Master's thesis

Master of Engineering

Engineering Management

2015

Marko Junno

## SELECTED COMBINATIONS OF SITUATIONAL MANAGEMENT IN THE CONTEXT OF MODERN EXPERT ORGANIZATION.

- The Leadership Focus.



MASTER'S THESIS | ABSTRACT

TURKU UNIVERSITY OF APPLIED SCIENCES

Tekniikka | Teknologiaosaamisen johtaminen

Autumn 2015 | 37 pages

Instructors: Tero Reunanen and Juha Kettunen

#### Marko Junno

# SELECTED COMBINATIONS OF SITUATIONAL MANAGEMENT IN THE CONTEXT OF MODERN EXPERT ORGANIZATION. THE LEADERSHIP FOCUS.

Leadership is a concept proven troublesome to unambiguously define and its effectivity to assess. What is the role of leadership in modern expert organizations, how do the leaders themselves experience it and how can it be measured? Successful leaders need a set of leadership and management skills, or competencies as called in this study, to lead their organization towards a successful future in the fast changing world of today.

The objective of this study is to examine the feasibility of a leadership competency survey tool, which could be used in modern expert organizations to find the leader's conscious awareness towards the different leadership competencies. This study involved one target group consisting of leaders from the Faculty of Technology, Environment and Business from Turku University of Applied Sciences.

The management windshield metaphor's leadership focus is used as the theoretical basis and assessment model to create a survey tool which could be used to study the leader's leadership competencies. The findings show that while the study itself gave positive results about the function of the survey, the competence level self-evaluation part is difficult and to create a realistic evaluation of the respondent, the survey should be further developed. Those future research directions are also discussed in this paper.

**KEYWORDS:** 

Leadership, Organizational behavior, Leadership competencies

OPINNÄYTETYÖ (YAMK) | TIIVISTELMÄ

TURUN AMMATTIKORKEAKOULU

Tekniikka | Teknologiaosaamisen johtaminen

Syksy 2015 | 37 sivua

Ohjaajat Tero Reunanen ja Juha Kettunen

#### Marko Junno

## JOHTAMISEN VALITUT KOMBINAATIOT MODERNIN ASIANTUNTIJAORGANISAATION KONTEKSTISSA. FOKUKSENA JOHTAJUUS.

Johtajuuden käsitteen yksiselitteinen määrittely, sekä sen tehokkuuden arviointi, ovat osoittautuneet hankaliksi toteuttaa. Mikä on johtajuuden rooli nykyaikaisissa korkean teknologian asiantuntijaorganisaatioissa, miten johtajat tuon roolin kokevat itse ja voidaanko johtajuutta jotenkin arvioida? Nykypäivän nopeasti muuttuvassa maailmassa menestyvät johtajat tarvitsevat johtamisen alan taitoja, tai kompetensseja, kuten tässä opinnäytetyössä niitä kutsutaan. Näiden kompetenssien avulla menestyvä johtaja voi auttaa organisaatiotaan eteenpäin kohti parempaa tulevaisuutta.

Tämän tutkimuksen tarkoituksena on tarkastella johtajuuden arviointityökalun toteutettavuutta ja soveltuvuutta nykyaikaisten asiantuntijaorganisaatioiden johtajien tietoisten johtajuuden kompetenssien tutkimiseen. Tutkimuksen kohteena oli yksi kohderyhmä, joka koostui Turun Ammattikorkeakoulun tekniikan, ympäristön ja talouden –tulosalueen johtajista.

Tässä tutkimuksessa käytetään johtamisen tuulilasin metaforan johtajuuden fokusta teoreettisena perustana ja mallina johtajuuden kompetenssien tutkimusvälineen kehittämiseen. Tutkimuksen tulokset osoittavat, että vaikka tutkimus itsessään antoi positiivisia tuloksia työkalun toimivuudesta, niin omien kompetenssitasojen itsearviointi saattaa olla vaikeaa. Tutkimustyökalua on vielä kehitettävä, jotta vastaajista voitaisiin saada realistisempia arvioita. Näitä tutkimustyökalun tulevaisuuden kehityskohteita käsitellään myös tässä työssä.

#### ASIASANAT:

Johtajuus, organisaatiokäyttäytyminen, johtajuuden kompetenssit

### **CONTENT**

1 INTRODUCTION	6
2 LITERATURE REVIEW	9
2.1 Leadership approaches	11
2.1.1 Trait approach	12
2.1.2 Behavior approach	13
2.1.3 Power-influence approach.	13
2.1.4 Situational approach	13
2.1.5 Integrative approach.	14
2.2 Theoretical background in this study	14
2.2.1 Transactional Leadership	15
2.2.2 Transformational Leadership	17
2.2.3 Servant Leadership	19
2.2.4 Emotional Intelligence	21
3 METHODS OF THE STUDY	24
3.1 Data collection	25
3.1.1 Transactional and transformational leadership competencies	26
3.1.2 Servant leadership competencies	26
3.1.3 Emotional intelligence competencies	27
3.2 Data analysis	27
4 RESULTS AND DISCUSSION	29
5 CONCLUSIONS	36
REFERENCES	38

## **APPENDICES**

Appendix 1. Source of propositions; the theoretical model of management windshield's leadership focus.

Appendix 2. The cover letter of the survey.

Appendix 3. The instructive forewords of the questionnaire.

Appendix 4. The reminder letter of the survey.

Appendix 5. Webropol questionnaire including all propositions from all three individuated studies.  Appendix 6. Pearson's correlation matrix of current state.  Appendix 7. Pearson's correlation matrix of target state.  Appendix 8. Pearson's correlation matrix of competency gap.  Appendix 9. Spearman's correlation matrix of current state.  Appendix 10. Spearman's correlation matrix of target state.  Appendix 11. Spearman's correlation matrix of competency gap.  Appendix 12. Pearson's current state correlations illustrated in a Sammon map.	ual
Figure 1. The leadership process in accordance to the variables of the key leadersh theories (Yukl 2013, 27) Figure 2. The management windshield illustrated as the data structure model (Vanharanta 2008, applied by Reunanen 2013) Figure 3. All answers regarding the current state of all competencies. Figure 4. All answers regarding the target state of all competencies. Figure 5. All answers regarding the competency gap of all competencies.	12 15 33 34 35

## **TABLES**

Table 1. The number of statistically significant correlations in tested cases and the	
percentage of highly significant correlation between respondents compared to all	
comparisons possible.	29
Table 2. Averages and standard deviations of the data.	31

#### 1 INTRODUCTION

Good leadership is like good quality; we can recognize it when we see it. However, just as quality, leadership can be difficult to define unambiguously. Whether it actually exists or can its effectiveness be defined, is still much debated in the organizational behavior discussion (Kerr & Jermier 1978; Meindl et al. 1985; Alvesson & Sveningsson 2003; Bligh et al. 2011; Yukl 2013). Leadership as a phenomenon is debated also in Finland, but research coverage is not yet sufficient enough and this study contributes to that.

The idea for this study was triggered by the wide discussion about the meaning and effectiveness of leadership in general and the debated economic situation in Finland. Another trigger was an interesting outcome from a large research about the barriers of productivity development that was conducted in Finland. Studying 239 small and medium-sized Finnish companies during the years 1997 – 2014, researchers found that leadership was seen as the single most important inner factor, which had a direct impact on companies' outcomes. (Rantanen, Rantala & Pekkola 2015, 30.) Also, while writing this article, another research was published, which studied a large Finnish origin company Nokia, during the years 2005 and 2010. They found that fears in top and middle-management led to poor leadership and thus innovation capability suffered and the company experienced a rapid downfall from its position as a market dominant and innovative organization. (Vuori & Quy 2015, 1.)

The purpose of the study is to investigate, whether it is feasible to build a survey tool, a well covering set of propositions derived from the theories of leadership focus domain of the management windshield (Vanharanta 2008; Reunanen 2013) and get reliable results. To evaluate the most significant leadership competencies with the tool, all the competencies were broken down to factors and then propositions were created to best describe those factors. Answering those propositions, the respondent would self-evaluate their own leadership competencies, which would then be analyzed by the researcher.

Leadership literature was first reviewed to build an ontology of leadership, to find out what organizational scholars have to say about it and what the concept of leadership comprise. Particularly how it should be approached and whether it has an effect on organizational outcome and if so, how it can be measured. For this reason, the metaphor of the managerial windshield (Vanharanta 2008; Reunanen 2013) was chosen to represent the theoretical frame of reference where this study was to be carried out.

The research strategy used in this study includes both deductive and inductive reasoning as they are both needed in scientific research (Uusitalo 1992). Deductive thinking was used when the propositions were derived from the theories and inductive thinking was used when the propositions were tested with the survey. Positivist approach and hermeneutic approach are the two main research approaches when collecting data for a study. Hermeneutic approach is used in qualitative research and positivist in quantitative research. Hermeneutic approach is used to address non-quantitative data and positivist approach is used to address quantitative data using mathematical and statistical methods to analyze data. (Gummesson 2000.) Since the nature of this study is quantitative, positivist approach better describes the methods used here. The main elements in a quantitative research, which can be found in this study also, are conclusions from prior studies, prior theories, hypotheses presentation, concept specification, the acquirement of numerical data from a defined universe, the creation of table formats from the variables and conclusion making based on statistical analysis of the acquired data (Hirsjärvi, Remes & Sajavaara 2007, 136).

This paper is organized as follows. In the next section, the concept of leadership is presented along with a classification of major leadership approaches: 1) trait 2) behavior 3) power-influence 4) situational and 5) integrative approaches (Yukl 2013, 28–29), as the ontology of leadership. The paper continues with the theory of the management windshield and concentrates especially to its focus of leadership for its situational nature. Leadership focus comprises such leadership theories and skills as transactional leadership, transformational leadership, servant leadership and emotional intelligence. (Vanharanta 2008; Reunanen 2013.) All

skills that a good leader should master and use, depending on the nature of the situation. After the literature review, the methods of acquiring the data and the data itself are presented. Results are discussed in the next section, followed by the conclusions and future research issues.

#### **2 LITERATURE REVIEW**

"Leadership is one of the world's oldest preoccupations" as Bass (1990, 3) puts it. It has been the interest of people since the beginning of recorded history, but scientific research of leadership did not exist before the twentieth century. In the context of organizational behavior, leadership has been defined in numerous ways. After his review of leadership literature, Stogdill (1974, 259) wrote "there are almost as many definitions of leadership as there are persons who have attempted to define the concept". In their study on the last half-century of leadership research, Glynn & DeJordy (2010, 119) found that despite the fact that Harvard Business Review alone has published around 500 articles that refer to leadership in their abstract, the consensus of the meaning of leadership still remains unachieved.

The interest towards leadership research remains strong and researches tend to define leadership according to their own interests of the phenomenon and new definitions of leadership have continued to emerge since Stogdill made his observation (Yukl 2013, 18). Katz & Kahn (1978, 528) defined leadership as "the influential increment over and above mechanical compliance with the routine directives of the organization", where Hersey & Blanchard (1988, 86) defined it as "leadership is the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation". Bass (1990, 19–20) takes a broader approach with his integrative definition of leadership by stating: "leadership is an interaction between two or more members of a group that often involves a structuring or restructuring of the situation and the perceptions and expectations of the members. Leaders are agents of change – persons whose acts affect other people more than people's affect them. Leadership occurs when one group member modifies the motivation or competencies of others in the group --- with this broad definition, any member of the group can exhibit some amount of leadership and the members will vary in the extent to which they do so".

Because of the vast amount of different definitions of leadership and so many different meanings to people, some theorists and critics argue that the effects of leadership might not exist at all. Scholars such as Kerr & Jermier (1978, 377), claimed that the effect of certain variables neutralize the leader's effectivity on subordinate satisfaction and performance. Some theorists argue that followers see historical, economic, or social forces as leadership effects, when in fact, they are just romanticizing the situation.

In their attempt to "understand the prominence of the concept of leadership in our collective minds", Meindl et al. (1985, 78) were not able to generate an understanding about leadership that was both "intellectually compelling" and "emotionally satisfying" and the concept of leadership remained unattainable to them. They cited general critique about the leadership theories and research, including poor methodology, conceptual problems, definitional ambitions, inappropriate focus and lack of coherence. They also claimed that people have developed a highly romanticized and heroic view of leadership, which they called the "romance of leadership" (RoL). This view especially romanticizes the effects of leaders' actions and what they are able to accomplish and how they affect their lives. Leadership being a central organizational process and the premier force in the organizational events and activities is seen as the main element in the romanticized conception. (Meindl et al. 1985, 78-79.) Alvesson & Sveningsson (2003, 359) also argue that leadership could be non-existent as distinct phenomenon. After reviewing RoL and the social construction of leadership theory, Bligh et al. (2011, 1059) said even 25 years after the development of RoL, we still seem to have a highly romanticized view of leadership.

