

Change in perception of organizational culture after merger:

The influence of Motivation, Acceptance and Knowledge

Name	Neeta Bhansing ( 0063622)
Institution	University of Twente Behaviourly Science Psychology
Place	Enschede
Date	27-5-2010
Supervisor	Dr. Joost Ardts

Change in perception of organizational culture after merger:

The influence of Motivation, Acceptance and Knowledge

Neeta Bhansing

University of Twente

### **Abstract**

This study focuses on to what extent support for mergers and acquisitions has an impact on organizational change over time. This support will be seen as the degree of motivation, acceptance and knowledge that employees have at the beginning of the M&A. The data used in this study was gathered from two companies operating in the IT- sector. 527 returned questionnaires were analyzed. The results shows that the culture perception changed in time and depends on the perception they had at the beginning of the M&A. Motivation did had an impact on the change. The degree of Acceptance and Knowledge of the employees had no influence on this change. Interaction effects of the support variables on the change in perception over time were also investigated. These findings tell that the perception of organizational culture at the beginning of the M&A plays an important role for the culture perception after the M&A. The more employees are motivated, the more employees are willing to change. Also the longer employees work at the organization, the more they are willing to change. Managers should take this into account for the implementation of the change.

### **Samenvatting**

Deze studie richt zich op in hoeverre steun voor fusies en overnames ( F&O) een invloed heeft op de organisatorische veranderingen na verloop van tijd. Steun wordt in deze studie gezien als de mate van motivatie, acceptatie en kennis die medewerkers hebben aan het begin van de F&O. De gebruikte gegevens in deze studie zijn verzameld van twee bedrijven die werkzaam zijn in de IT-sector. 527 teruggestuurde vragenlijsten werden geanalyseerd. Uit de resultaten blijkt dat de cultuur perceptie veranderd na verloop van tijd en dat deze verandering afhangt van de perceptie die ze hadden aan het begin van de F&O. Motivatie had een invloed op deze verandering. De mate van acceptatie en kennis van de medewerkers had geen invloed op deze verandering. Interactie-effecten van de steun variabelen op de verandering in de perceptie na verloop van tijd werden ook onderzocht. Uit de resultaten is ook gebleken dat hoe langer werknemers werken bij een organisatie, hoe meer ze bereid zijn te veranderen. Managers zouden hier rekening mee moeten houden bij het invoeren van de veranderingen die noodzakelijk zijn bij een F&O.

**Content**

<b>1. Introduction</b>	6
<b>2. Theory</b>	7
<i>2.1 Organizational Culture</i>	7
<i>2.2 Support</i>	10
<i>2.3 Motivation</i>	12
<i>2.4 Acceptance</i>	13
<i>2.5 Knowledge</i>	15
<i>2.6 Interaction of the support variables</i>	16
<b>3. Method</b>	17
<i>3.1 Population</i>	17
<i>3.2 Procedure</i>	17
<i>3.3 Measures</i>	18
<b>4. Results</b>	20
<b>5. Conclusion and Discussion</b>	25
<i>5.1 Recommendations for further research</i>	28
<b>6. Literature</b>	29
<b>7. Appendix</b>	32

### 1. Introduction

Every company seeks to develop a unique strategy. With a unique strategy, an organization can distinguish itself from the rest of the organizations, so they are secured for a long term survival. Unique strategy might involve unique standards and values. A popular strategy option for organizations is to merge with another organization or to acquire another organization (McEntire & Bently, 1996). Organizational strategies are assumed to change, among other, through mergers and acquisitions (M&A). An acquisition is when one organization takes over the other one and the acquirer keeps control of the company. With mergers, two organizations merge into a single organization (Boys & Jemison, 1989).

Organizations merge or get acquired for different reasons. Organizations may decide to merge for financial reasons and enlarge their company or a large organization may decide to take over a small company in order to grow their share of the market. Organizations can merge because of political reasons (Trautwein, 1990). Organizations also merge to increase efficiency or because of the need to reduce cost. The assumption in these M&A's is that bringing two organizations together will bring the best aspects of each organization together, which will lead to success, however the reverse is likely to occur and many of these M&A's fail (Cartwright & Cooper, 1996).

There are many factors which can influence the failure of organizational change. Literature shows that there is a great interest in the human side of the cultural facets of M&A, because the traditional explanations do not provide answers to the question why these M&A's fail (Pablo, 1994). One of the important factors that managers often underestimate is the role of organization culture.

Organization culture is described in the literature as a typical profile of a group of people with regard to standards, values, behavior and institutions. If an organization decides to merge with another organization or takes it over, then it has to deal with a difference in organizational culture. This difference in culture can lead to consistent decrease in performance of both companies' employees after the merger (Weber & Camrer, 1996).

Every organization has developed a way of doing things in a particular way; how to handle problems, make decisions and react to situations. For example, an organization that focuses especially on procedures and structure and is characterized by rules and predictability will have a major conflict when it merges with an organization that focuses on innovation, motivating its employees to think creatively and outside of boundaries. But at the same time,

these challenges (merge with a culturally different organization) offer possibilities to grow and become a better organization.

Organizational culture is a difficult subject to investigate, because culture is not clearly visible. However, organizational cultures seem to be an important factor in the failure of mergers or acquisitions. Therefore, this research tries to open this 'black box' in order to explore to what extent perceptions of employees on the organizational culture change in time and whether it changes as a result of employees' motivation, acceptance, and knowledge to make the M&A a success.

In sum, although several factors may affect the failure of an M&A, in this study we focus on the impact of support for the M&A on culture after a merger or acquisition, and this research will focus on the following main question: *To what extent does support for mergers and acquisitions influence organizational cultural change in time?* In this study, support is defined as the motivation, acceptance and knowledge that employees have before the merger or acquisition. In the next part, the impact of support will be discussed in more detail.

## **2. Theory**

### **2.1 Organizational Culture**

Organizational culture can be seen as a lasting and only gradually changing characteristic of an organization and refers to implicit aspects of an organization. It reflects core values that are cherished and assumptions in the organization that are often not under discussion. It is recognized by the dominant leadership styles, language and symbols, procedures and fixed rules, and definitions of success that makes an organization unique (Cameron & Quinn, 1999).

Organizational culture develops itself through the years and it is created and maintained by the owners of the company (Cameron & Quinn, 1999).

If a new employee enters the organization he or she immediately gets aware of the organizational culture, which happens consciously as well as unconsciously. Also, the country of origin determines the culture. The norms and values of a nation can also have an influence on the culture of each and every organization operating or located within it.

“Culture refers to the norms, values and beliefs the members of an organization maintain about the purpose of work and how they are expected to go about doing the work” (Tentenbaum, 1999 p.5). The norms and values of a country can determine what kind of

attitudes and behavior are appropriate or acceptable. Likewise, in an organization the norms and values of a company determine the way people work together.

