THE ROLE OF ORGANIZATIONAL CULTURE IN A SUCCESSFUL CHANGE PROCESS



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The Role of Organizational Culture in a Successful Change Process



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1. Abstract

This study examines the organizational culture in the context of organizational change, focusing on the role of culture in the success of the change process. Too many organizations failed in their attempt to change systems and work processes since they were merely mechanistic in their approach and neglected the role of culture within the process.

The main two hypotheses laid in this research were:

- 1. There is a positive correlation between the dissatisfaction with the current organizational culture and the success of the change process;
- 2. There is a negative correlation between the strength of the organizational culture and the success of the change process.

Other hypotheses dealt with company size, company age, employees' professional experience, and employees' education as moderators in the above correlation. The research was conducted in IT division of a European corporate during a change process it went through, and included 12 companies. The preliminary stage of the research was in depth interviews, which led afterward to a quantitative research conducted in two stages. Findings of two companies were eliminated because of their small size and out of 700 employees 344 participated in the survey before change and 411 participated in the survey after the change (nine month later).

The findings confirm the two main hypotheses and most of the secondary ones:

- 1. The stronger dissatisfaction with culture is the more eased is achieving success of the change process. It becomes even easier in more mature companies, with longer employees' professional experience, and with lower level of employees' education;
- 2. The stronger culture is the more difficult it is to achieve success of the change process. It becomes even more difficult in bigger companies, more mature, with longer employees' professional experience and with higher of employees' education.

The main managerial consequences following these findings are:

- (a) Strong culture may become a curse when change is required unless the culture is learning oriented and change focused;
- (b) Change will be eased if managers consider dissatisfaction with the current situation as an essential tool to start breaking the status quo the organization is used to

Acknowledgement

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2. Introduction

One of the main characteristics of the world in the recent period and of the organizations functioning nowadays is the frequent change occurring all time long. Peters (1995) made a very dramatic statement that today the only stable thing we are left with is the change itself, and probably this paradox best reflects the importance of change in today's life. Usually we find that organizational changes shake the entire internal power equilibrium and generally constitute a total shaking of the culture: the norms, values, concepts and habits of the organization. The organization reference to change is essentially paradoxical - on the one hand the organization, which aspires to achieve its goals, need change in order to adapt to the changing environment. On the other hand, change hurts the natural need of it's members to feel confidence in their working place and act in a well known and expected environment, which means sticking to the existing patterns of culture (Lakomski, 2001).

The employee's resistance to the introduced organizational change can often avoid the success of the process and sometimes even harms the organization survival perspective (Bovey & Hede, 2001). The inclination of all living organisms to keep an equilibrated condition constitutes the basic obstacle in every movement towards a change (Stacey, 1996). Often the organization failure in its adjustment to new conditions occurs due to shortage of management understanding of the culture's role in the change process. In the past, a successful change relied on the management that might energize all organization's systems, and which overcame the inclination to return to equilibrium.

Today, since 'equilibrium means death' (Stacey, 1996), it is not anymore sufficient. The real test of the organization readiness and ability to carry out the necessary change relies upon its culture. When the change process is not escorted with the necessary cultural changes, it will be not just the basis for resistance to the present change, but also for any future required changes (Nielsen, 2000). So, understanding the attribute of organizational culture to change, is the main aim of this study.

Further in this paper we shall get better acquainted with the phenomena of 'change' and 'organizational culture' and mainly with the cultural challenge the changing organization managers face.

3. Literature Review

The purpose of the critical review of the literature is twofold: to help clarify and refine the research questions and to position this research within its genre. This study intends to examine literature in the relatively young fields of change management and organizational culture and to review some of the works by the leading critics in these fields. This researcher will also read and review literature connecting the two phenomena together and discussing the mutual impact on each other. Lastly, the study will examine how organizational scholars view the contribution of strong culture to the change management process in order to reach the suggested results. The literature review is also intended to define key words, parameters and objectives for this study. In short, the purpose of this literature review is to gain insight and understanding into relevant previous research and the trends that have emerged in the field, to understand how cultures interact within a change process in order to best understand how to develop the thesis of this paper.

3.1 Sources of Organizational Changes:

Changes derive from three sources: external, internal or natural (from the organization very nature). Changes in the organization's environment compel the organization to change, in order that positive relations will continue. Changes in the environment can be compelled on the organization, however outstanding organization shape their environment by proactive behavior and are not its victims. Changes can also derive from within the organization, further to failing to meet needs, or the opposite -further to growth and success. According to the 'resistant complex systems theory', organizations, like living systems, pass from a simple situation to a complicate one as part of a natural process. The 'resistant complex systems theory' approach emphasizes the organizations' ability to self-change and self-grow, their very nature being to develop and pass to higher, more complex phases (Nadler, 1998). Also according to the 'resistant complex systems

theory' change is but a vital component in the organization natural life path (Adizes, 1991). Adizes described the organization natural life path and the stages and passes among them. The 'pass from one stage to another involves essential changen and organizing difficulties, risks and opportunities.