Nevertheless, although there are theorists and critics saying leadership is no more than a romanticized illusion and not a real phenomenon, most of the organizational behavioral scientists seem to believe otherwise. They believe leadership is a real phenomenon, which can have an impact on the organizational effectiveness. (Yukl 2013, 19.) In their definition of the state of leadership research, Mackenzie & Barnes (2008, 92) state "interest in the phenomena of leadership knows no geographical, political, or temporal boundaries. Leadership is widely acknowledged to be important to groups, organizations and even societies." They con-

tinue saying despite the common understanding of how external forces can impact the performance of an organization, "we still attribute organizational success to good leadership and failure to poor leadership." According to Bass (1990, 8), leaders do make a difference and all social and political movements require a leader to begin them. He also claims leadership to be the most critical factor in the success of institutions and in the business and industrial sector for companies to survive and prosper, they need a higher level of leadership than ever before due to increasing competition, technological advances, changing governmental regulations and changing working attitudes.

The research findings of the barriers of productivity development in Finnish companies, support the idea of leadership being an effective phenomenon. In their study, Rantanen et al. (2015) found out that the most significant barrier to increased internal productivity, where the company itself can have a direct impact, is the leader's know-how and education deficiency related to productivity matters. This is something that has changed during the last twenty years in Finland. Similar studies were made in 1997 and this deficiency was considered only the fourth or tenth most important internal barrier then. (Rantanen et al. 2015, 28–30.)

#### 2.1 Leadership approaches

The development of theoretical organizational leadership research has a historical pattern. Leadership theories have always been influenced by the broader theoretical milieu of their period and the events and needs of the times in which the theoretical models evolved. (Glynn & DeJordy 2010, 122.) There are many ways to classify leadership theories and try to organize them to major approaches. To understand leadership effectiveness, Yukl's (2015) version provides means by classifying leadership theory and research according to their most emphasized variable. Effective leadership research emphasizes the characteristics of leaders, characteristics of followers and characteristics of the situation. Most theories emphasize one over the other and leader's characteristics have been emphasized

mostly over the past fifty years. (Yukl 2013, 25–26.) According to the key variables in leadership theories, Yukl (2013, 28) divided the leadership approaches to five major approaches and Figure 1 illustrates the causal relationships between them.

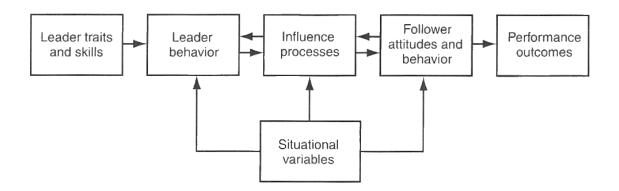


Figure 1. The leadership process in accordance with the variables of the key leadership theories (Yukl 2013, 27)

These five major leadership approaches are: 1) the *trait approach* 2) the *behavior approach* 3) the *power-influence approach* 4) the *situational approach* and 5) the *integrative approach*. Most leadership research seems to strive to find a variable's, such as leader traits, impact on performance. The leadership research focus has actually shifted from the significance of decision-making to the significance of economic performance in the last fifty years. (Podolny et al. 2005, 1.)

#### 2.1.1 Trait approach

This was one of the earliest leadership theories, surfacing in the early 1920's. It started from a psychological perspective and an assumption that leaders had superior qualities and in possession of special attributes, skills or physical characteristics, that differentiated them form their followers. Behind trait theories is the so-called Great-Man theory according to which leaders are born, not made. However, the trait theory was not able to explain why everyone who had these special traits did not become successful leaders. Researchers concluded that plain traits did not guarantee success as leader, success was dependent on the leader's behavior among other things. (Bass 1990, 38; Glynn & DeJordy 2010, 122.)

#### 2.1.2 Behavior approach

In the early 1950's, many researches were turning their attention away from the trait approach to behavior approach, to study what the managers actually do on the job (Yukl 2013, 28.) There are two major lines of research in the behavioral approach. Task orientation, which studies the achievement of work goals, organizing structures, rules or designs and people orientation, which studies relationships between people and consideration for followers. Behavioral styles are seen as stable properties which do not change according to situation. This lack of situationality and the abstracted concepts of behavioral types sent researchers on a quest for more situationally specific theories. (Glynn & DeJordy 2010, 122–123.)

#### 2.1.3 Power-influence approach.

The influence processes between the leader and other people are at the core of the power-influence approach. Some of the research in this approach is leader-centric and assumes that causality is only unidirectional, which means that after when leaders act, followers react. Power is seen important to influence subordinates and also superiors, peers and others outside the organization, such as clients and suppliers. The amount of power and how the leader exercises power, determines leadership effectiveness. (Yukl 2013, 28–29.)

#### 2.1.4 Situational approach

Whereas trait and behavior approaches are theorized as static approaches, situational approach is the exact opposite. Contextual factors that have an impact on leadership processes play an important role. A great leader is seen as a result of time, place and circumstance. The leaders are assumed to possess an arsenal

of behavioral styles and leadership attributes, which they can use adaptively, depending on the situation or followers. (Bass 1990, 38; Glynn & DeJordy 2010, 123.)

#### 2.1.5 Integrative approach.

This approach usually includes several types of leadership variables such as traits, behaviors, influence processes, situational variables and outcomes, in the same study. (Yukl 2013, 29.) It could be said that the integrative approach describes the approach used in this study fairly well, since this study also includes the above mentioned types of leadership variables.

#### 2.2 Theoretical background in this study

The theoretical starting point in this study is the management windshield; the effective combination of leadership and management introduced by Vanharanta (2008) and continued by Reunanen (2013). The management windshield consists of upper-level knowledge model of leadership ontology, management ontology and time ontology.

Both, the leadership and management ontologies comprise activities, style, focus and purpose. Time ontology (Reunanen 2015), positioned between leadership and management ontologies, comprises six levels, which are not considered here. Figure 2 illustrates the management windshield as the data structure model applied in this study.

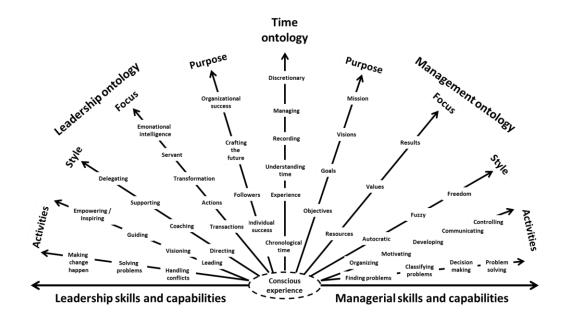


Figure 2. The management windshield illustrated as the data structure model (Vanharanta 2008, further developed by Reunanen 2013)

The leadership ontology's focus is used as the theoretical basis and assessment model to find the leader's conscious awareness towards the different leadership styles and personal competencies. Leadership focus consists of five competencies, of which the four most relevant are used in this study: transactional leadership, transformational leadership, servant leadership and emotional intelligence.

#### 2.2.1 Transactional Leadership

Burns (1978) first introduced the concepts of transactional leadership, along with the transformational leadership. Bass (1999, 11) describes transactional leadership as "a relationship between leader and follower to meet their own self-interests". It is also a motivator for the followers to deliver a desired outcome. Followers may also receive punishment if the expected result is not accomplished. This type of leadership refers to a leadership style which is based on exchange between the leader and the follower, where the follower's material and psychic needs are satisfied and the leader gets an expected work performance in return (Deichmann & Stam 2015, 205). Values are not an essential part of transactional leadership although it may involve values such as honesty, fairness, reciprocity

and responsibility. These values are relevant only from the exchange process point of view (Yukl 2013, 312).

To assess the levels of transactional leadership competency, this study utilizes the new version of transactional leadership, which takes on four forms, referred to as factors in this study: 1) contingent reward, 2) active management-by-exception, 3) passive management-by-exception and 4) laissez-faire (Bass 1999; Yukl 2013, 314).

Contingent reward. This type of leadership behavior includes clarifying, negotiating and tying specific accomplishments to performance in order for the follower to obtain specific rewards. These rewards are usually material and include psychic elements, such as the satisfaction of doing good work. It also includes the use of incentives and kudos to influence the follower's motivation. (Bass 1999, 11; Avolio et al. 1999, 444–445; Judge & Piccolo 2004, 755; Yukl 2013, 313.)

Active management-by-exception. This behavior model concentrates on irregularities, exceptions, mistakes and deviations from what is considered standard. Timing is the essential part between active and here later introduced passive management-by-exception. An active transactional leader does not wait for problems and incidents to occur, but rather monitors and traces errors closely and takes initiative action to prevent errors by enforcing rules to avoid them. (Bass 1999, 11; Avolio et al. 1999, 445; Judge & Piccolo 2004, 756; Yukl 2013, 314.)

Passive management-by-exception. Opposite to an active transactional leader, the passive transactional leader waits for the errors and incidents to surface before taking any action. In passive management-by-exception, the focus is on failures, rather than success. This also includes the use of punishments and other corrective actions, but only after the occurrence of deviations from the desired performance. (Bass 1999, 11; Judge & Piccolo 2004, 756; Yukl 2013, 313.)

Laissez-faire. This last form of transactional leadership is the totally passive avoidance or absence of leadership, the laissez-faire. Such leaders avoid in-

volvement, making decisions, hesitate in taking actions and they are usually absent when they are needed. They do not care of followers needs or taking care of issues. For its totally passive nature, it is actually a non-leadership approach (Bass 1999, 11; Judge & Piccolo 2004, 756; Yukl 2013, 314; Greiman 2009, 52.)

#### 2.2.2 Transformational Leadership

As mentioned earlier, Burns (1978, 19) introduced the concepts of transformational leadership and claimed it induced the followers to act towards a certain common goal, which represented both leaders and followers. Since then, transformational leadership has been extensively studied by organizational scholars. Amongst other definitions it is said to be "the product of past experience to future course of action through innovative ideas, views and intellect" (Chaudhuri, Kettunen & Naskar 2015, 94). Chaudhuri et al. (2015) also define the behavior of a transformational leader as an input mechanism to create organizational development through the three core concepts of leading, initiating change and organizational makeover (Chaudhuri et al. 2015, 97.) Transformational leadership is a process of changing how followers envision themselves and it can be learned and managed. Transformational leaders are also seen capable of turning followers into leaders by inducing followers to go beyond their own needs for the good of the organization and become aware of what is really important. (Bass 1990, 53; Tse & Chiu 2014, 2827; Yukl 2013, 313.) Transformational leadership is seen most effective in the time of change in the organization and it can have a positive impact on follower's commitment to that change (Tyssen et al. 2014, 371).

The 5 forms of transformational leadership that are utilized in this study to assess the levels of transformational leadership competency are: 1) idealized influence – attributes, 2) idealized influence – behaviors, 3) inspirational motivation, 4) intellectual stimulation and 5) individualized consideration (Bass 1999; Avolio & Bass, 2004; Greiman 2009, 51).

*Idealized influence – attributes.* Transformational leaders exhibit their influencing attributes by appearing in a charismatic, ethical and reliable manner. They make

personal sacrifices for the benefit of the organization, respond calmly to crisis, make followers feel proud when associated with them and promote trust in future success. (Bass 1999, 19; Greiman 2009, 51.)

Idealized influence – behaviors. Leadership behavior that results in followers identifying with the leader and desiring to emulate the leader, can be described as idealized behavior. Transformational leaders communicate effectively with followers and create trust among followers. They also demonstrate ability to consider the ethical and moral consequences of their actions and commit to difficult actions. (Bass 1999, 19; Greiman 2009, 51.)

Inspirational motivation. This refers to leadership that creates meaning and challenges to their follower's activities, inspires followers to commit to a shared goal or vision and creates an atmosphere of optimism in the organization. Transformational leaders inspire followers by creating a compelling and inspiring vision of the future. They also communicate how to reach it and set an example for followers and show determination and confidence to achieve the shared goals. (Bass 1999, 11,19; Greiman 2009, 51.)