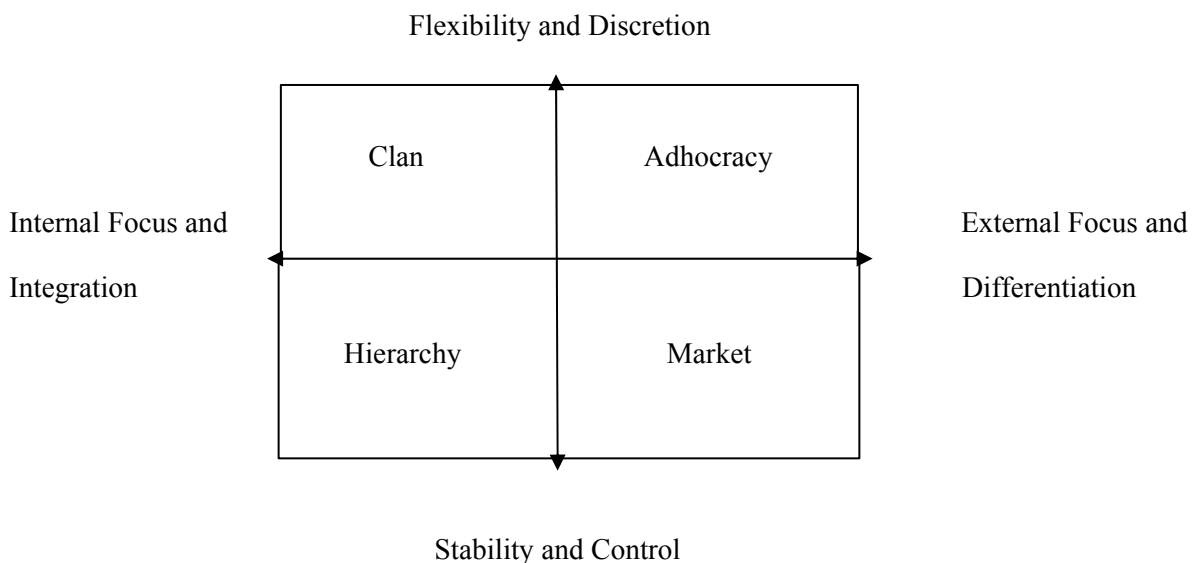
There are many typologies of company culture. Hofstede argues that differences in the norms and values of different countries can be captured by five dimensions of culture: individualism vs. collectivism, power distance, achievement vs. nurture orientation, uncertainty avoidance, and long term vs. short term organizations. Hofstede focuses on the differences at an international level and states that differences in national norms and values can make M&A's difficult for many reasons (George & Jones, 2002).

Quinn and Rohrbaugh (1983) use a different typology of company culture. They developed the Competing Values Framework that has four dimensions: people oriented, control oriented, innovation oriented and market oriented.

In this research we will use the typology of Cameron & Quinn (1999). This model is often used as a typology for company culture. With this model we can compare the culture of different organizations, instead of comparing the culture of different nations, like in Hofstede's model.

Cameron and Quinn (1999) developed the Organizational Culture Assessment Instrument:OCAI model. In this model (figure 1) there are basically four distinct business cultures that deal with the amount of control or flexibility within a company and its focus outwards or inwards.

*Figure 1: Organizational Culture Assessment Instrument: OCAI model*





## Organizational Culture

On the vertical axis, in the first quadrant is the clan culture. Here the company is internally focused with little control. The management of the organization behaves in general as a mentor, it facilitates and encourages. The management style of the organization is characterized by teamwork, consensus and participation. Employees are flexible and the work is often team oriented. Loyalty and trust are the binders that hold the organization together. This involvement is highly valued and human relationships are very important.

In the second quadrant is the adhocracy culture, which is externally focused. The organization is very dynamic and there is a real entrepreneurial spirit. The people are willing to take risks. The management of the organization in general emphasizes an entrepreneurial spirit, as well as innovation and risk-taking. The management style of the organization is characterized by personal risk taking, innovation, freedom and uniqueness. The binder that holds the organization together consists of commitment to innovation and development.

The third quadrant (internally focused and closely controlled), is the hierarchical culture. The organizations can be described as tightly structured and managed. Formal procedures determine in general what people do. The leadership in the organization gives the general expression of coordinating and organizing behavior and makes the impression of a smoothly running, efficient machine. The management style of the organization is characterized by job security, rules, and predictable and stable relationships. The binder that holds the organization together consists of formal rules and policy documents. Maintaining a smooth running organization is important.

The last quadrant (externally focused, with little control) is the market culture. The market culture can be described as being very much results oriented. The work is given the greatest care. People are very competitive and focused on delivering results. The management of the organization gives the general impression of a no-nonsense setting, with aggressiveness and a results orientation. The management style of the organization is characterized by unscrupulous competition, high standards and performance orientation. The binder that holds the organization together is the emphasis on performance and the achievement of objectives.

When two companies merge, three things can happen: a complete new culture emerges; the organizational culture of the most dominant organization overrules the organizational culture of the less dominant counterpart; or the new organization includes best of both worlds, in other words the cultures merge nicely (Guns, 2006). As mentioned above, sooner or later the culture or culture perception of employees will change after an M&A.

But Cartwright and Cooper (1993) argue that when an organization has a successful performance which is supported by strong organizational culture, then this doesn't guarantee that culture can easily be transferred to another organization. Culture is in their opinion not meant to change. Also, the organizational culture will not change spontaneously or by accident (Sims, 2000).

The expectation here is that the culture perception will change after an M&A, which might mean that the culture change is not in the desired direction, and that the change depends on the culture perception employees have at the start of the M&A.

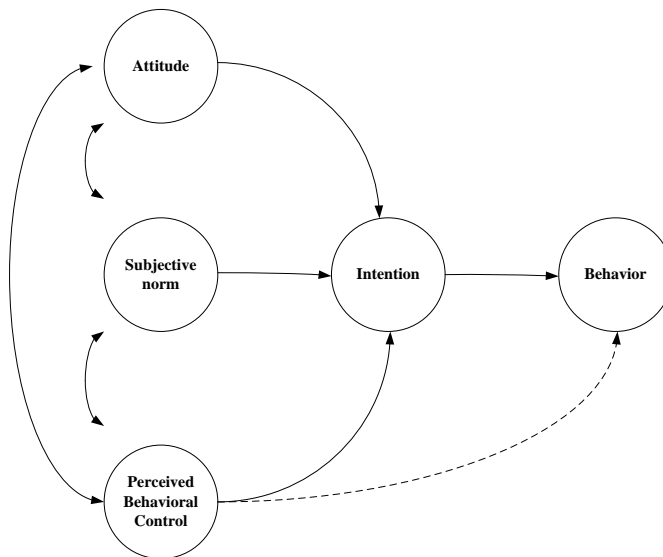
This leads to the first hypothesis:

*H1: The change in culture perception of employees after an M&A depends on their perception at the start of the M&A.*

### **2.2 Support**

Metselaar and Cozijnen (1997) have developed a model where the concept of willingness to change is captured. This model also known as the "DINAMO-model": Diagnostic Inventory for Assessment of the willingness to change Among Management Organizations gives tools to develop interventions in order to measure and explain the willingness to change among managers and employees. According to Metselaar the DINAMO-model is based on the assumption that all variables influence the willingness to change by managers. This model is also frequently used to measure the willingness to change among employees.

The DINAMO-model is based on the theory of planned behavior of Ajzen (1991). The theory of planned behavior was developed to predict behavior of people in specific contexts. The theory assumes that intention plays a central role in how an individual will behave. Behavior is best predicted by asking how people will exhibit certain behavior in a specific situation. Intentions serve as indicators of how much effort you want to spend for a certain behavior that will lead to the desired performance. The stronger the intention, the greater the likelihood, that the behavior will be shown. This theory also shows that exhibition of a certain behavior depends on both motivation (intention) and ability.

