- [ ] 20-30
- [ ] 30-40
- [ ] 40-50
- [ ] 50-60
- [ ] 60+

**E. Sex**
- [ ] Male
- [ ] Female

**F. How many subordinates report directly to you?**

**G. How many years have you been with the company?**

**Nationality:** _______________
PROBLEM SET #5 ANSWER SHEET

PLACE AN X OVER THE DECISION MAKING PROCESS YOU WOULD USE IN EACH PROBLEM (e.g. AI AII CI CII GII).

1. AI AII CI CII GII  11. AI AII CI CII GII  21. AI AII CI CII GII
2. AI AII CI CII GII  12. AI AII CI CII GII  22. AI AII CI CII GII
3. AI AII CI CII GII  13. AI AII CI CII GII  23. AI AII CI CII GII
4. AI AII CI CII GII  14. AI AII CI CII GII  24. AI AII CI CII GII
5. AI AII CI CII GII  15. AI AII CI CII GII  25. AI AII CI CII GII
6. AI AII CI CII GII  16. AI AII CI CII GII  26. AI AII CI CII GII
7. AI AII CI CII GII  17. AI AII CI CII GII  27. AI AII CI CII GII
8. AI AII CI CII GII  18. AI AII CI CII GII  28. AI AII CI CII GII
9. AI AII CI CII GII  19. AI AII CI CII GII  29. AI AII CI CII GII
10. AI AII CI CII GII  20. AI AII CI CII GII  30. AI AII CI CII GII

PLEASE CHECK ONE ITEM IN EACH OF THE FOLLOWING CATEGORIES THAT DESCRIBES YOUR ORGANIZATION, YOUR LEVEL IN THE MANAGEMENT HIERARCHY, AND YOUR MANAGEMENT FUNCTION:

A. Type of Organization
   ___ Manufacturing
   ___ Processing (Chemicals, Paper, etc.)
   ___ Technological Development
   ___ Service
   ___ Government
   ___ Transportation
   ___ Utility
   ___ Other

B. Level of Management
   ___ First Level Supervisor
   ___ Manager of Supervisors
   ___ Unit/Department Manager
   ___ General/Executive Manager
   ___ Individual Contributor
   ___ Not Related to a Specific Level
   ___ Other

C. Managerial Function
   ___ Production/Operations
   ___ Research/Engineering
   ___ Sales/Marketing
   ___ Finance
   ___ General Management
   ___ Personnel
   ___ Other

D. Age  E. Sex  (M,F)

F. How many subordinates report directly to you? ___

G. How many years have you been with the company? ___

Nationality: ___________________________