Intellectual stimulation. A transformational leader challenges the status quo of followers' and organization's beliefs, assumptions, traditions and habits. Such leader stimulates the follower's intellectuality and creativity, brings out new ideas and promotes creative problem solving. Intellectual stimulation can enhance the followers' capability to innovate, change and bring up differencing, constructive opinions. (Bass 1999, 11; Avolio et al. 1999, 444; Greiman 2009, 51.)

Individualized consideration. When the leader shows interest towards follower's personal needs and supports and coaches them as needed, individual consideration is being exhibited. Transformational leaders also create opportunities for follower growth by assigning them challenging assignments and provide a supportive climate for that. Such leader is also able to see the followers as individuals and accept their differences. (Bass 1999, 11; Avolio et al. 1999, 444; Greiman 2009, 51.)

#### 2.2.3 Servant Leadership

The term "servant-leadership" was introduced by Robert Greenleaf (1970) in his essay "The servant as leader", where he stated true leaders are chosen by their followers. He also described a servant leader as being a servant first and being "sharply different from one who is a leader first" and that is "the key to his greatness". (Greenleaf 1970, 2,6.) Since Greenleaf published his ideas, servant leadership has been studied until this day and seen as a worthy theory of leadership although some criticize it being too vague to be taken into account (Mackenzie & Barnes 2007). Servant leadership in work organizations includes putting others, the followers, needs first and helping them to reach shared goals. This can lead to better working atmosphere and service in the organization, but does not necessarily have an impact on e.g. sales performance (Hunter et al. 2013, 327).

A servant leader builds an environment that serves the needs of the organization and enables the followers to grow and develop and become more willing to accept responsibilities. A servant leader focuses also on building positive long-term relationship with followers. (Yukl 2013, 336–337; Liden et al. 2008, 162) Avolio et al. (2009) mention 10 characteristics that well describe a servant leader: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment and building community (Avolio et al. 2009, 436). Compassionate love, or just compassion in organizations, could also be linked to servant leadership. van Dierendonck & Patterson (2015, 121) claim compassionate love to be a foundational element of servant leadership.

While the research on servant leadership is still limited (Yukl 2013, 337), there are some cases of successful studies carried out by researchers. The seven distinguishable and reliable factors of servant leadership surfaced in the study carried out by Liden et al. (2008) and they are utilized also in this study to assess the level of servant leadership competency. They are: 1) conceptual skills, 2) empowerment, 3) helping subordinates to grow and succeed, 4) putting subordinates first, 5) behaving ethically, 6) emotional healing and 7) creating value for the community (Liden et al. 2008, 166).

Conceptual skills. The ability to thoroughly understand the organization, its goals and tasks and think through complex problems to affectively help and support followers.

Empowerment. The ability to facilitate and encourage followers in identifying and solving issues. A servant leader also encourages followers to make important work decisions on their own.

Helping subordinates grow and succeed. The servant leader shows interest in follower's development and well-being and helps the follower to reach goals by coaching and mentoring and providing the possibilities for their growth.

Putting subordinates first. This means that the leader makes clear to followers that the followers' work needs to come first. A servant leader often discontinues their own work to help the follower in their distress or need. They care more of the follower's success than their own and do what they can to make the follower's work easier.

Behaving ethically. This means interacting with the followers in an open, straightup, trustworthy, honest and fair manner. A servant leader would not compromise their own ethical principles in order to succeed and they value honesty more than profit.

Emotional healing. This is the ability to show empathy and sensitivity to others and their personal concerns and recognize other emotions. Servant leaders often take time to talk to others on a personal level also and they have the ability to recognize people's moods and feelings without asking them.

Creating value for the community. A servant leader has a real, genuine concern for helping their community or organization. They are eager to help people in the community or organization and emphasize the importance of giving back to the community. (Liden et al. 2008, 162.)

#### 2.2.4 Emotional Intelligence

Emotions are powerful human feelings, which should not be underestimated, when discussing leadership competencies. As the process of leadership involves people and their emotions, it is likely that those emotions affect the behavior and cognitive processes of leaders and followers. Even a passed emotion can leave a person in positive or negative mood and that mood is very difficult to neutralize so, that it would not affect the leadership process. This last level of focus was introduced twenty years ago (Goleman 1995) and it is seen not as an actual leadership theory, but more like a managerial competency model (Yukl 2013, 158.)

Emotional intelligence can be defined as the individual's ability to identify, understand and control emotions within themselves and recognize them in others also (Bradberry & Greaves 2009, 23–24). An emotionally intelligent leader must possess good skills in self-awareness by monitoring their own moods and emotions, self-management by controlling those emotions and behavior and not letting them affect results, social awareness by recognizing follower's emotions and the currents of office politics and relationship management by communicating effectively and acting in a way that spreads their enthusiasm and promotes good mood and team spirit. (Goleman et al. 2001, 49; Yukl 2013, 158-159.) These skills can be learned and to be able to reach a high level of emotional intelligence, to "rewire the brain", there is a five-part process designed to change the leader's behavior towards that goal. It starts from self-studying and recognizing your true nature and continues by making a realistic plan to achieve one's ideal state of emotional intelligence. When such a state has been reached, one must actively practice these learned skills and by creating a network of coaches who mirror the leader's behavior, make sure that in the future the process continues. (Goleman et al. 2001, 48, 50–51.)

The revised Goleman model of emotional intelligence is utilized in this study to assess the level of emotional intelligence competency. Some scholars claim competencies missing from that model, such as a direct appeal for ethics and morality (Segon & Booth 2015, 797) and some claim the results being unreliable in some

extent (Virtanen 2013, 200). Nevertheless, since the Goleman four-branch model is often seen as the most promising model (Føllesdal & Hagtvekt 2013,748), it is utilized also here. The Goleman model of the emotional intelligent leader's abilities consist of 4 major factors, introduced earlier and their 18 sub factors. They are: 1) self-awareness, having sub factors: emotional self-awareness, accurate self-assessment and self-confidence 2) self-management, having sub factors: self-control, transparency. adaptability, achievement, initiative and optimism 3) social-awareness, having sub factors: empathy, organizational awareness and service and 4) relationship-management, having sub factors: inspiration, influence, developing others, change catalyst, conflict management and teamwork & collaboration. (Goleman et al. 2001, 49.; Goleman et al. 2002, 253–256.)

Self-awareness. The ability to recognize and understand one's own emotions consists of sub factors such as *emotional self-awareness*, which means recognizing one's own feelings and their effects on performance and the ability to speak openly about emotions. *Accurate self-assessment* means knowing one's own capabilities and being open to constructive criticism to learn. *Self-confidence* means being able to use one's own strengths and stand out in the crowd.

Self-management. The ability to control one's own emotions and act in trustworthy and predictable ways consists of sub factors such as self-control which means the ability to manage disturbing emotions and to stay calm and focused even in stressful situations. Transparency means the ability to show one's own true feelings, opinions and actions and openly admit when making mistakes and tackle unethical actions. Adaptability means the ability to adjust to change and take on new challenges and handle multiple demands without losing focus on what is important. Achievement means having high standards of performance level expectations of the whole organization and being able to set sensible goals, estimate the correct risk level and promote continuous improvement. Initiative means not waiting for others to make future plans, but rather take control of one's own destiny and be willing to even bend the rules when necessary. Optimism refers to seeing an opportunity in a challenge rather than a threat or failure. It also

means seeing others in a positive light and seeing the future as an even better place.

Social-awareness. The ability to recognize others emotions and read the currents of office politics and atmosphere, consists of sub factors such as empathy which means feeling for others and see things from their point of view. It helps the leader to succeed in diverse organizations. Organizational awareness means the social awareness and ability to read key power relations and networks and understanding the political forces that affect the organization. Service means being available to customers and the ability to create an environment, where the customer relationships are appreciated and looked after. Customer satisfaction is monitored closely.

Relationship-management. The ability to communicate effectively, spread enthusiasm, build strong personal bonds and promote good team spirit consists of sub factors such as *inspiration*, which means the ability to effectively communicate a shared goal, tell clearly what the is expectations are and make work exciting. *Influence* means the ability to be persuasive, recognize the right approach for a given listener and find the right people to support initiatives. *Developing others* means showing real interest in the development of others by helping them to recognize their weaknesses, strengths and goals by giving effective constructive feedback in the right time; coaching and mentoring. *Change catalyst* means the ability to recognize the need for change and being in favor of it and making compelling argumentation even when facing opposition. After initiating the change, creating practical ways to promote it. *Conflict management* means being able to recognize and surface conflicts, find the common ground and reconciliation. *Teamwork & collaboration* means the ability to build good team spirit and create an atmosphere of enthusiasm, trust and respect in the organization.

#### 3 METHODS OF THE STUDY

This study is based on a quantitative research and the research data was acquired using a structured survey questionnaire, appendix 5, with Webropol, which is a popular online survey and analysis tool. Finnish language was used in the survey, because all the respondents were expected to understand it sufficiently to be able to carry out the self-assessment.

The target organization of the study was the Turku University of Applied Sciences Faculty of Technology, Environment and Business. The online questionnaire was sent to 27 recipients from the Turku University of Applied Sciences Faculty of Technology, Environment and Business steering group. Recipients contained dean, education managers and education & research leaders.

The data was gathered during the autumn of 2015. The first survey invitations were sent in mid-September and the reminder emails after two weeks. Due to the lack of responses, another set of invitations were sent to the recipients mentioned above. This round of invitations was successful and a total of eleven responses was received. The respondents consisted of three women and eight men of which six was between the ages of 41-50, four between the ages of 31-40 and one under 30 years old. Seven of the respondents had a Master's degree level of education and four had Doctorate degree. One of the respondents had over 30 years of leadership experience, two of them had 21-30 years, four of them had 11-20 years and four of the had 0-5 years of leadership experience. Most of the respondent had had some additional leadership and management training, which consisted of university studies, military training and various training provided by employers.

#### 3.1 Data collection

The questionnaire comprised propositions of three individual studies, all studying leadership thru the management windshield leadership metaphor, but from a different perspective. To maximize the answering rate, the time to fill the questionnaire was determined to be under 15 minutes. This resulted in reducing the amount propositions used in this particular study from the original 111 to 30, which equals one proposition per each used factor or sub-factor of the leadership focus. In addition to the propositions drawn from the factors, other common questions were put to the questionnaire to gather data for statistical purposes from the respondents. These questions comprised age, gender, education, leadership experience in years, leadership education and voluntary contact details.

The propositions of the questionnaire were derived from the factors of leadership theories concerning the management windshield leadership focus. Leadership focus consists of the theories and competencies of transactional leadership, transformational leadership, servant leadership and emotional intelligence. Each theory and competency was broken down to factors and sub factors. These factors then profiled each theory and competence, so that they could be measured using a self-assessing structured questionnaire.

Each proposition was divided into two parts to assess the respondent's current level and the desired level of leadership competencies related to management windshield's leadership focus. Respondents answered each of the propositions by choosing two points of view, the current situation and the target situation, from a forced-choice, six-item Likert scale. The scale items consisted of "totally disagree", "disagree", "disagree somewhat", "agree somewhat", "agree" and "totally agree". All answers from the propositions were handled as integers between 1 and 6, where "totally disagree" equals 1 and "totally agree" equals 6 and others between accordingly. In each proposition, the respondent was first asked to assess their current level of a given competency and then assess the target level of that same competency. This enables the questionnaire to bring out the respond-

ent's self-assessed levels of leadership competencies at the time and their desired levels in the future. By finding these competency gaps in present and future competency levels, the researcher can bring out the respondent's possible competency weaknesses. These weaknesses could then be addressed in suitable means, but that is not a part of this study. The success of the survey is of course highly dependent on the respondent's conscious awareness of their leadership competencies and their ability and willingness to truthfully assess their own personality.

#### 3.1.1 Transactional and transformational leadership competencies

Transactional and transformational leadership competencies were measured adapting the structure of the well-known Multifactor Leadership Questionnaire (Avolio, Bass & Jung 1999), specifically the best resulting nine factor model (Muenjohn & Armstrong 2008), but in a smaller scale. The nine factors are: (1) contingent reward, 2) active management-by-exception, 3) passive-management-by-exception and 4) laissez-faire), 5) idealized influence – attributes, 6) idealized influence – behaviors, 7) inspirational motivation, 8) intellectual simulation and 9) individualized consideration. For each of the nine factors, several describing propositions were formed and only one proposition, which described the factor best, was chosen to the questionnaire.