*Figure 1: Model of Ajzen*

According to Ajzen behavior attention is conducted by:

1. Attitudes
2. Subjective norms (expectations of others)
3. Perceived Behavioral Control (the expectation of their ways to perform the behavior)

The first variable refers to the degree where the person expects positive or negative outcomes of the behavior. The second variable reflects the pressure from the environment whether or not showing the behavior. The third variable represents the extent to which someone is convinced of the feasibility of the target behavior. The person then acts according to his or her intentions. The dotted line from behavior control to behavior refers to barriers that despite a high intention yet prevent to show the target behavior.

Instead of the division of attitude, subjective norm and behavior control, Metselaar and Cozijnen use the variables “wanting, needing and be able” to change, in order to declare the attitude of an employee (wanting to change), the subjective norm (need to change) and the behavior control of an employee (be able to change) regarding to the change process.

This study translated the variables, “wanting, needing and be able to change” of Metselaar and Cozijnen into Motivation, Acceptance and Knowledge. These variables are used to measure the support for M&A. In the next part, these variables will be discussed in more detail.

### 2.3 Motivation

In order to get things changed through employees, the organization should be able to motivate their members, which is easier said than done.

There are several theories about work motivation. Katzell and Thompson (1990) have made a review article listing all the theories about work motivation. They divide work motivation theories into two groups, exogenous and endogenous theories. Exogenous theory focuses on important variables that can be changed by external resources like organizational incentives, rewards and social factors such as leader and group behavior. In turn, an endogenous theory focuses on the process or mediating variables like expectancies, arousal and attitudes. Since we are looking at the process at an individual level in time, the focus here is on endogenous theory of motivation.

One of the endogenous theories is the expectancy theory. The expectancy theory was developed by Vroom (1964) and says that in order to get employees motivated, the Valence, Expectancy and Instrumentality must be linked to each other. Valence is the perceived outcomes of performance, that the employees need (intrinsic or extrinsic). Expectancy is the belief that increased effort will lead to increased performance (like getting the right skills, the necessary skills to do the job). Instrumentality has to do with the belief that if an employee's delivers good performance, then that will lead to rewards. When these variables are held constant, the expectancy will be positively linked with performance level.

The goal-setting theory states that people are motivated by conscious goals they have set, when they are performing a task. By setting specific and clear goals they get motivated, because these goals let them know what there should be done and how much effort they should exert. Hereby when a person sets a difficult goal and they are also committed to these goals, then this will lead to better performance (Locke, 1968).

These theories shows that, the more employees are motivated, the more this will lead to better work performance of employees, especially when they are intrinsic motivated. Ryan and Deci (2000) revisited the classic definitions of intrinsic and extrinsic motivation in view of current research and theory. They concluded that intrinsic motivated people are performing out of interest. They satisfy the natural psychological needs for autonomy and competence. If the organization explains why the merger had to take place and what the new goals are of the new organization, then the more the will feel activated toward the change in culture and are willing to contribute to the realization of the merger.

If an organizational change happens, the organization should motivate their members. Employees will do what they want to do or otherwise are motivated to do. Whether it is being more creative or to work in teams, if they are intrinsic stimulated, then the sooner the employees will change their culture perception. The hypothesis here is as follows:

*H2: The higher the motivation at the start of the M&A, the more respondents will change in culture perceptions in time.*

### **2.4 Acceptance**

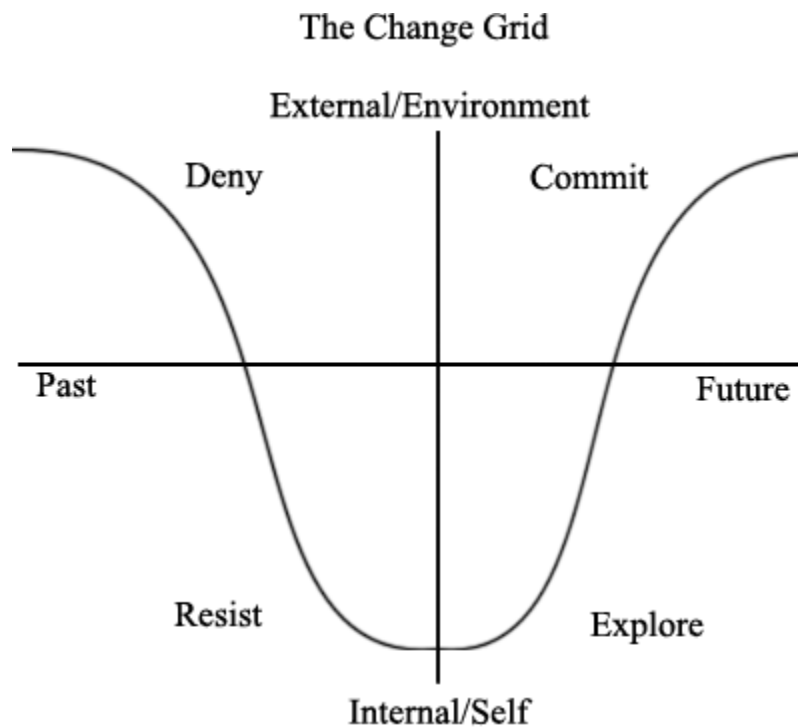
#### **Resistance to Change Model**

The decision to merge is most of the time in the hands of the management. Employees often have to accept it and have little participation. If an M&A takes place, it means that two different organizations have to cooperate. This means that they have to learn to work together and if necessary adapt to each other. An M&A is accompanied by major changes and are faces with a lot of uncertainty (Davy et al., 1988). Employees may have to work in another work environment. It can also mean that they have to work with new colleagues and tasks that are performed that may change into tasks that they were not used to.

All these changes can lead to resistance from the employees. The consequences of these changes on employees are often underestimated, which can be a reason for failure of the M&A. Often too much attention is paid to the implementation of the change rather than the process of change.

According to Scott and Jaffe (1988), the biggest challenge comes after the merger or change of work environment. A change is a fact and the acceptance of it requires much more energy and effort than many managers probably think. Employees may not be able to perform in the same way as before the change and there is a chance that they could blame themselves that they are too weak and get the feeling that they can't do the job any more. Managers often misjudge the situation and make the mistakenly expect that employees should immediately start with working on the same work level as they did before. Managers do not realize that this reaction is normal and that they have to give them some time in order to adapt to the new situation. They have to move away from the old situation in order to create a new culture and this is very important to the success of the new organization.

Figure 2: Change grid model



Scott & Jaffe (1988) worked a lot with people who have to deal with major changes in their lives. During their observations of these people they discovered this pattern. The phases of these patterns are as follows:

**Denial:** When a change occurs people show a high rate of ignorance. They don't have awareness that there is a change going on. People will simply continue with their work and their performance will remain the same. This phase is very dangerous because this attitude inhibits the natural healing process and the possibility to move on. At this stage it is good for managers to provide a stress management course and productivity training to help them cope with the idea that a change has occurred.

**Resistance:** This phase is characterized by feelings of fear, anger, depression and frustration. It focuses on the personal impact of the change, which goes along with a lot of grumbling. In this stage managers have to, as difficult as it is, be open to these negative statements. Relaxing activities will make the feeling of loneliness go away and will give employees some rest.

**Commitment:** Then there comes a phase where people begin to make new plans. After plenty of research and testing they are now prepared create a new mission, new ways to work together.

**Exploration:** Finally people are showing their interests again and are ready to cross the

boundaries of resistance. The creativity is back and it focuses on the external environment. People are focused on the future and new tires within the workgroup. But there is still some stress of uncertainty present.