According to the chaos theory' (Stacey, 1996), change, lack of stability, randomness, temporaries and dynamics are part of the 'universal order', therefore complex organizational systems are situated in a dynamic condition, in which periods of order are temporary. Chaos is reflected in frames' disintegration, lack of clear directioi, empty space and lack of leadership. It enables the generation of initiative, new ideas and new order. Such a kind of operation pattern is recommended merely for organizations operating in the most turbulent environment.

According to the 'paradigm theory', scientific and organizational development is done through revolutions, changing the borders of the human concept and thinking. 'Paradigm' is another name used by many scholars for organizational culture, mainly for the deepest levels of it. The term 'shifting paradigms' is actually connecting together the two phenomena of organizational change and of organizational culture Johnson & Scholes, 1999).

3.2 Types of organizational change:

There are various typologies of organizational changes, varying from one another in the focus on the change dimensions. This may be best put by four questions: what is changed? How fast is the change? How radical is the change? Who is influenced by the change? (Kotter, 1996).

The domains that change vary in accordance with the change contents:

1. Change of the destination, changes in objectives and essence.

- Structural changes or changes in authority and in internal and external organizational relations.
- 3. Technological changes or changes in working methods and processes
- 4. Change concerning people: in positions, values, beliefs, skills, abilities or the workers' human composition.

The changes differ from each other according to the change source - initiated or compelled, the change direction - outwardly or inwardly directed, the planning range-planned or unplanned change, and more (Senior, 2001).

Nadler (1998) observes seven kinds of change within organizations:

- Changes in the physical conditions, like moving the premises to new geographical location.
- Changes in the working conditions: rewards, work range and promotion possibilities.
- Changes in the occupation: in the work contents and essence.
- Changes in the social environment: integration in a new team, working with new people.
- Structural and political changes: change in the organizational structure, communication and authority.
- Changes in the organization policy, procedures and standards,
- n Changes in the organization's culture and values

Johnson & Scholes (1999) model offers a very common typology for organizational changes according to two parameters: the change impact on the organization and the source of the change initiative. Organizational changes can be classified into four types, according to this model: changes made within the extant of the 'organizational paadigm', divided as follows: **strategic tuning**, when the change is initiated by the organization, and **adaptation**, when the change is compelled. Organizational changes that include the changing of the 'organizational paradigm' are divided into two types: **plained** essential

change, when it is initiated by the organization, and **forced** essential change, when it is reactive.

Change classification according to the change depth generally refers to the change range and domain. In this context it is customary to classify changes into two levels: first class change, small range, within the extant thinking patterns, and second class change, large range, including change of the extant thinking patterns, value change, paradigm shift (Head, 1997).

3.3 The Concept of Organizational Culture:

Every society has it's own culture that is created through social interactions among it's members and enables them to live and act together as a unique entity (Macionis, 2001). The scientific interest in cultures started with tribes (e.g., Hall, 1959) and moved toward nations. Only in the late 1970's an interest was focused for the first time upon culture on the organizational level. Among the first to raise the subject was Ouchi (1981) who learnt the Japanese organizational culture and pointed it out as the main reason for the Japanese success at that given time. It was not until the beginning of the 1980's that organizational scholars began paying serious attention to the concept of culture (Pascale & Athos, 1981; Deal & Kennedy, 1982; Peters & Waterman, 1982). In the mid 80's there was great interest in understanding and measuring culture because it was perceived more and more to be not only a concept that could explain many organizational phenomena, but also something that could be manipulated to create a more effective organization (Van Maanan, 1985; Schein, 1997). This approach was rejected during the early 1980's by a big group of scholars. During this years, there was, a clear distinction between those writers who saw culture as something an organization has (meaning it is a variable proper to manipulate with), and those who saw it as something organization is (meaning one is allowed only to understand it). The first group was mainly of managers and management consultants, and the ater was almost exclusively found among pure academics, mainly anthropologists (Smircich, 1983).