#### 3.1.2 Servant leadership competencies

Servant leadership competencies were measured adapting a small scale structure of the most reliable, seven-factor solution to measure servant leadership competencies (Liden et al. 2008). The seven factors are: 1) conceptual skills, 2) empowerment, 3) helping subordinates to grow and succeed, 4) putting subordinates first, 5) behaving ethically, 6) emotional healing and 7) creating value for the community. For each of these seven factors, several describing propositions

were formed and only one proposition, which described the factor best, was chosen. Only four out of these seven propositions was used in the questionnaire due to similarities with other propositions used in the questionnaire.

#### 3.1.3 Emotional intelligence competencies

Emotional intelligence competencies, which can be described more like managerial competencies, were measured adapting Goleman four-factor model to assess emotional intelligence (Goleman, Boyatzis & McKee 2001) in low scale. The four main factors in this model are: 1) self-awareness, 2) self-management, 3) social-awareness and 4) relationship-management. These four factors consist of 18 sub-factors and one best describing proposition per factor was chosen. One of these propositions was left out from the questionnaire due to similarity with another proposition used in the questionnaire.

#### 3.2 Data analysis

The gathered data was quantitatively analyzed using Webropol Professional Statistics tool and IBM SPSS statistics tool and Microsoft Excel. Some data, such as the example of a visualized Sammon style Pearson's correlation map illustrated in appendix 12, was visually analyzed with Webropol Professional Statistics for better understanding of correlations. In this example case, the correlation between transformational leadership, (TRF-factors in this figure), seems to be strong with emotional intelligence (EI-factors). SPSS was used in finding the Pearson's analysis correlations and Spearman's analysis correlations between the respondents' answers, because of its better usability and file export function. The results are shown in Table 1. SPSS was also used to find the averages and standard deviations in the data and these results are shown in Table 2. Microsoft Excel was used in creating the charts illustrated in Figures 3, 4 and 5.

The research data consisted of all 11 respondents' 65 answers: each respondent giving 30 answers of the current state, 30 answers of the target state and five

answers concerning gender, age, education, leadership experience and leadership courses and certifications. This resulted in 715 different variables, which was calculated using the equation below where x equals the number of variables and n equals the number of respondents.

$$x = n * (2 * 30 + 5)$$

To find out whether the gaps in the current and target states correlated, a correlation gap variable was calculated from their difference in every answer. Gender and leadership courses and certifications answers were not used in this study, but they were gathered due to possible future study.

The statistical significance of correlations in every case was tested again the null hypothesis, which was the assumption that correlation exists between the respondent's answers. All cases, current state, target state and competency gap, were analyzed using Pearson's product-moment correlation for its linear nature and also Spearman's rank correlation which is a monotonic relationship coefficient and less restrictive than the linear coefficient. In all tested cases, all answers from all respondents were compared to corresponding answers from all respondents. The background questions regarding gender, age, education, leadership experience and leadership training were not tested. This resulted in 55 different comparisons between the respondents. This was calculated using below equation, where n equals the number of respondents. All the correlation matrixes are attached as appendixes 6-11. Also, the relationship between respondents age or education or leadership experience and competency factors was tested. This was done by trying to find the relation between these variables from the data.

$$N=n*\frac{n-1}{2}$$

#### **4 RESULTS AND DISCUSSION**

The results of the study were at the same time expected, interesting and vague. As expected, there is positive correlations between the respondents answers and the leaderships focus factors that were used in this study. Table 1 illustrates all the cases that were tested in this study. The first column represents the highly significant positively correlating answers and their percentage of all possible comparisons, the second column represents the significant positively correlating answers, third column represents the non-significant correlation in answers, fourth column represents the highly significant negatively correlating answers and the fifth represents the negatively correlating answers.

Table 1. Percentages of correlation between all respondents.

Tested cases	Positive correlation	Positive corre- lation	Non-signifi- cant corre- lation	Negative correlation	Negative correla- tion
	p < 0,01	$0.01$	p >= 0.05	p < 0,01	$0.01$
Current state Pearson's analysis	7,3 %	10,9 %	78,2 %	0 %	3,6 %
Target state Pearson's analysis	5,5 %	16,4 %	78,2 %	0 %	0 %
Competency gap Pearson's analysis	5,5 %	16,4 %	78,2 %	0 %	0 %
Current state Spear- man's analysis	7,3 %	10,9 %	80,0 %	0 %	1,8 %
Target state Spear- man's analysis	5,5 %	12,7 %	78,2 %	0 %	0 %
Competency gap Spearman's analysis	3,6 %	16,4 %	80,0 %	0 %	0 %

As illustrated in Table 1, there seems to be some amount of statistically significant positive correlation between all answers of all respondents. Although, the amount of highly significant positive correlation is quite low, the significant positive correlation compensates it. Both, the Pearson's and the Spearman's analysis of the current state show a total of 18,2 % of significant positive correlation between all answers from all respondents. In target state Pearson's analysis, the total positive correlation is 21,9 % and in Spearman's analysis 18,2 %. In competency gap

analysis, Pearson's analysis gives 21,9 % and Spearman's analysis 20,0 % of positive correlation. Although the non-significant correlation if fairly high, over 78 %, in all cases, it does not mean there is no correlation. Correlation can be found from most answers between the respondents, but it just cannot be declared statistically significant. Also, there is very little significant negative correlation between the answers. Only current state Pearson's analysis gives 3,6 % and current state Pearson's analysis gives 1,8 % of negative correlation. The rest the answers have no significant negative correlation. All this implies that the factors and respondents' answers correlate positively well.

The one-sample statistics below in Table 2 shows all means and standard deviations of all answers to propositions in this study. On the left of each row is the number of proposition and moving rightwards are the means and standard deviations of the mean of the proposition's current state, target state and the competency gap between them. Propositions 1-4 are the transactional leadership factors, 5-9 are transformational leadership factors, 10-13 are servant leadership factors and 14-30 are emotional intelligence leadership factors.

Table 2. Averages and standard deviations of the data.

-	Curr	irrent state Target state		get state	Competence gap		
Proposition	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	
1	4,455	,8202	5,364	,5045	,91	,539	
2	4,455	1,0357	5,091	1,3003	,64	,809	
3	4,091	1,3003	4,545	1,4397	,45	,688	
4	4,818	1,2505	5,364	,6742	,55	,820	
5	4,182	,6030	4,727	,9045	,55	,688	
6	4,909	,5394	5,182	,6030	,27	,467	
7	4,636	,9244	4,909	,8312	,27	,467	
8	4,818	1,3280	5,182	1,1677	,36	,505	
9	5,091	,8312	5,636	,5045	,55	,688	
10	5,545	,5222	5,727	,4671	,18	,405	
11	4,000	1,6125	5,455	,6876	1,45	1,695	
12	4,818	1,4013	4,909	1,4460	,09	,302	
13	4,273	1,0090	4,091	,9439	-,18	,405	
14	4,455	,9342	5,000	1,0954	,55	,522	
15	4,909	,7006	5,636	,5045	,73	,647	
16	4,455	,8202	5,273	,7862	,82	,751	
17	4,364	,6742	4,909	,5394	,55	,688	
18	4,909	,7006	5,364	,6742	,45	,522	
19	5,091	,7006	5,364	,5045	,27	,467	
20	4,818	,7508	5,000	,6325	,18	,405	
21	4,727	,9045	4,545	1,1282	-,18	,405	
22	4,909	,8312	5,273	,6467	,36	,505	
23	4,455	,9342	5,182	,6030	,73	1,009	
24	4,364	1,0269	5,091	,5394	,73	,786	
25	4,455	,8202	5,273	,7862	,82	,405	
26	5,000	,6325	5,182	,6030	,18	,751	
27	4,727	,6467	5,364	,6742	,64	,809	
28	4,364	1,0269	4,636	1,0269	,27	,905	
29	4,273	,6467	4,727	,6467	,45	,522	
30	4,909	,5394	5,000	,6325	,09	,302	

Table 2 shows that the average level of each assessed competency factor at the current state is quite high, 4,000 or higher, when considering that the level was set between 1 and 6. The levels seem somewhat homogenous and expected in both the current state and target state answers. The highest standard deviation in current state answers is 1,6125, the lowest 0,5222 and the mean standard deviation is 0,8823. The highest standard deviation in target state is 1,4460 and

the lowest 0,4671 and the mean standard deviation is 0,7833. Competence gap on the other hand shows some interesting and unexpected results. While the levels of competency gap are the result of target state and current state and the gap can be expected to be positive, there seems to be some deviation in that. The highest standard deviation in competency gap answers is 1,695 and lowest -0,18. The negative gap in these factors could indicate the respondent's true feelings towards decreasing the levels of some of the competencies for some reason. On the other hand, it could imply that the proposition itself could be easily misinterpreted or the proposition is not assessing the factor correctly.

The figures presented next show the levels of assessed competencies in a more illustrative manner. In all figures, the first 4 bars indicate the competence levels of transactional leadership, the next 5 bars indicate competence levels of transformational leadership, the next 4 bars indicate competence levels of servant leadership and the next 17 bars indicate the competence levels of emotional intelligence.

Figure 1 illustrates the average levels of all respondents' competencies at the time of answering the survey, in the leadership focus domain. The X-axis indicates the main factors, the competencies, of leadership focus and the Y-axis indicates the level of competency self-assessed by the respondent.

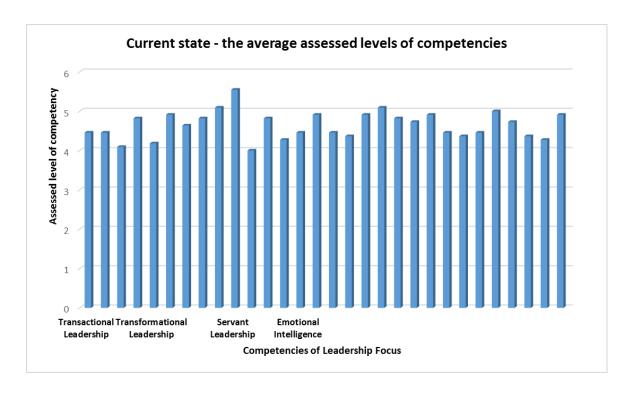


Figure 3. All answers regarding the current state of all competencies.

As can be seen from Figure 1 most of the respondents evaluate their competencies to be on a high level regardless of their age, education or leadership experience. This implies that the questionnaire used in the study may not be effective and that it leads the respondent to answer in a certain manner. One major reason may also be the difficulty of self-evaluation although some researchers imply, that it could be done effectively and it can be learned and improved (Yliruka 2015, 77–79.) Parallel to that, all of the respondents were long-term professional with the average experience of 16 years on leadership and management and they can truly be on a mastery level, when it comes to leadership competencies.

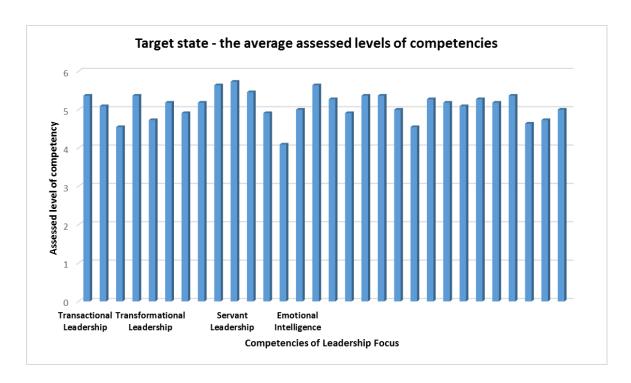


Figure 4. All answers regarding the target state of all competencies.

Figure 2 illustrates the target level of all respondents' competencies in the leadership focus domain. The X-axis indicates the main factors, the competencies, of leadership focus and the Y-axis indicates the level of competency self-assessed by the respondent. The result is very similar to the current state and same trend in the answers can be seen. The target state average levels are higher as expected, since they represent the level of competency that the respondent wishes to achieve.