Managers are mainly focused on the technical aspects of a change not on the human side of the change like guiding and supporting the employees during the process (Demers et al, 1996). Many mistakes that are made during an M&A process can be reduced by focusing more on the human resource issues (Schuler & Jackson, 2001). Managers expect their employees as soon as possible to restore their active groups. Although people are very flexible, they still need support so they can accept change and quickly swing to the other side of the model. If the managers create an environment in which employees accept the changes that has to occur, then they are more willing to change in their culture perception. The hypothesis here is as follows:

*H3: The higher the acceptance at the start of the M&A, the more respondents will change in culture perceptions in time.*

### **2.5 Knowledge**

Based on the model of Ajzen it can be said that the control that a person experiences of a change process depends on his or her knowledge of and experience with earlier change processes and the tools that someone has in order to be able to change (Metselaar and Cozijnen, 1997). If it is not clear why the changes take place and what kind of effect it will have on them, then it is more likely that the members will show resistance to changes which can occur as a result of M&A.

The main way to inform employees about the issues around the M&A is through communication and should be a major priority during a merger process. Not only between organizational members, but also with employees at all levels (Kavanagh, 2006). Providing information through communication ensures the correct perception of the need for change, how the change occurs, the desired results and the progress of the process. Through interactions such as communication, important knowledge will be transferred (Shin et al, 2000).

Especially when it is not clear what the changes mean for the employees. Doing different tasks, working with new colleagues or changes in work environment could be possible.

Glavimans and Reinders (1994) also emphasize the importance of communication and according to them it is very important to start as soon as possible with communicating about the change with the members. The management should tell them what the goals of the changes are and on what terms they think these goals can be realized, during the whole process of the change and not only at the beginning. They should also explain which interests are under pressure and include everyone from the communication process (such as individuals, departments, organization and extern environment). These members also have to know what the consequences are of the changes are (Glavimans & Reinders, 1994). The perceptions of employees of the “change climate” within the organization are in line with those of there supervisors and teams (Tierney, 1999).

The management could provide information though open communication channels. These information channels will accelerate contacts and strengthen the information flow. If the members of the organization have enough knowledge about what will change after the M&A, then they will better understand the need to change and show less resistance. The fourth hypothesis of this research is:

*H4: The higher the knowledge concerning the M&A at the start of the merger, the more respondents will change culture perception in time.*

### **2.6 Interactions of the support variables**

The literature shows that Motivation, Acceptance and Knowledge are important support variables for the M&A. These variables were examined separately, but it is possible that the perception of culture is not only determined by one support variable. It is imaginable that if an organization not only provides information about the M&A, but also tries to motivate their employees, than the employees will show less resistance to change. And if an employee has accepted that the M&A will occur and is also motivated to put effort for the implementation of the M&A, than the more he or she is willing to change their perception of organizational culture. So an employee’s perception can be determined by one's motivation but at same time also by their acceptance or knowledge. Therefore this study will also look at the interaction of these support variables and the last three hypotheses of this study are as follows:



*H5: The higher the Motivation & Acceptance concerning the M&A at the start of the merger, the more respondents will change culture perception in time.*

*H6: The higher the Motivation & knowledge concerning the M&A at the start of the merger, the more respondents will change culture perception in time.*

*H7: The higher the Acceptance & knowledge concerning the M&A at the start of the merger, the more respondents will change culture perception in time.*

### **3. Method**

#### **3.1 Population**

This study has collected data from two companies operating in the ICT sector. Both companies are located in the Netherlands. This research has a quantitative character and it is a longitudinal study over one and a half years. The participants were asked to fill out a questionnaire for assessing organizational culture based on the culture typology of Cameron and Quinn (1999). In total 4722 of the 10000 employees completed the questionnaire. At the first measurement 48% of the people have completed the questionnaire and at the second measurement 56% of the employees have completed the questionnaire. This may be because people were sick or because some employees left or joined the organization. Only the questionnaires that were completed at the first measurement as well as the second measurement were used for the analysis. Eventually 527 questionnaires were usable and the overall response rate here is 11%. The average age of the respondents is between 31 and 40 years (48.1%), 85% was male and 15 % was female. Most of the respondents (51.5%) have finished the HBO. Furthermore, 19.6 % of the employees have a management function. Most of the respondents worked at the organization for 6 to 10 years, also at the department they work in the organization. 79.1% of the respondents have a staff function and 20, 4 % has a sales function (0.4 % had neither one of them).

#### **3.2 Procedure**

All participants were approached through an online questionnaire. Data was collected shortly after the acquisition and a second time one and a half years after the acquisition. All

members of the organization were invited to fill in the online questionnaire. If the participant didn't fill in the questionnaire, a reminder was sent. In order to compare both questionnaires, participants were asked to make a unique code based on the letter of their zipcode and the last three numbers of their phone number. Respondents' answers were treated confidentially.

### 3.3 Measures

The organizational culture is measured by a scale developed by Dusschooten- de Maat (2004). This questionnaire is based on the OCAI-model of Cameron and Quinn (1999). They developed the Organizational Culture Assessment Instrument: OCAI model that distinguishes four business cultures based on two dimensions - i.e. the amount of control or flexibility within a company and its focus inwards or outwards. These four types are Clan, Adhocracy, Hierarchy and Market.

The questions for the questionnaire were formulated in relation to factors such as: the way employees get along with each other, communication, decision making, degree of freedom, typical features, atmosphere, leadership, degree of integration, in- and external focus. These elements were presented to an expert team of management consultants and industrial psychologists. They operationalized these elements into concrete statements. In this way, organizational culture can be measured by identifying relevant practices in the department and also examine the underlying values of the members of the organizations. From these statements, Dusschooten- de Maat selected items that measures organizational culture in a descriptive way that refers to collective behavior.

This study used a shortened version (40 items) of the original questionnaire (109 items). These items only measure the four culture orientations from Quinn and Cameron (1999). All the questions are scored on a 5-point Likert scale (1 = not at all typical, 2 = less typical, 3 = moderately typical, 4 = mostly typical, and 5 = entirely typical). A factor analyses was conducted on all items.

The 40 items are constructed as follows:

The first scale has ten items and is based on the type clan. These questions are based on five constructs: support, solidarity, team spirit, participation and tolerance. An example of a question is: "We give each other a lot of attention and support" (Cronbach's alpha of the first measurement (T1) is .89; second measurement (T2) .91).

The second scale consists of ten items concerning the second typology of the OCAI model: Adhocracy. This type also consists of five constructs: competition, incentives, performance, motivation, productivity and feedback on results. An example of a question is: “We quickly pick up new trends” (Cronbach's 'alpha T1 = .86; T2 = .89).

The third scale also consists of ten items. The items here are based on the third typology of Cameron and Quinn (1999), Hierarchy. This typology hierarchy of five constructs; Conscious, procedures, monitors, stability and cost control.

These questions examine how far formal procedures determine what people do. “You must strictly follow the rules here”, is an example of a question (Cronbach's alpha T1 = .67; T2 = .75).

The fourth scale is constructed to measure the last typology of Cameron and Quinn (1999), Market. This typology consists of five constructs: innovation, adaptation, alertness networking and taking risks. “We set ourselves challenging targets”, is an example of a question (Cronbach's alpha T1 = .84; T2 = .85). To assess the presence of beta change at this scale, a factor analyses has been conducted over all the items.