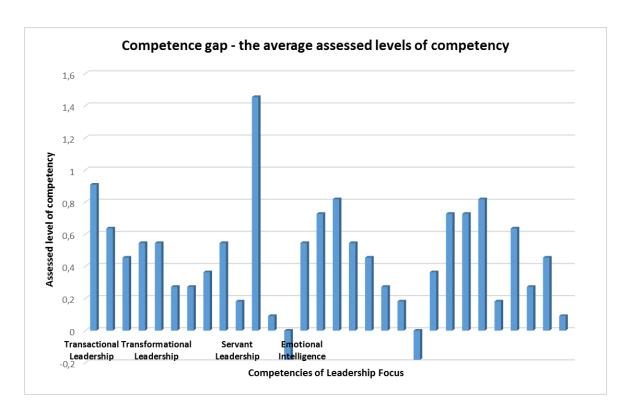


Figure 5. All answers regarding the competency gap of all competencies.

The last, Figure 3 represents all respondents' gaps in their leadership competencies examined in this study. Again, the X-axis indicates the main factors, the competencies, of leadership focus and the Y-axis indicates the level of competency self-assessed by the respondent. The gaps illustrated in this figure seem to be concerned with the competencies of servant leadership and emotional intelligence and this was an expected result, since those are the two vaguest theories and competencies studied here. Their deficiency can also be more easily self-evaluated by some people, since they concern the human essence of emotions and compassion. But, there is also negative gap in competencies, which may indicate the vagueness of those competencies and the difficulty to self-assess them.

#### **5 CONCLUSIONS**

The purpose of this study was to examine the feasibility of building a survey tool to get reliable results about the respondent's leadership competencies. The competencies themselves were derived from the leadership focus domain of the management windshield. The study was conducted by first building an ontology, "what is", of leadership. Based on the findings of the literature research, a set of best describing propositions were created to build a survey tool to evaluate the respondent's leadership competencies.

The survey was tested by sending the survey invitation to 27 of the leaders Turku University of Applied Sciences Faculty of Technology, Environment and Business steering group. 11 of the recipients, consisting of dean, education and research managers and leaders, answered the survey.

Although the sample size is not very reliable yet, the survey was found to be working, although reliability issues were found, which should be addressed in possible later studies. There is a good amount of positive correlation in tested factors and a clear gap between the positive and the negative correlations. Most of the assessed competency levels of the respondents were somewhat homogenous and there was low deviation from the average levels of competencies. These imply a reasonable trust in the survey tool. Another side is the actual reliability of the results of the survey. The rather small sample size can also be seen problematic and while the competency gaps were positive as expected, there was also negative gaps to indicate that some propositions may easily be misinterpreted or they are not assessing the factor correctly. Also, the low number of propositions per competency available in this study can be seen as a reliability issue, since there was less than one proposition per factor.

Judging by these research results, there definitely is a need for future research on leadership through the leadership focus of the management windshield. The number of factors and especially the number of propositions describing the factor was clearly not sufficient in this study. The respondent might be led to answer the

propositions in an eagerly positive manner, thus not reflecting the true essence of their leadership competencies. Also, the use of interviews would definitely give the possibility to an in-depth evaluation of the leader's capabilities and competencies. The interview could take place after the online survey and concentrate on going thru the propositions with the respondent to really get an understanding of the answers and complement the data acquired with the online survey. Or, the respondent could be interviewed in a more informal and loose fashion. Also, a 360-type of approach, where the respondent's peers are also asked to take part on to same survey evaluation as the respondent, would be needed, since selfevaluation is clearly not sufficient. Another issue is the coverage of the theoretical model of leadership focus. Whether there are more of the most significant leadership competencies, that are not covered in this study, should be studied. The research coverage of the leadership focus domain is already quite extensive, but more research is needed, especially in the domain of effective leadership capabilities, which combine several different and effective approaches and their competencies.

#### **REFERENCES**

- Alvesson, M., & Sveningsson, S. (2003). The great disappearing act: Difficulties in doing "leadership". *The Leadership Quarterly*, *14*(3), 359-381.
- Avolio, B. J., & Bass, B. M. (2004). Multifactor leadership questionnaire. manual and sampler set. (3rd ed.). Redwood City, CA: Mind Garden, Inc.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the multifactor leadership. *Journal of Occupational and Organizational Psychology*, 72(4), 441-462.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, *60*(1), 421-449.
- Bass, B. M. (1999). Two decades of research and development in transformational leadership.

  European Journal of Work and Organizational Psychology, 8(1), 9-32.
- Bass, B. M., & Stogdill, R. M. (1990). Bass & stogdill's handbook of leadership: Theory, research and managerial applications (3rd ed.). New York (N. Y.): The Free Press.
- Bligh, M. C., Kohles, J. C., & Pillai, R. (2011). Romancing leadership: Past, present, and future.

  The Leadership Quarterly, 22(6), 1058-1077.
- Bradberry, Travis,, Greaves, Jean. (2009). Emotional intelligence 2.0. E-book. Talentsmart.
- Burns, J. M. (1978). Leadership. New York: Harper & Row.
- Chaudhuri, M. R., Kettunen, J., & Naskar, P. (2015). Transformational and servant leadership: Evidence from indian higher education. *The Online Journal of Quality in Higher Education,* 2(4), 93-101.

- Deichmann, D., & Stam, D. (2015). Leveraging transformational and transactional leadership to cultivate the generation of organization-focused ideas. *The Leadership Quarterly*, 26(2), 204-219.
- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, *25*(1), 36-62.
- Føllesdal, H., & Hagtvet, K. (2013). Does emotional intelligence as ability predict transformational leadership? A multilevel approach. *The Leadership Quarterly*, 24(5), 747-762.
- Glynn M.A. & DeJordy R. (cop.2010). Leadership through an organization behavior lens. A look at the last half-century of research. In Nohria N. & Khurana R. (Ed.), *Handbook of leader-ship theory and practice : An HBS centennial colloquium on advancing leadership.* (pp. 119-156)
- Goleman, D., Boyatzis, R., & McKee, A. (2001). Primal leadership: The hidden driver of great performance. *Harvard Business Review*, 79(11), 42-51.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). Primal leadership: Realizing the power of emotional intelligence. Boston: Harvard Business School Press.
- Goleman, D. (1995). Emotional intelligence. New York: Bantam Books.
- Greenleaf, R. K. (1970). The servant as leader. Cambridge, Mass: Center for Applied Studies.
- Greiman, B. C. (2009). Transformational leadership research in agricultural education: A synthesis of the literature. *Journal of Agricultural Education*, *50*(4), 50-62.
- Gummesson, E. (cop. 2000). *Qualitative methods in management research* (2nd ed. ed.). Thousand Oaks, Calif: Sage.

- Hersey, P., & Blanchard, K. H. (1988). *Management of organizational behavior: Utilizing human resources* (5 th. ed.). Englewood Cliffs, N.J: Prentice-Hall
- Hirsjärvi, S., Remes, P., & Sajavaara, P. (2007). Tutki ja kirjoita (13th.ed.). Helsinki: Tammi.
- Hunter, E. M., Neubert, M. J., Perry, S. J., Witt, L. A., Penney, L. M., & Weinberger, E. (2013).
  Servant leaders inspire servant followers: Antecedents and outcomes for employees and the organization. *The Leadership Quarterly*, 24(2), 316-331.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A metaanalytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.). New York: Wiley.
- Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement.

  Organizational Behavior and Human Performance, 22(3), 375-403.
- Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *The Leadership Quarterly*, 19(2), 161-177.
- Mackenzie, K. D., & Barry Barnes, F. (2008). The unstated consensus of leadership approaches. *Int J of Org Analysis*, *15*(2), 92-118.
- Meindl, J. R., Ehrlich, S. B., & Dukerich, J. M. (1985). The romance of leadership. *Administrative Science Quarterly*, *30*(1), 78-102.
- Muenjohn, N., & Armstrong, A. (2008). Evaluating the structural validity of the multifactor leadership questionnaire (MLQ), capturing the leadership factors of transformational-transactional leadership. *Contemporary Management Research*, *4*(1), 3-14.

- Podolny J. M., Khurana R. & Hill-Popper M. (2005). Revisiting the meaning of leadership. *Research in Organizational Behavior.*, *26*, 1-36.
- Rantanen, H., Rantala, T., & Pekkola, S. (2015). *Tuottavuuden kehittämisen esteet suomi eilen ja tänään* (Research Report No. 38). Lappeenranta University of Technology, University press 2015: Lappeeranta University of Technology.
- Reunanen, T. J. (2013). Leaders´ conscious experience towards time. Master's thesis, Tampere University of Technology.
- Reunanen, T. (2015). Human factor in time management. Procedia Manufacturing, 3, 709-716.
- Segon, M., & Booth, C. (2015). Virtue: The missing ethics element in emotional intelligence. *Journal of Business Ethics*, 128(4), 789-802.
- Stogdill, R. M. (1974). Handbook of leadership: A survey of the literature. New York: Free Press.
- Tse, H. H. M., & Chiu, W. C. K. (2014). Transformational leadership and job performance: A social identity perspective. *Journal of Business Research*, *67*(1), 2827-2835.
- Tyssen, A. K., Wald, A., & Spieth, P. (2014). The challenge of transactional and transformational leadership in projects. *International Journal of Project Management*, 32(3), 365-375.
- Uusitalo, H. (1991). *Tiede, tutkimus ja tutkielma : Johdatus tutkielman maailmaan.* [Porvoo]: WSOY.
- van Dierendonck, D., & Patterson, K. (2015). Compassionate love as a cornerstone of servant leadership: An integration of previous theorizing and research. *Journal of Business Ethics*, 128(1), 119-131.
- Vanharanta, H. (2008). The management windshield: An effective metaphor for management and leadership. Conference Proceedings, *AHFE International Conference*, *14-17 July 2008*, Las Vegas, Nevada, USA.

- Virtanen, M. (2013). Teachers emotional competency: A research of teachers and students emotional intelligence competencies and its importance. (Doctoral dissertation, Tampere University Press).
- Vuori, T. O., & Huy, Q. N. (2015). Distributed attention and shared emotions in the innovation process: How Nokia lost the smartphone battle. *Administrative Science Quarterly*. Prepublished September 18th 2015, DOI: 10.1177/0001839215606951.
- Yliruka, L. (2015-06-16). Self-evaluation as a reflective structure. workability, adaptation and development of the mirror method. Helsingin yliopisto.
- Yukl, G. A. (2013). Leadership in organizations (8th ed. ed.). Boston: Pearson.

# Source of propositions; the theoretical model of management windshield's leadership focus.

Continuational leadership Passi		SUD-TACTOR	Vaittama (Proposition)
	Contingent Reward		Kerron selvästi muille mitä heiltä odotetaan, jos he haluavat tulla palkituksi työstään
	Active Management by Exception		Kerron selvästi muille vaatimustasot, jotka heidän pitää tietää suorittaakseen tehtävänsä hyväksytysti
	Passive Management by Exception		Odotan virheiden sattumista ennen toimenpiteisiin ryhtymistä
Laizz	Laizzez-Faire Leadership		Välttelen päätösten tekemistä
Ideal	Idealized Influence (Attributes)		Muut ovat yl peitä, kun heidät jollain tavoin yhdistetään minuun
Ideal	Idealized Influence (Behaviours)		Harkitsen päätösteni moraalisia ja eettisiä seurauksia
Transformational leadership Inspirational Motivation	irational Motivation		llmaisen muutamalla sanalla mitä tiimimme/meidän pitäisi ja tulisi tehdä
Intell	Intellectual Simulation		Ehdotan muille uusia näkökulmia eriskummallisten asioiden tarkasteluun
Indiv	Individua lized Consideration		Autan muita kehittämään heidän ammattitaitoaan ja omia vahvuuksiaan
Emot	Emotional Healing		Osaan tunnistaan muiden tunnetiloja kysymättä heiltä niistä
Crea	Creating Value		Autan aina mielelläni muita organisaationi jäseniä
Conc	Conceptual Skills (Käsitteelliset		Minulla on perinpohjainen ymmärrys organisaatiostani ja sen tavoitteista
Servant leadership Empo	Empowering (Valtuuttava,		Annan muille vastuun tehdä tärkeitä päätöksiä liittyen heidän omiin töihinsä
Help	Helping subordinates grow and		Annan muille sellaisia työtehtäviä, jotka auttavat heitä kehittämään uusia taitoja
Putti	Putting subordinates first		Asetan usein muiden, esim. alaisteni, edut omieni edelle.
Beha	Behaving Ethically		Olisin valmis tinkimään eettisistä periaatteistani haluamani lopputuloksen saavuttamiseksi
		Emotional self-awareness	Emotional self-awareness Tunnistan tilanteet, jotka laukaisevat tietyt tunteet itsessäni
	Self-Awareness	Accurate self-assessment	Accurate self-assessment <mark>Tunnen hyvin omat vahvuuteni ja heikkouteni</mark>
		Self-confidence	Esiinnyn varmalla, voimakkaalla ja vaikuttavalla tavalla
		Self-control	Pysyn tyynenä ja positiivisena myös vaikeina ja koettelevina hetkinä
		Transparency	Käyttäydyn johdonmukaisesti asettamieni arvojen ja uskomusten kanssa
	Colf_Management	Adaptability	Olen valmis muuttamaan mielipiteeni ja käsitykseni asioista uuden tiedon tai päinvastaisen todisteen perusteella
	Jen-Ivialiagellicili	Achievement	Asetan mitattavia ja haastavia tavoitteita itselleni ja muille
		Initiative	Olen valmis ohittamaan byrokratian ja joustamaan säännöissä, jotta työ saataisiin valmiiksi
Emotional Intelligence		Optimism	Toimintaani ohjaa enemmän menestyksen halu kuin epäonnistumisen pelko
		Empathy	Osaan tunnistaa ihmisten mielialoja, tunteita tai äänettömiä vihjeitä
	Social-Awareness	Organizational awareness	Organizational awareness Osaan tunnistaa ryhmien tai organisaation jäsenten väliset tärkeät suhteet ja sosiaaliset verkostot
		Service	Seuraan asiakastyytyväisyyttä huolellisesti, jotta asiakkaat saisivat tarvitsemansa
		Inspiration	Johdan asettamalla vision ja näyttämällä suunnan sen sijaan, että käyttäisin määräysvaltaani muihin
		Influence	Vaikuttaakseni muihin, osaan valita oikean lähestymistavan kuuntelijoista nippuen
	Relationship Management	Developing others	Osaan tunnistaa muiden vahvuudet ja kehitystarpeet
-	nciations in private Bernetic	Change catalyst	Otan voimakkaasti ja julkisesti kantaa asioihin halutun muutoksen aikaansaamiseksi vastustuksesta huolimatta
		Conflict management	Osaan tuoda erimielisyydet ja valituksen aiheet esille
		Teamwork and	Pyrin kehittämään ihmisten välisiä suhteita pakollista yhteistyötä pidemmälle