Based on the model of Metselaar and Cozijnen, the items for motivation, acceptance and knowledge were author constructed. All the questions are scored on a 5-point Likert scale (1 = not at all typical, 2 = less typical, 3 = moderately typical, 4 = mostly typical, and 5 = entirely typical). These 12 items are constructed as follows;

Motivation is measured by four items. “I would like to contribute to the realization of the merger” is one of the items (Cronbach's alpha T1= .84).

Acceptance is also measured by four items. An example of an item is “It is clear to me why the merger took place” (Cronbach's alpha T1= .89).

Knowledge is measured by four items. Questions here are as follows: “I know exactly what the consequences are for the staff after the merger” (Cronbach's alpha T1= .81). These 12 items were excluded from the questionnaire that was taken at the second measurement.

Demographics measured in the study are respondents' age, gender, education and Job Tenure.

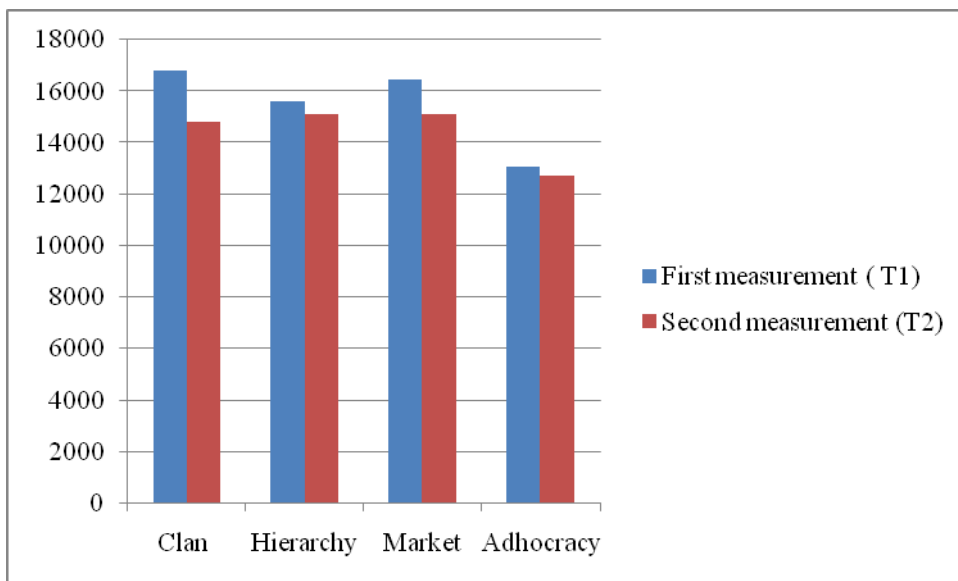
#### 4. Results

In this chapter, first the outcome of the changes in the view of organizational culture over time is discussed. Then, the influence of motivation, acceptance and knowledge will be discussed.

The averages, standard deviations and correlations between the research variables are shown in Table 1 (Appendix).

The analysis for the first hypothesis is conducted in two stages. First, differences in the mean score on all the types of organizational culture (family, hierarchy, market and adhocracy) at the first measurement (T1) and the second measurement (T2) were tested through a paired sample t-test. Second, a regression analysis was performed to test hypothesis 1. The mean scores of the cultures are shown in graph 1 and 2. At T1 the cultures Clan and Market are dominating. After the merger the cultures Hierarchy and Market are dominating.

*Graph 1: perception of organizational on the different culture type at T1 and T2*



In order to see whether the differences that are shown in the graphics are significant, a paired sample t-test was conducted. Table 2 shows that the perceptions on all the cultures Clan, Hierarchy, Market and Adhocracy differ significantly.

Table 2: Result of paired sample t-test

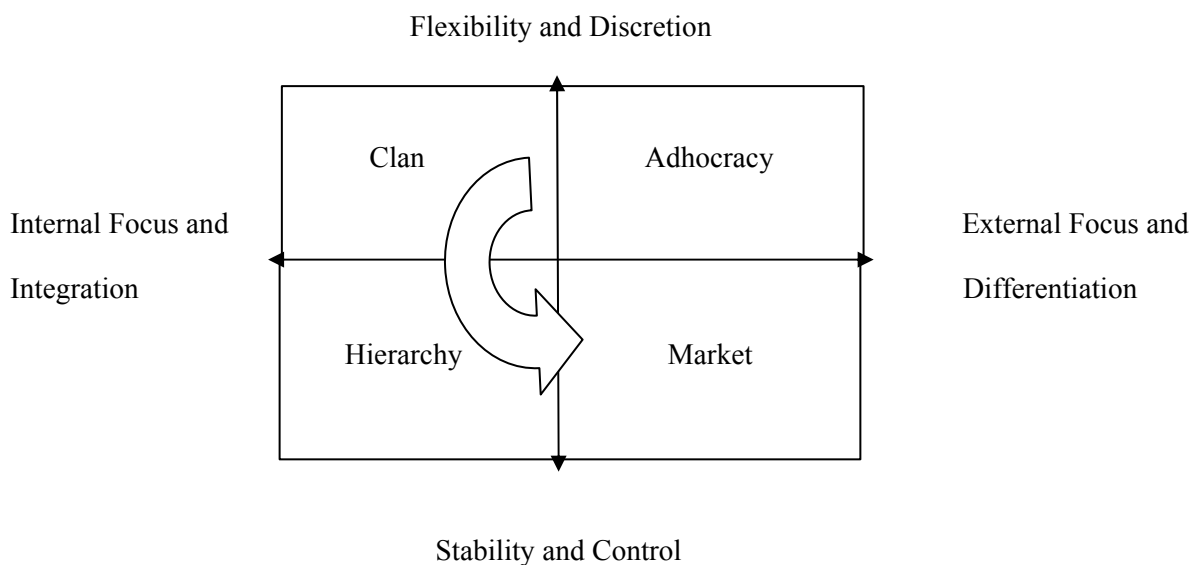
	M	Sd	t
Clan	-.30	.74	**
Hierarchy	.26	.71	**
Market	.70	.77	**
Adhocracy	-.98	.80	**

\*\* :  $p \leq 0,01$

Note: values are standardized  
( $\beta$ 's)

It seems that a shift occurred from a clan/market to a hierarchy/market culture (Figure 3). One can say that after the fusion, the company moved to a more stability, order and control focus (Figure 3).

Figure 3: shift from a clan/market to a hierarchy/market culture



In order to test hypotheses 2, 3 and 4, regression analyses were performed. The results of these regression analyses are shown in Table 3 to 6, with the perception of organizational culture at T2 as the dependent variable. In all four tables there are eight models. In the first model, the relationship between the dependent variable (perception of organizational culture at T2) and the control variables is tested. In the second model, the perception at T1 is included. In model 3 to 5 the relationship between the support variables and the dependent

variable are tested. Then the interaction effects of the support variables are tested in model 6 to 8.

Hypothesis 1 says that the perception of organizational culture at T2 depends on the perceptions the employees have at T1. Table 1 to 4 shows that there is a significant relationship between T1 and T2 for the cultures Clan ( $\beta = .41, p \leq .01$ ), Hierarchy ( $\beta = .34, p \leq .01$ ), Market ( $\beta = .36, p \leq .05$ ) and Adhocracy ( $\beta = .30, p \leq .01$ ). Although T1 explains a moderate percentage of the perceptions at T2 (Clan,  $R^2 = .18$ , Hierarchy,  $R^2 = .12$ , Market,  $R^2 = .16$  and Adhocracy,  $R^2 = .12$ ), overall it can be said that hypothesis 1 is confirmed.

The hypotheses 2 to 4 states that the higher the support (in the form of motivation, acceptance and knowledge), the more respondents will change in culture perceptions in time. The results of these regression analyses are shown in Table 1 to 4 (models 3 to 5), with the perception of organizational culture at T2 as the dependent variable.

Table 3, 4, 5 and 6 (p 23, 24 and 25) shows that there is no significant relationship between the support variable motivation and the dependent variable Clan ( $\beta = .03, p \geq .05$ ) an Adhocracy ( $\beta = -.08, p \geq .05$ ) culture at T2. But table 4 and 5 shows that there are significant relationships between the rest of the culture types Hierarchy ( $\beta = .14, p \leq .05$ ), Market ( $\beta = .14, p \leq .05$ ). So the second hypothesis is partly confirmed.

As can be seen in table 3 to 6, there are no significant relationship found between Acceptance and the dependent variables Clan ( $\beta = .04, p \geq .05$ ), Hierarchy ( $\beta = -.09, p \geq .05$ ), Market ( $\beta = .02, p \geq .05$ ) and Adhocracy ( $\beta = .14, p \geq .05$ ). These results show that the third hypothesis is not confirmed.

The fourth hypothesis states that the higher the Knowledge, the more respondents will change in time. Model 5 in table 3 to 6 shows that there also no significant findings between the Knowledge and the dependent variable Clan ( $\beta = .05, p \geq .05$ ), Hierarchy ( $\beta = -.03, p \geq .05$ ), Market ( $\beta = -.11, p \leq .05$ ) and Adhocracy ( $\beta = .09, p \geq .05$ ). Indeed the more knowledge they have, the less the employees with a market perception change. In model 6 to 8 in table 3 to 6 the interaction effects between the support variables are shown.

There is no interaction found between Motivation and Acceptance and the dependent variables Clan ( $\beta = -.01, p \geq .05$ ), Market ( $\beta = -.02, p \geq .05$ ) and Adhocracy ( $\beta = -.01, p \geq .05$ ). But there is an interaction between Motivation an Acceptance by Hierarchy as dependent variable ( $\beta = .15, p \leq .05$ ).

There are also no interactions found between Motivation and Knowledge and the dependent variables Clan ( $\beta = -.10, p \geq .05$ ), Hierarchy ( $\beta = -.02, p \geq .05$ ), Market ( $\beta = .07, p$

$\geq .05$ ) and Adhocracy ( $\beta = -.01, p \geq .05$ ).

There are no significant findings between Acceptance and Knowledge and the dependent variables Clan ( $\beta = .10, p \geq .05$ ), Market ( $\beta = .04, p \geq .05$ ) and Adhocracy ( $\beta = -.06, p \geq .05$ ). But there is an interaction by Hierarchy ( $\beta = .13, p \leq .05$ ).

As for the demographic variables, Tables 3, 5 and 6 show that job tenure also have a significant influence on the change in perception for Clan ( $\beta = .10, p \leq .05$ ), Market ( $\beta = .14, p \leq .05$ ) and Adhocracy ( $\beta = .16, p \leq .05$ ). This means that the longer employees work at a department, the more these employees change in perception over time.

Table 3: Results of regression analyses with Clan T2 as dependant variable

	model 1	model 2	model 3	model 4	model 5	model 6	model 7	model 8
<i>Control variables</i>								
Gender	.04	.04	.04	.04	.04	.04	.04	.04
Age	-.06	-.04	-.04	-.04	-.04	-.04	-.04	-.04
Education	-.04	.01	.01	.01	.01	.01	.02	.01
Job Tenure	.10*	.10*	.09*	.09*	.09*	.09*	.09*	.09*
Clan T1		.41**	.41**	.41**	.40**	.40**	.40**	.40**
<i>Support variables</i>								
Motivation			.03	.01	.01	.01	.01	.01
Acceptance				.04	.02	.02	.02	.02
Knowledge					.05	.05	.07	.05
Motivation&Acceptance						-.01	.04	.04
Motivation&Knowledge							-.10	-.04
Acceptance&Knowledge								.10
R <sup>2</sup>	.02	.18*	.18	.18	.18	.18	.19	.20
R <sup>2</sup> difference		.16	.00	.00	.00	.00	.01	.01

\*:  $p \leq 0,05$ ; \*\*:  $p \leq 0,01$

Note: values are standardized ( $\beta$ 's)

## Organizational Culture

*Table 4: Results of regression analyses with Hierarchy T2 as dependant variable*

	model 1	model 2	model 3	model 4	model 5	model 6	model 7	model 8
<b>Control variables</b>								
Gender	-.07	-.05	-.05	-.05	-.05	-.06	-.06	-.06
Age	.03	-.01	-.01	-.01	-.01	-.01	-.01	-.01
Education	.04	.08	.07	.07	.07	.07	.07	.07
Job Tenure	.04	.05	.04	.05	.05	.05	.05	.05
Hierarchy T1		.34**	.34**	.34**	.34**	.34**	.34**	.34**
<b>Support variables</b>								
Motivation			.14*	.19**	.19**	.19**	.19**	.15*
Acceptance				-.09	-.08	-.09	-.09	-.04
Knowledge					-.03	-.05	-.04	-.04
Motivation&Acceptance						.15*	.16*	.15*
Motivation&Knowledge							-.02	-.10
Acceptance&Knowledge								.13
R <sup>2</sup>	.01	.12	.14*	.15	.15	.17*	.17	.18
R <sup>2</sup> difference		.11	.02	.01	.00	.02	.00	.01

\*: p ≤ 0,05; \*\*: p ≤ 0,01

Note: values are standardized (β's)

*Table 5: Results of regression analyses with Market T2 as dependant variable*

	model 1	model 2	model 3	model 4	model 5	model 6	model 7	model 8
<b>Control variables</b>								
Gender	-.10	-.07	-.06	-.06	-.06	-.06	-.06	-.06
Age	-.05	-.04	-.04	-.04	-.04	-.04	-.04	-.04
Education	.09*	.09*	.08	.08	.08	.08	.07	.08
Job Tenure	.14*	.09*	.09*	.09*	.09*	.09*	.09*	.09*
Market T1		.36**	.37**	.36**	.38**	.37**	.37**	.37**
<b>Support variables</b>								
Motivation			.14*	.13*	.13*	.13*	.13*	.11*
Acceptance				.02	.07	.07	.08	.09
Knowledge					-.11*	-.11*	-.12*	-.12*
Motivation&Acceptance						-.02	-.06	-.06
Motivation&Knowledge							.07	.05
Acceptance&Knowledge								.04
R <sup>2</sup>	.03	.16	.18	.18	.19	.19	.19	.19
R <sup>2</sup> difference		.13**	.02*	.00	.01*	.00	.00	.00

\*: p ≤ 0,05; \*\*: p ≤ 0,01

Note: values are standardized (β's)



## Organizational Culture

*Table 6: Results of regression analyses with Ahhocracy T2 as dependant variable*

	model 1	model 2	model 3	model 4	model 5	model 6	model 7	model 8
<b>Control variables</b>								
Gender	.02	.04	.04	.03	.03	.03	.03	.03
Age	-.06	-.06	-.06	-.06	-.06	-.06	-.06	-.06
Education	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02
Job Tenure	.16*	.15*	.15*	.14*	.14*	.14*	.14*	.14*
Adhocracy T1		.30**	.30**	.30**	.30**	.30**	.30**	.30**
<b>Support variables</b>								
Motivation			-.08	-.08	-.08	-.08	-.08	-.06
Acceptatance				.14	.09	.09	.09	.07
Knowledge					.09	.09	.09	.08
Motivation&Acceptance						-.01	-.01	-.01
Motivation&Knowledge							-.01	-.01
Acceptance&Knowledge								-.06
R <sup>2</sup>	.03	.12**	.12	.13*	.13	.14	.14	.14
R <sup>2</sup> difference		.09	.00	.01	.00	.01	.00	.00

\*: p ≤ 0,05; \*\*: p ≤ 0,01

Note: values are standardized ( $\beta$ 's)

## 5 Conclusions and discussion

The purpose of this study was to give an understanding of in what extend perceptions of employees on the organizational culture change in time and whether it changes as a result of employees' support (defined as Motivation, Acceptance and Knowledge) to make the M&A successful. According to Gun (2006) three things can happen after an M&A. Either a new culture emerges, the most dominant culture overrules the organizational culture of the less dominant counterpart, or both cultures merge nicely.