### The cover letter of the survey.

### Arvoisa vastaanottaja,

Tule mukaan rakentamaan näkökulmaa suomalaiseen esimiestyöhön!

Tämän kyselytutkimuksen tarkoituksena on koota ja analysoida esimiesten kokemuksia esimiestyöstä. Kyseessä on opinnäytetyö, jonka tilaajana on Turun ammattikorkeakoulun Liiketoimintaosaaminen ja prosessien johtaminen–tutkimusryhmä.

Kysely on kohdistettu Turun Ammattikorkeakoulun Tekniikka, ympäristö ja talous - tulosalueen yhteistyöyritysten johtaja- ja esimiestehtävissä toimiville henkilöille. Tämä kyselykutsu on lähetetty yrityksenne henkilöstövastaavalle, jonka toivomme jakavan kutsun sähköpostilla muille yrityksessä työskenteleville soveltuville vastaajaehdokkaille.

Kyselyyn vastaajien anonymiteetti on suojattu ja kerättävää tietoa tullaan käyttämään aineistona vain tässä opinnäytetyössä.

Koska tähän kyselyyn mukaan valittujen henkilöiden määrä on jo lähtökohtaisesti suhteellisen pieni, toivoisimme mahdollisimman monen vastaavan kyselyyn.

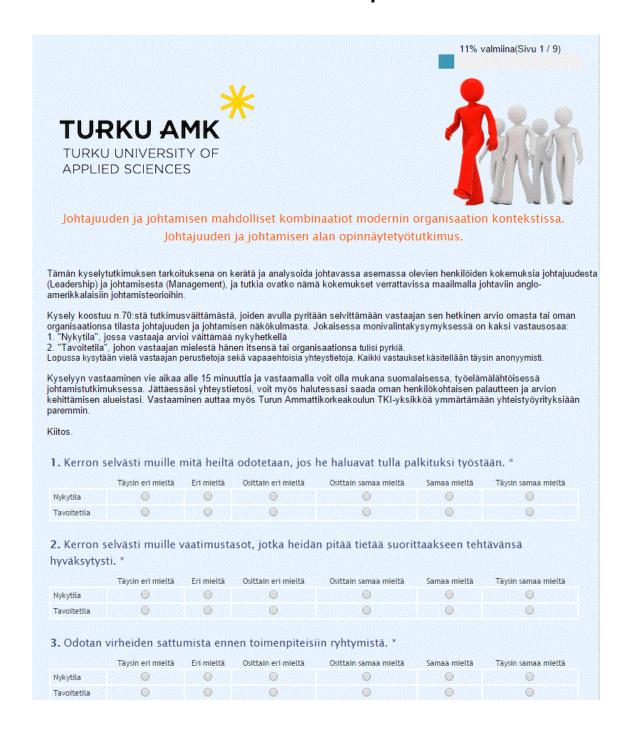
Lomakkeessa on n.70 kysymystä, joista suurin osa on monivalintakysymyksiä. Kyselyyn vastaaminen kestää alle 15 minuuttia.

Toivomme teidän vastaavan kyselyyn 5.10.2015 mennessä.

Kiitos yhteistyöstä ja vastauksistanne jo etukäteen.



### The instructive forewords of the questionnaire.



## The reminder letter of the survey.

#### Arvoisa vastaanottaja,

Lähetimme Teille 21.9.2015 sähköpostitse kutsun kyselyyn koskien Turun ammattikorkeakoulun Liiketoimintaosaaminen ja prosessien-tutkimusryhmän tilaamaa johtamisen alan opinnäytetyötä. Mikäli olette jo vastanneet kyselyyn, tämä viesti ei koske Teitä.

Kysely on kohdistettu Turun Ammattikorkeakoulun Tekniikka, ympäristö ja talous - tulosalueen yhteistyöyritysten johtavassa asemassa toimiville henkilöille. Kyselytutkimuksen tarkoituksena on koota ja analysoida johtajien ja esimiesten kokemuksia työstään. Kyselykutsu lähetettiin Turun AMK:n tiedoissa olevalle yrityksenne yhteyshenkilölle, jonka toivoimme vastaavan sekä jakavan kutsun myös muille yrityksessä työskenteleville soveltuville vastaajaehdokkaille.

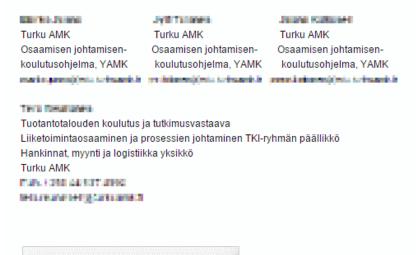
Koska kyselyyn valittujen yritysten määrä on jo lähtökohtaisesti suhteellisen pieni, toivomme saavamme vastauksia kyselyyn mahdollisimman monelta yrityksestänne. Ystävällisesti pyydämme Teitä myös vastaamaan kyselyyn mahdollisimman pian. Vastaaminen kestää alle 15 minuuttia.

Kyselyn voi täyttää nimettömänä ja vastaukset käsitellään luottamuksellisesti tilastollisin menetelmin. Mikäli vastaaja haluaa lyhyen analyysin vastauksistaan, voi yhteystiedot antaa kyselyn viimeisellä sivulla olevalla lomakkeella. Se on kuitenkin siis täysin vapaaehtoista.

Vastauksenne ovat ensiarvoisen tärkeitä tutkimuksen onnistumiselle, ja vastaamalla voitte auttaa Turun ammattikorkeakoulua ymmärtämään yhteistyöyrityksiään ja alueen yritysten johtamiskulttuureja paremmin. Halutessanne voitte myös saada ilmaisen, lyhyen henkilökohtaisen palautteen ja arvion kehittämisen alueistanne.

Toivomme Teidän vastaavan kyselyyn alla olevan linkin kautta 9.10.2015 mennessä.

Kiitämme yhteistyöstä ja vastauksistanne jo etukäteen.



Vastaa kyselyyn tästä

# Webropol questionnaire including all propositions from all three individual studies.

100% valmiina (Sivu 0 / 9)



Johtajuuden ja johtamisen mahdolliset kombinaatiot modernin organisaation kontekstissa. Johtajuuden ja johtamisen alan opinnäytetyötutkimus.

i. Kerron selva	asti mullie miti	a nelita o	dotetaan, jos n	e naiuavat tulia pa	ikituksi tyo:	staan. ^
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	О	С	О	О
2. Kerron selva nyväksytysti. *	ästi muille vaa	timustaso	ot, jotka heidän	pitää tietää suorit	taakseen te	htävänsä
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	C	0	0
Tavoitetila	0	0	0	O	0	0
3. Odotan virh	eiden sattumi:	sta enner	toimenpiteisiir	n ryhtymistä. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	0	0	0
<b>1.</b> Välttelen pä	iätösten teken	nistä. *				
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	0	0	0

5. Muut ovat vlpeitä. kun heidät iollain tavoin vhdistetään minuun. \*

	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	О	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
<b>6.</b> Harkitsen pä	ätösteni mora	alisia ja	eettisiä seurauk	sia. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
7. Ilmaisen muu	ıtamalla sanal	la mitä ti	imimme/meidä	n pitäisi ja tulisi te	hdä. *	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	О	0	0	0	0	0
Tavoitetila	0	0	О	О	0	О
8. Ehdotan mui				asioiden tarkaste		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	О	0	О	0	0	0
Tavoitetila	0	0	0	О	0	0
9 Autan muita	kehittämään	heidän ai	nmattitaitoaan i	a omia vahvuuksi	aan *	
J. Adtail illuita	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	C	0	0	0
Tavoitetila	C		C	C	C	C
10. Autan aina	mielelläni mu	ita organ	isaationi jäseniä	*		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
11. Minulla on	perinpohjaine	n ymmär	rys organisaatio	ostani ja sen tavoi	tteista. *	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	О	0	О	0	0	0
Tavoitetila	О	0	0	0	0	0
12 Annan muil	le vastiuin tel	ndä tärke	itä näätöksiä liit	ttyen heidän omiir	n töihinsä *	
i Z. Allilali Illuli	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä

Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	О
13. Asetan use	ein muiden, es	im. alais	teni, edut omiei	ni edelle. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	О
14. Tunnistan	tilanteet, jotka	a laukais	evat tietyt tunte	et itsessäni. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
Tavoitetita	Ü					
15. Tunnen hy	vin omat vahv	uuteni ja	heikkouteni. *			
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	0	0	0
16. Esiinnyn va	ırmalla, voima	kkaalla ja	ı vaikuttavalla ta	avalla. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	О
Tavoitetila	0	0	О	О	0	С
17. Pvsvn tvvn	enä ia positiiv	isena mv	ös vaikeina ia k	oettelevina hetkin	ıä. *	
, , , , , , , , , , , , , , , , , , , ,	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	O	0	0
10 1/2 442			**			
io. Kayttaydyr				n ja uskomusten k		Tända aasta salakii
Nyloutila	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
19. Olen valmi		mielipit	eeni ja käsitykse	eni asioista uuden	tiedon tai p	päinvastaisen

Täysin eri mieltä Eri mieltä Osittain eri mieltä Osittain samaa mieltä Samaa mieltä Täysin samaa mieltä

Nykytila	O	0	0	0	0	0
Tavoitetila	0	0	0	О	0	0
20. Asetan mita	attavia ja haas	stavia tav	oitteita itselleni	ja muille. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	О	0	0
21. Olen valmis	ohittamaan l	oyrokratia	an ja joustamaa	n säännöissä, jotta	a työ saatais	siin valmiiksi. *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
22. Toimintaan	i ohjaa enemi	män men	estyksen halu k	uin epäonnistumi	sen pelko. *	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
23. Osaan tunn	istaa ihmister	n mielialo	oja, tunteita tai i	äänettömiä vihjeitä	i. *	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
	istaa ryhmien	tai orga	nisaation jäsent	en väliset tärkeät	suhteet ja s	osiaaliset
verkostot. *						
Nh do stil a	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila -	0	0	0	0	0	0
Tavoitetila	О	0	О	O	0	О
<b>25.</b> Seuraan asi		yyttä huo	lellisesti, jotta a	ısiakkaat saisivat t	arvitsemans	sa. *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	О	0	0	O	0	0
Tavoitetila	О	0	0	О	0	О
26. Johdan aset muihin. *	ttamalla visior	ı ja näytt	ämällä suunnan	sen sijaan, että kä	iyttäisin mä	äräysvaltaani
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä

Nykytila	0	0	0	O	0	0
Tavoitetila	0	0	0	0	0	0
27. Vaikuttaaks	seni muihin, o	saan vali	ta oikean lähest	ymistavan kuunte	liioista riinn	uen *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
ravortotta						
<b>28.</b> Otan voima vastustuksesta		kisesti kai	ntaa asioihin ha	lutun muutoksen a	aikaansaami	iseksi
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	0	0	0
29. Osaan tuod	ła erimielisyw	let is vali	tuksen aiheet e	sille *		
<b>23.</b> Osdan tuot	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	C	0	0
ravorcetta						
20 Purin kohitt	tämään ihmist	on välisiä	i subtoita nakol	lista yhteistyötä p	idammälla	*
30. Fyrin Keniti	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	C	C	O	C	C	C
Tavoitetila	0	0	0	0	0	0
ravoitetila			C	C	C	C
21 Turantalista	te in a condition	والمالية				
31. Tyontekijo	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	kevät työnsä. *	Camaa mialtii	Tävain samaa mialtä
Nykytila	C C	C	Osittain eri mietta	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Tavoitetila	O	О	О	О	O	O
<b>32.</b> Työntekijöi						
Nydostila	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila 						
Tavoitetila	0	0	О	O	0	0
33. Työntekijät	tuntevat epä	varmuutt	a ja tarvitsevat	ohjausta työtehtä	viensä hoita	amiseen. *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0

Tavoitetila	0	0	0	0	0	0
<b>34.</b> Esimies ed ilman työntekij			ltaa suhteessa 1	työntekijöihin ja h	än voi tehdä	i päätöksiä
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	О	С	О	О
<b>35.</b> Esimies jak	kaa ja tarvittae	ssa selve	entää työtehtävä	it. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	О	0	O
<b>36.</b> Työntekijä	t otetaan huo	mioon pä	ätöksiä tehtäes	sä. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	О	О	0	О
<b>37.</b> Työntekijö	iden ohjaus ill Täysin eri mieltä	man pain Eri mieltä	ostamista on av	vain hyvään johtaj Osittain samaa mieltä	uuteen. *	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	О	0	O
38. Fsimies tie	dustelee alais	iltaan ide	oita ia palautet	ta tulevia projekte	eia varten. *	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
<b>39.</b> Tvöntekijä	t ovat itsenäis	iä ia sitoi	utuneita tehtävi	insä. *		
,	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	О	0	О
40 Esimiehen	nitää tukea ty	öntekiiää	ottamaan vast	uuta työn loppuun	saattamises	sa *
. J. Esimienen	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	C	C	C	C C	C	0

Tavoitetila	O	0	0	О	0	0
41. On esimiel	hen vastuulla a	auttaa ala	istaan löytämää	in motivaatio työh	ön. *	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	O	0	0	0	0	0
Tavoitetila	0	0	0	О	0	0
<b>42.</b> Esimiehen	tulee tukea al	aistensa a	ammatillista kas	svua. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	O	0	0	0
Tavoitetila	O	0	0	О	0	О
<b>43.</b> Työntekijä	t ovat yleisest	i ottaen a	ammatillisesti p	äteviä ja hoitavat i	työnsä hyvii	n. *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	O	0	0	0
Tavoitetila	О	0	О	С	0	О
<b>44.</b> Esimies sa	llii alaistensa p	oriorisoid	a työtehtäviään	valvotusti. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	О	0	0	О	0	О
<b>45.</b> Työntekijä	t osaavat ratk	oa ongeli	mia luovasti om	issa työtehtävissä	än. *	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	О	0	О	О	0	О
<b>46.</b> Monimutka	aisissa tilantei	ssa esimi	ehen tulee jättä	iä työntekijät ratko	omaan onge	elmia keskenään.
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	O	0	O
<b>47.</b> Esimiehen	tulee olla puu	ttumatta	alaistensa toim	intaan näiden työs	kennellessä	i. *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	0	0	0

48. Työntekijöi	den tulee saa	da itse p	äättää mitä teh	dä ja kuinka se tel	hdään. *	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	O	0	0
Tavoitetila	0	0	0	0	0	0
40 Esimiehen i	nitää luottaa s	alaisen or	maan arviointik	ykyyn työtehtävien	hoitamises	sa *
45. Esimienen	Täysin eri mieltä		Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	O	0	0	C	O	C
Tavoitetila	О	0	0	O	0	0
<b>50.</b> Esimiehen t	tulee antaa na	lautetta	alaisilleen *			
50. Estimenen	Täysin eri mieltä		Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	O	O	O	C C	C	C
	0	0	0	0	0	0
Tavoitetila	C	O	C	C		C
<b>51.</b> Alaiset osaa	_	e itseään	yhtä hyvin kuii	n esimies. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
<b>52.</b> Johdon tule	ee tehdä kaikl	ki budjet	ointiin ja talout	een liittyvät päätö	kset. *	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	О	0	0
53. Tiimien, es	imiesten ja ty	öntekijöi	den tulee olla v	astuussa budjetoi	nnista ja to	teutuksesta. *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	C	0	0
Tavoitetila	0	0	0	0	0	0
<b>54.</b> Työntekijät	ovat tietoisia	ı yritykse	n taloudellisest	a tilanteesta. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	О	0	О

suunnittelua. *	imiehet kyker	ievät, pie	nellä avustukse	ella ja valvonnalla,	toteuttama	an taloudellista
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
<b>56.</b> Tiimien ja	esimiesten tul	ee olla m	ukana, kun työ	ntekijöitä rekrytoi	daan heidär	ı ryhmäänsä. *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	0	0	0
<b>57.</b> Organisaat	ion tulee olla	mahdollis	simman "kapea'	' ja "matala". *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	O	0	0
Tavoitetila	0	0	0	0	0	0
<b>58.</b> Jatkuva opj	piminen on yr	ityksemn	ne avainasioita.	*		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	0	0	0
<b>59.</b> Tiimit, työr	ntekijät ja esir	niehet su	unnittelevat ko	ulutusta yhdessä.	*	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	0
Tavoitetila	0	0	0	0	0	0
<b>60.</b> Organisaat	ion rakenne ja	a toteutus	s perustuu osaa	miseen ja kykyihii	า. *	
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0
<b>61.</b> Johdon tule	ee tarkastella	määräajo	in organisaatio	ja sen toiminta. *		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	0	0	0	0	0	0

<b>62.</b> Organisaati	oni tärkeimpi	iä arvoja	eivät ole taloud	elliset tulokset tai	i –menestys	. *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	О	0	О	О	О	О
<b>63.</b> Johdon- ja	organisaatior	n muutok	sia on hyvin vai	kea muuttaa ilmar	n, että vaihd	etaan ihmisiä. *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	0	0	0
Tavoitetila	О	0	O	О	0	O
<b>64.</b> Jos (kun) or toimesta, itsenä		:yy, kaikk	ki tilanteet ratka	istaan tiimien, esi	miesten ja 1	työntekijöiden
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	0	О	0	О
Tavoitetila	О	0	0	0	0	0
<b>65.</b> Johdon tule				oksista ja taloude		
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	О	0	О	О	0	0
Tavoitetila	0	0	0	О	О	О
<b>66.</b> Asiakkuuks	ien johtamine	en/hoito	ei ole kaikkien a	asia yrityksessämr	ne, johto ho	oitaa sen. *
	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	О	0	0	О	0	0
Tavoitetila	О	0	О	С	О	О
<b>67.</b> PR- työn ho	oitamista pitä	ä jakaa n	nyös esimiehille	ja työntekijöille, j	johdon avus	stuksella. *
				Osittain samaa mieltä		
Nykytila	0	0	О	0	0	0
Tavoitetila	0	0	0	0	0	O
68 Vritybeaces	mme talous	ia vlaisto	n asioiden tiod	ottaminen on hoic	lettu hvvin	sk
oo. They kaesaa	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	C	C	O	C C		C
	0	0		0		
Tavoitetila	U	U	О	U	О	О

**69.** Esimiehet ja työntekijät ovat perillä talouden tunnusluvuista.  $^{\star}$ 

	Täysin eri mieltä	Eri mieltä	Osittain eri mieltä	Osittain samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Nykytila	0	0	О	О	0	0
Tavoitetila	0	0	0	0	0	0
<b>70.</b> Sukupuoli	*					
C Nainen						
C Mies						
<b>71.</b> Ikä *						
C 18-30						
C 31-40						
C 41-50						
C 51-60						
C 61-						
<b>72</b> . Koulutusta	.so *					
Perusaste						
C Keskiaste (lukio,	, ammattikoulu)					
<ul><li>Alin korkea-aste</li></ul>	(teknikko, merkono	mi yms.)				
C Alempi korkea-a korkekoulututki						
	ste (DI, maisteri, YA	MK)				
<ul> <li>Tutkijakoulutus</li> </ul>	aste (tiet. lisensiaat	ti, tohtori)				
O Muu, mikä						
<b>73.</b> Johtamisen	alan koulutus	s (kurssit	, tutkinnot yms.	) *		
			_			
			-1			
			<u> </u>			
<b>74.</b> Johtamisko	okamus vuosin	ıa *				
	Aciiius vuosii	ια				
<ul><li>○ 0-5</li><li>○ 6-10</li></ul>						
O 11-20						
© 21-30						
. 2. 30						

O 31-

75. Mikäli haluat henkilökohtaisen palautteen vastauksistasi, voit jättää yhteystietosi alla oleviin
kenttiin. Yhteystietojen antaminen ei siis ole pakollista. Vastaajien tietoja tai vastauksia ei
luovuteta ulkopuolisille tai muille henkilöille yritysten sisällä.

Etunimi	
Sukunimi	
Sähköposti	
Puhelinnumero	
Yritys / Organisaatio	

## Pearson's correlation matrix of current state.

					Correlations	ations						
		R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11
R1	Pearson Correlation	1	000'0	,121	-,021	,202	-,071	,143	101,	-,082	,225	-,093
	Sig. (1-tailed)		,500	,262	,455	,142	,355	,225	,297	,334	,116	,313
R2	Pearson Correlation	000'0	_	,040	,514	,045	000'	,027	,378	0,000	-,033	,185
	Sig. (1-tailed)	,500		,416	,000	407,	,500	,443	,020	,500	,431	,164
R3	Pearson Correlation	,121	,040	-	,083	,313	090'	-,014	-,074	,476	,022	339
	Sig. (1-tailed)	,262	,416		,331	,046	,376	,471	,348	,004	,455	,015
R4	Pearson Correlation	-,021	,514	680,	-	,208	260'	-,028	,319	-,281	-,051	,413
	Sig. (1-tailed)	,455	,000	,331		,135	,305	,442	,043	990'	,394	,012
R5	Pearson Correlation	,202	,045	,313	,208	1	,128	650'-	-,072	-,176	950'-	,344
	Sig. (1-tailed)	,142	407,	,046	,135		,250	,378	,353	,176	,383	,031
R6	Pearson Correlation	-,071	000'	090'	260'	,128	-	-,332	-,002	-,037	177	,464
	Sig. (1-tailed)	,355	,500	926,	305,	,250		780,	,496	,423	,175	,005
R7	Pearson Correlation	,143	,027	-,014	-,028	650'-	-,332		,140	,107	,436	-,175
	Sig. (1-tailed)	,225	,443	,471	,442	378	760,		,230	,287	800'	,177
R8	Pearson Correlation	101,	378,	-,074	,319	-,072	-,002	,140	1	-,318	,126	620'
	Sig. (1-tailed)	,297	,020	,348	,043	,353	,496	,230		,044	,253	,419
R9	Pearson Correlation	-,082	0,000	476	-,281	-,176	-,037	,107	-,318	1	990'	-,061
	Sig. (1-tailed)	,334	,500	,004	990'	,176	,423	,287	,044		,366	,375
R10	Pearson Correlation	,225	-,033	,022	-,051	950'-	177	,436	,126	990'	1	-,033
	Sig. (1-tailed)	,116	,431	,455	,394	,383	,175	800'	,253	,366		,431
R11	Pearson Correlation	60'-	,185	666,	,413	,344	,464	-,175	680'	-,061	-,033	1
	Sig. (1-tailed)	,313	,164	,015	,012	,031	,005	,177	,419	,375	,431	

# Pearson's correlation matrix of target state.

					Correl	Correlations						
		R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11
R1	Pears on Correlation	_	-,059	,168	,115	,012	,122	,284	,034	,154	198	,015
	Sig. (1-tailed)		,378	,187	,272	,476	,260	,064	,428	,208	,147	,470
R2	Pears on Correlation	690'-	-	385,	966,	,281	7357	-,209	,273	,265	,211	,175
	Sig. (1-tailed)	378		,018	,015	790,	,027	,134	,072	920,	,132	,178
R3	Pears on Correlation	,168	385,	-	,187	190'	,116	-,148	,196	796,	180,	,135
	Sig. (1-tailed)	,187	,018		,161	,373	,270	,217	,150	,023	,436	,238
R4	Pears on Correlation	,115	966,	187,	-	,311	,373	0,000	,322	-,037	,031	,266
	Sig. (1-tailed)	,272	,015	,161		,047	,021	,500	,041	,423	,434	720,
R5	Pears on Correlation	,012	,281	190,	,311	-	,237	960'-	,012	-,071	,204	,314
	Sig. (1-tailed)	,476	790,	,373	,047		,104	,307	,476	,355	,140	,046
R6	Pears on Correlation	,122	,357	,116	,373	,237	1	-,100	080'	,132	,431	,429
	Sig. (1-tailed)	,260	,027	,270	,021	,104		300,	,338	,243	600'	600'
R7	Pears on Correlation	,284	-,209	-,148	000'0	960'-	-,100	1	,081	-,039	,199	,094
	Sig. (1-tailed)	,064	,134	,217	,500	,307	,300		,335	,419	,146	,311
R8	Pears on Correlation	,034	,273	,196	,322	,012	080'	,081	-	-,022	740,	,377
	Sig. (1-tailed)	,428	,072	,150	,041	,476	,338	,335		,454	,402	,020
R9	Pears on Correlation	,154	,265	796,	-,037	-,071	,132	-,039	-,022	-	-,132	-,204
	Sig. (1-tailed)	,208	,078	,023	,423	,355	,243	,419	,454		,243	,140
R10	Pears on Correlation	,198	,211	,031	,031	,204	,431	,199	,047	-,132	1	065'
	Sig. (1-tailed)	,147	,132	,436	,434	,140	600'	,146	,402	,243		000'
R11	Pears on Correlation	,015	,175	,135	,266	,314	,429	,094	,377	-,204	065,	_
	Sig. (1-tailed)	,470	,178	,238	720,	,046	600'	,311	,020	,140	000'	

## Pearson's correlation matrix of competency gap.

					Correlations	ions						
		R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11
R1	Pearson Correlation	_	950'-	-,013	302,	670'	-,047	920'	,155	,322	197,	-,160
	Sig. (1-tailed)		,385	,472	,050	,439	,402	,347	,207	,042	,148	,199
R2	Pearson Correlation	950'-	1	,121	,274	-,131	050'-	,141	000'	0.40'-	,442	000'
	Sig. (1-tailed)	,385		,263	,072	,245	766,	,228	,500	,356	700,	,500
R3	Pearson Correlation	-,013	,121	1	,220	,333	,582	,264	780'	,408	,240	399
	Sig. (1-tailed)	,472	,263		,121	980,	000'	620'	,423	,013	,101	,014
R4	Pearson Correlation	302,	,274	,220	1	000'	,318	,322	,188	-,128	,302	,358
	Sig. (1-tailed)	,050	,072	,121		,500	,044	,041	,160	,249	,052	,026
R5	Pearson Correlation	670'	-,131	,333	000'	1	,202	,190	,122	,106	460,	,317
	Sig. (1-tailed)	,439	,245	980'	,500		,142	,157	,261	,288	,310	,044
R6	Pearson Correlation	-,047	-,050	,582	,318	,202	1	680,	,054	,203	-,038	,662
	Sig. (1-tailed)	,402	798,	000'	,044	,142		,332	389	,141	,420	000'
R7	Pearson Correlation	920'	141	,264	,322	,190	680,	1	,011	,169	,343	,148
	Sig. (1-tailed)	,347	,228	620'	,041	,157	,332		,477	,186	,032	,218
R8	Pearson Correlation	,155	000'	780,	,188	,122	,054	,011	1	-,130	,136	,242
	Sig. (1-tailed)	,207	,500	,423	,160	,261	389	,477		,246	,236	660'
R9	Pearson Correlation	,322	-,070	408	-,128	,106	,203	,169	-,130	1	,132	-,202
	Sig. (1-tailed)	,042	,356	,013	,249	,288	,141	,186	,246		,243	,142
R10	Pearson Correlation	197	,442	,240	,302	,094	-,038	,343	,136	,132	1	-,245
	Sig. (1-tailed)	,148	,007	,101	,052	,310	,420	,032	,236	,243		960'
R11	Pearson Correlation	-,160	000'	666,	,358	,317	,662	,148	,242	-,202	-,245	1
	Sig. (1-tailed)	,199	,500	,014	,026	,044	000'	,218	660'	,142	960'	

# Spearman's correlation matrix of current state.

						Correlations	tions						
			R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11
arman's	R1	Correlatio	1,000	,018	,137	650'	,257	,082	,136	,206	-,142	,247	-,077
rho		Sig. (1-		,462	,234	978,	980'	,334	,237	,138	,226	,094	,342
<u>  L</u>	R2	Correlatio	,018	1,000	,081	,544	-,054	-,040	,106	,352	-,046	,050	171
		Sig. (1-	,462		,335	,000	988,	,417	,289	,028	,405	397	,183
<u> </u>	R3	Correlatio	,137	,081	1,000	,113	,342	,001	-,024	-,065	467	,147	,288
		Sig. (1-	,234	,335		,275	,032	,498	,450	998,	900,	,220	,061
<u> </u>	R4	Correlatio	650'	,544	,113	1,000	,146	,193	-,046	,334	-,284	-,035	390
		Sig. (1-	,379	,001	,275		,221	,153	,406	980'	,064	,427	,017
<u> </u>	R5	Correlatio	,257	-,054	,342	,146	1,000	,257	-,088	-,051	-,054	960'-	,340
		Sig. (1-	980'	986,	,032	,221		,085	,322	,394	389	306,	,033
	R6	Correlatio	,082	-,040	,000	,193	,257	1,000	-,211	,171	-,180	,327	,425
		Sig. (1-	,334	,417	,498	,153	,085		,131	,183	,170	620'	,010
<u> </u>	R7	Correlatio	,136	901'	-,024	-,046	-,088	-,211	1,000	,128	,140	464,	-,123
		Sig. (1-	,237	,289	,450	,406	,322	,131		,249	,230	003	,258
<u> </u>	R8	Correlatio	,206	,352	-,065	,334	-,051	171,	,128	1,000	-,361	,214	,165
		Sig. (1-	,138	,028	996,	980'	,394	,183	,249		,025	,128	,192
	R9	Correlatio	-,142	-,046	,467	-,284	-,054	-,180	,140	-,361	1,000	260'	-,063
		Sig. (1-	,226	,405	,005	,064	,389	,170	,230	,025		,308	,371
<u> </u>	R10	Correlatio	,247	020'	,147	-,035	960'-	,327	464,	,214	960'	1,000	,051
		Sig. (1-	,094	766,	,220	,427	906,	680,	,003	,128	,308		,394
	R11	Correlatio	-,077	,171	,288	066,	,340	,425	-,123	,165	-,063	,051	1,000
		Sig. (1-	,342	,183	,061	,017	,033	,010	,258	,192	,371	,394	

## Spearman's correlation matrix of target state.

						Correlations	ons						
			R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11
Spearman's	R1	Correlation	1,000	-,072	,162	,131	620'	,276	174	620'	260'	,223	,040
rho		Sig. (1-		,353	,196	,246	,351	070,	,178	,338	,304	,118	,416
	R2	Correlation	-,072	1,000	,318	,316	350	:303	-,264	378,	906,	,229	,212
		Sig. (1-	,353		,043	,045	,029	,052	620'	,020	,050	,112	,131
	R3	Correlation	,162	,318	1,000	131	,172	,108	-,164	460,	,341	,052	,207
		Sig. (1-	,196	,043		,245	,182	,284	,193	,310	,032	,392	,137
	R4	Correlation	,131	,316	,131	1,000	,229	,347	990'	,456	-,067	-,016	,265
		Sig. (1-	,246	,045	,245		,112	000,	,365	900'	,362	,467	620'
	R5	Correlation	670,	,350	,172	,229	1,000	,406	-,094	,131	,026	90£'	,183
		Sig. (1-	,351	,029	,182	,112		,013	,311	,246	,446	,050	,166
	R6	Correlation	,276	303	,108	,347	,406	1,000	-,035	,279	,104	,521	,500
		Sig. (1-	070,	,052	,284	000,	,013		,427	890'	,292	,000	,000
	R7	Correlation	174	-,264	-,164	990'	-,094	-,035	1,000	,047	,012	660'	-,016
		Sig. (1-	,178	620'	,193	365	,311	,427		,402	,476	,301	,467
	R8	Correlation	620'	378,	460'	,456	,131	,279	,047	1,000	-,093	,168	497,
		Sig. (1-	,338	,020	,310	900'	,246	990'	,402		,313	,187	003
	R9	Correlation	260'	906,	,341	-,067	,026	,104	,012	-,093	1,000	-,063	-,136
		Sig. (1-	,304	020'	,032	,362	,446	,292	,476	,313		,370	,237
	R10	Correlation	,223	,229	,052	-,016	906,	,521	660'	,168	-,063	1,000	,507
		Sig. (1-	,118	,112	392	,467	,050	,000	,301	,187	,370		,000
	R11	Correlation	,040	,212	,207	,265	,183	905,	-,016	497,	-,136	705,	1,000
		Sig. (1-	,416	,131	,137	620'	,166	,000	,467	,003	,237	,000	

## Spearman's correlation matrix of competency gap.

						Correlations	tions						
			R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11
arman's	R1	Correlatio	1,000	950'-	000'0	306,	900'	950'	750,	,155	,326	961'	-,044
rho		Sig. (1-		385,	,500	,050	996,	,385	,382	,207	620'	,149	409
	R2	Correlatio	950'-	1,000	,158	,274	-,117	,094	,135	000'0	-,055	,446	,035
		Sig. (1-	385,		,202	,072	,269	,310	,238	,500	788,	700,	,427
	R3	Correlatio	000'0	,158	1,000	174	335	,381	,284	190'	362'	,230	,187
		Sig. (1-	,500	,202		179	,035	,019	,064	375	,015	,111	,161
	R4	Correlatio	308'	,274	,174	1,000	,027	,317	4307	,188	-,083	762'	368
		Sig. (1-	020'	,072	,179		,443	,044	,049	,160	,331	,056	,023
	R5	Correlatio	<b>90</b> 0'	-,117	335	,027	1,000	,213	,222	690'	,108	,124	,262
		Sig. (1-	996,	,269	,035	,443		,129	,119	,358	,285	,258	,081
	R6	Correlatio	950'	460,	,381	,317	,213	1,000	,062	:303	,248	000'	,493
		Sig. (1-	385,	,310	,019	,044	,129		,372	,052	660,	,500	000,
	R7	Correlatio	<b>2</b> 90'	,135	,284	4307	,222	,062	1,000	-,014	,127	,362	760'
		Sig. (1-	,382	,238	,064	,049	,119	,372		,470	,252	,025	305,
	R8	Correlatio	155,	0,000	,061	,188	690'	:303	-,014	1,000	080'-	,133	,311
		Sig. (1-	,207	,500	,375	,160	,358	,052	,470		,337	,242	,047
	R9	Correlatio	978'	-,055	395	-,083	,108	,248	,127	-,080	1,000	,163	-,240
		Sig. (1-	680'	788,	,015	,331	,285	660,	,252	,337		,195	,101
	R10	Correlatio	961'	,446	,230	767	,124	000'	,362	,133	,163	1,000	-,217
		Sig. (1-	,149	700,	,111	950'	,258	,500	,025	,242	,195		,125
	R11	Correlatio	-,044	980'	187,	896,	,262	,493	260'	,311	-,240	-,217	1,000
		Sig. (1-	,409	,427	,161	,023	,081	,003	305,	,047	,101	,125	

# Pearson's current state correlations illustrated in a Sammon map.