The first hypothesis of this study was that after an M&A takes place, the perception of organizational culture will change, but that this depends on the perception employees have at the start of the M&A. This because culture is not something that will change easily; it is quite stable (Sims, 2000). This study shows that the perception of organizational culture in time is significantly explained by the perceptions employees have at the beginning of the merger. This could mean that it is very important how the employees look at the merger in the beginning, because this could help determine how development of organizational culture takes place in time. It can also give a notice if the change will occur in the desired direction.

Cartwright and Cooper (1993) discuss in their research that if managers are aware of the differences in behavioral practices and procedures and also the values on which they are

based, then managers can have a more effective approach to the human aspects of the merger process. If managers invite employees of both organizations to discuss the changes that will occur and give them the feeling that they also have something to say in the process, then there will be less resistance. Both organizations learn to know each other's similarities and differences. Based on the DINAMO-model of Metselaar and Cozijnen (1997) this study used three variables to measure the support for the M&A. The assumption here was that the more support for the M&A, the more employees are willing to change their perception over the organizational change.

The first support variable that was tested is motivation. The more the employees were motivated, the more employees would change in their culture perception. This study shows that there are significant findings that support this hypothesis. The main organizational culture at the organization was Hierarchy/Market at the second measurement, one and a half year after the M&A took place. Motivation did have an impact by the perception of organizational change on these culture types.

This means that it is very important to motivate the employees when an M&A is going to take place. If employees are willing to put in effort for the changes that will take place as a result of the M&A and are willing to contribute to a good integration process and to the realization of the M&A, then the more they are willing to change in their perception of organizational culture. The less resistance there is by the employees, the smoother the integration process will take place. In order to get these employees motivated it is very important for managers to show their own motivation. In order to motivate employees through leadership, managers should first find out what their own core values are and share these with their employees through visions and personal action (Fry, 2003).

The second support variable that was tested is acceptance. If employees stand behind the decisions that are made and understand why the organizations had to merge or get acquired and therefore accept the M&A, then more employees are willing to change their perception of organizational culture. This hypothesis was not confirmed in this study. Apparently acceptance did not have an impact on their perception at all. So it does not matter if it is clear why the M&A happens or if they understand the arguments for the M&A. Acceptance does not have an impact on the change in perception in time by any of the culture types.

Waddell and Sohal (1998) say that employees are not necessarily against the change, but that they are against the insecurities and the potential outcomes. That's why managers

should seek for alternatives to introduce the change. They should communicate and consult with the employees and get involved in every aspect of the change. So even when employees have accepted the change, that does not mean that the insecurities are gone. It may result in resistance to change the perception of organizational culture.

The fourth hypothesis suggested that knowledge also have an impact on the perception of organizational culture change. When the organizations provide information that is clear, up to date, factual consistent and sympathetic in diverse ways, the coping abilities of employees will increase and eventually it will increase their productivity. Schweiger and Denisi (1991) researched communication during a merger process. They find that a realistic merger preview seems to help make employees less resistant to the negative effects of M&A. People who are unhappy about the outcome of a merger process will have more dissatisfaction and more dysfunctions if they don't get an understanding through open communications about the reasons why the merger took place (Appelbaum et al, 2000). Therefore the last hypothesis suggested that the more knowledge employee's have about the merger, the more they will change in perception over time. Here there are also no significant results that confirm this hypothesis, which is also not what was expected. Remarkably, in the culture type Market, the more knowledge employees had, the less their perception changed.

Knowledge about the merger may help people understand why it has to take place, but that does not have to mean that they agree with it. The other side of having too much information is that employees will worry about the changes that will occur. On the other hand, the changes that occur during an M&A are not voluntary. When an organization decides to merge or acquire, a lot of changes take place. Not only changes in organizational culture, but also personal changes that matter. People may lose their job, have to move to another city, or get a higher or lower function. When changes occur that count for all the employees then it is more likely that employees are willing to change, because everyone has to deal with the same changes. Also when an employee has a job interview, then there are two sides, the organization not only looks at whether the employee is suitable candidate, but the applicants itself also looks if the organization suits him or her. It is possible, that after the merger took place applicants get the feeling that they do not fit anymore in the organization because the organizational culture is changed.

Besides the main effects of the support variables, this study also looked at the interaction effects of these variables. The assumption here was that the perceived organizational cultural change is not only determined by employee's motivation but also by

their acceptance or knowledge. There were only two interaction effects found by the culture type Hierarchy. If the Motivation and Acceptance was combined then it had an effect on the perception of organizational cultural change. Hypothesis 5 is confirmed by the culture type Hierarchy. This is also true hypotheses 7, the higher the Acceptance en Knowledge, the more they changed in their perception, but is counts only for Hierarchy culture type. So the combination of these variables had more effect than the variables separately had. When managers are implementing the changes they should hold this in mind.

An important finding in this study is the effect of job tenure on the perception of organizational change in time. The more years an employee remains at the organization, the more they are willing to change in perception. Most of the employees worked at least 6 to 10 years at the organization. The longer an employee works at an organization, the more experience they have about the processes that take place and how the organization operates. They have gotten used to it. Through the years they work there, employee's gain seniority and connections with the organization (Becker, 1992). Also the longer an employee works at an organization the more they get committed within the organization (Mathieu and Zajac, 1990). Because of this commitment they will not leave the organization easily and asses their experiences with the organization more positively (Kline and Peters, 1991). Based on the investments employees had to make in the organization and the exchange relations they have, employees can develop organizational commitment and tenure relations (Cohen, 1993). The assumption here is that even if there will be any changes as a result of an M&A, because of the strong commitment to the organization as a hole, they are more likely to change their perceptions.

### **5.1 Recommendations for further research**

“Marks and Mirvis (1983) and Bruno and Bowditch (1989) noted: as much as two years may be needed before full impact of M&A activity can be assessed.” (Schweiger and Denisi (1991, p 130). The second measurement took place one and a half year after the merger. Perhaps the second measurement was too early to find out if Motivation, Acceptance and Knowledge have an influence on the change in perception in time and should have taken place two years after the merger.

It is also possible that Motivation, Acceptance and Knowledge do have an influence, but on another HRM outcome besides organizational culture. Schweiger and Denisi (1991) argue that mergers could have negative impacts, like uncertainty seems to rise, there is more

stress and a decrease in satisfaction, commitment, intention to remain with an organization and the perception of the organizations trustworthiness, honesty and caring. For further research, these HRM outcomes can be included to see whether higher Motivation, Acceptance and Knowledge lead to more change over time.

### Literature

- Appelbaum, S.H, Gandell, Jobin, F. J., Proper, S., Yortis, H. (2000) Anatomy of a merger: behavior of organizational factors and processes throughout the pre- during post-stages (part 1), *Management Decision* 38/9, pp 649-661.
- Becker, T.E.(1992) Foci and bases of commitment: Are distinctions worth making? *The academy of management journal*. Vol 35 No 1 pp 232-244.
- Borys, B., Jemison, D.B. (1989). Hibrid arrangement as strategic alliances: Theoretical issues in organizational combinations. *Academy of management review*. Vol 14 No 2 pp 234-49.
- Davy, J. A., Kinicki, A., Kilroy, J. and Scheck, C. (1988). 'After the merger: dealing with people's uncertainty', *Training and Development Journal*, pp. 57–61.
- Dusschooten- de Maat, C. ( 2004). *Mensen maken het verschil*. 1<sup>ste</sup> druk. Rode egel producties. Assen. KoninklijkenVan Gorcum.
- Demers, R., Forrer, S.E., Leibowitz, Z., Cahill, C. (1996). Commitment to change. *Training and development Journal*.
- Cartwright, S., Cooper, C.L.(1993). The role of culture compatibility in successful organizational marriage. *Academy of management executive*. Vol 7 No 2.
- Cohen, A. (1993). Age and Tenure in relation to Organizational Commitment: A meta-analysis. *Basic and applied social psychology*. Vol 14 pp 143-159.
- Fry, L. W. (2003). 'Towards a theory of spiritual leadership', *Leadership Quarterly*, 14, pp. 693–727.
- George, J.M., Jones, G.R. (2005). *Understanding and Managing Organizational Behavior*. Fourth Edition. New Jersey. Pearson Prentice Hall.
- Glavimans, L.J.M, Reinders (1994). Participatie en communicatie in veranderende organisaties. *Communicaties*. 7<sup>de</sup> jaargang. Nr 5.

- Guns, T. (2006). De Impact van fusies en overnames op de bedrijfscultuur: literatuurstudie en empirisch onderzoek. Universiteit Gent. Faculteit Economie en Bedrijfskunde.
- Katzell, R.A., Thompson, D.E. (1990). Workmotivation. *American Psychologist*. Vol 45 No 2 144-153.
- Kavanagh, M.( 2006).The Impact of Leadership and Change Management Strategy on Organizational Culture and Individual Acceptance of Change during a Merger. *British journal of management*. Vol 17.
- Kline, C.J, Peters, L.H. ( 1991). Behavioral commitment and tenure of new employees: A replication and extension. *Academy of management journal*. Vol 34 No 1 pp 194-204.
- Locke, E.A.(1968).Towards a theory of task motivation and Incentives. *Organizational behavior and human performance*. Vol 3 pp 157-189.
- Mathieu, J.E, Zajac, D.M. (1990). A review and meta-analysis of the antecedent, correlates, and consequences of organizational commitment. *Psychological Bulletin*. Vol 108 no 2 pp 171-194.
- McEntire, M.H., Bently, J.C.(1996). When rivals becomes partners: acculturation in a newly-merged organization. *International journal of organizational analyses*. Vol 4 No 2 pp 154-74.
- Metselaar, E.E.,Cozijnen A.J.(1997). Van weerstand naar verandering. Holland Business Publications.
- Pablo,A. (1994). Determinants of acquisitions integration level: a decision making perspective. *Academy of management Journal*. Vol 37 No 7. pp 803-32.
- Ryan, R.M, Deci, E.L.(2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology* Vol 25, pp 54–67.
- Quinn,R.E., Quinn, K.S. (1999). Onderzoeken en veranderen van organisatiecultuur. Academic Service.Den-Haag.

- Quinn, R.E., Rorbaugh, J. (1983). A spatial model of effectiveness criteria: to competing value approach to organizational analyses. *Management Science*. Vol 29 No 3 pp 363-377.
- Sims, R.R. (2000). Changing an organization's culture under new leadership. *Journal of business ethics* 25, 65-78.
- Shin,M., Holden,T., Schmidt, R.A. (2000). From knowledge theory to management practice: towards an integrated approach. *Information Processing and Management*. Vol 37 pp 335-355.
- Schuler, R., Jackson, S.(2001). 'HR Issues and Activities in Mergers and Acquisitions', *European Management Journal*, 19 (3), pp. 239–253.
- Schweiger, D.M, DeNisi, A.S.( 1991). Communication with employees following a merger: a longitudinal field experiment. *Academy of Management Journal*. Vol 34 No 1 pp 110-35.
- Scott, D., Jaffe, T.J. (1988) Survive and Thrive in Times of Change. *Training and Development Journal*.
- Tentenbaum, T.J. (1999). Beating the Odds of Merger & Acquisition: Seven Key Practices That Improve the Chance for expected Integration and Synergy Organizational Dynamics.
- Tierney,P. (1999). Work relations as a precursor to a psychological climate for change; The role of work groups supervisors and peers. *Journal of organizational change management*. Vol 12 No 2 pp 120-133.
- Trautwein,F.(1990). Merger motives and merger prescriptions. *Strategic Management journal*. Vol 11 no 4 283-295.
- Vroom, V.H., Stanton, M.M. ( 1965) Motivation in management. New York: American foundation for management research.
- Waddell,D., Sohal. A.S., (1998). Resistance: a constructive tool for management. *Management Decision*. Vol 36/8 pp 543-548.
- Weber,A., Camrer, C.F. (1996). Cultural conflict and merger failure: An experimental approach. *Management Science*. Vol 49. No 4 pp 400-415.

Appendix

Table 1: Mean, Standard deviation and correlations between the measured variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Clan ( T1)	3.20	.69	1														
2 Hierarchy (T1)	2.86	.55	.11*	1													
3 Market (T1)	2.54	.70	.42*	.18*	1												
4 Adhocracy (T1)	3.49	.65	.38*	.28*	.43**	1											
5 Motivation	4.05	.58	.01	.04	.00	.17**	1										
6 Acceptance	3.56	.79	.11*	.02	.07	.10*	.51**	1									
7 Knowledge	2.90	.76	.11*	.02	.13**	.10*	.25**	.52**	1								
8 Clan ( T2)	2.90	.67	.42*	.16**	.31**	.21**	.06	.10*	.12**	1							
9 Hierarchy (T2)	3.12	.68	.01	.34**	.02	.19**	.16**	.04	.01	.08	1						
10 Market (T2)	3.24	.68	.21*	.14**	.39**	.42**	.17**	.13**	.04	.51**	.29**	1					
11 Adhocracy (T2)	2.52	.72	.26*	.11*	.56**	.31**	.05	.11*	.14**	.62**	.07	.64	1				
12 Gender	1.16	.37	.23	-.04	-.05	-.03	.01	-.01	.03	.07	-.06	-.05	.04	1			
13 Age	3.70	.89	-.04	-.04	-.02	.00	.02	.00	.02	-.04	.01	-.00	-.03	-.22**	1		
14 Education	3.04	.71	.05	-.14**	.03	.01	.05	.05	.00	.03	.01	.08	-.02	.01	.02	1	
15 Job Tenure	3.16	.93	.00	-.02	.13**	.08	.05	.04	.10*	.09	.03	.13**	.15**	-.05	.23**	.02	1

\*: p ≤0,05; \*\*: p ≤0,01