Members of the second group shared an alternative approach, which argue that all organization's features and behaviors, including its systems, procedures, policies and processes, are parts of its culture. As a consequence the culture can not be manipulated as a whole, or turned on or off, although it may be somehow intentionally influenced. It leads some scholars from this party to a pessimistic view of the possibilities for planned, topdown culture as many actors engage in negotiations about cultural values and meanings, and at least some are strong enough to resist attempts by managers to impose cultural orientations on them (Harrison & Shirom, 1999). But today, not only it is accepted by most scholars in the business administration domain that culture may be shaped and reshaped, but it is also viewed as one of the main responsibilities of managers nowadays. It is very ironic that at the years 1999 and 2000, the hip period of the so-called 'new economy', IT companies in the US have hired anthropologists, those professionals who traditionally opposed any idea of manipulating culture, since they found these professionals most suitable for diagnosing and shaping organizational culture.

The study of organizational culture is an eclectic one since it was at the very beginning based on theories from two major disciplines: the anthropology and the organizational behavior. The anthropologists view 'culture' as a system of common symbols and meanings that has to be processed mentally to be understood. As to the approach of organizational behavior, the organization has to operate according to symbolic patterns to achieve affectivity. In 'culture' the anthropologists see a mechanism serving the human needs for adaptation. According to the organizational behavior approach, people join organization from various reasons and are expected to unify and adopt the organization goals and behavior. Bringing together the two concepts created the relatively new field of 'organizational culture'. It will be appropriate to mention that Hofstede (1984) claims that there is a third source for this new sub-discipline: the psychology, while Schein (1997) argues that the third source is in fact microeconomics.

Today it is viewed as an independent field as for the last two decades scholars has developed comprehensive framework for a better insight of the organizational culture. It is agreed by all scholars that the organization can not exist without the organizational culture that is the

normative system joining all members of the organization together (Schein, 1997) In most modern countries people live within a diverse society and when they join organization a central issue is the question of which cultural values and practices will guide the organizational process and unit them all together.

Each manager brings his own cultural norms into his professional practice. His perception and conceptualization of the organizational goals may influence the extent to which his managerial behavior will become an extension of his own culture exclusively or will incorporate the cultures of the employees. Accordingly most scholars view the organizational culture as a pattern of the values, beliefs, assumptions and perceptions that determines members' behaviors in and around the organization. When the manager does not pay attention to the culture within his organization, the organizational culture resembles very much the national one, is parallel but smaller version of the societal culture (Erwing & Douglas, 2000).

This paper deals with the organizational culture in the context of a change process; therefore, it is essential to begin with the definitions offered to this concept. There is not any widely agreed definition since organizational culture is a very soft term, as described by Schein: "The concept'is hard to define, hard to analyze and measure, and hard to manage" (1997, pp. xi). Hereby are some various definitions for 'organizational culture':

- 1. The collective programming of the mind which distinguishes the members of one organization from another (Hofstede, 1997)
- 2. The collective personality of an organization (Hofstede, 1984)
- 3. Culture is to the organization what personality is to the individual a hidden yet unifying theme that provides meaning, direction, and mobilization (Kilman et. al, 1985)
- 4. It is the way we do things around in the company (Deal & Kennedy, 1982)
- 5. The way things are done around in the organization (Osland et. al, 2001)
- 6. Shared, consensual validated set of definitions that are passed on to new members as the correct way to define the situation (Schein, 1997)
- 7. Corporate identity (Schein, 1997)

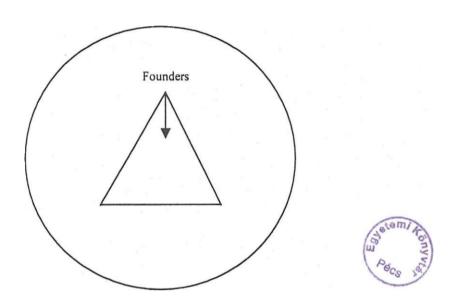
- 8. The deepest level of assumptions and beliefs that individuals in organization share among them (Cunha & Cooper, 2002)
- 9. Common assumptions (Fiol, 1991; Fitzgerald, 1988)
- 10. A mix of artifacts and assumptions (Lewis, 1999)
- 11. What the organization is or has (Schall, 1983 in Weick, 1987)
- 12. Main pillar of strategy (Bate, 1995)
- 13. Control system (Critchley, 1993; Week, 1987)
- 14. Common feelings (Sutton & Nelson, 1990)
- 15. Wide range of meanings and behavior patterns (Furenham & Gunter, 1998)
- 16. Shared orientations (Harrison & Shirom, 1999)

We can see various definitions for 'organizational culture', which differ some how fbm each other: some emphasize the meaning, some emphasize the way it is transmitted, some emphasize the applications on the organization, and some point out the culture mainly as pattern of behavior. All definitions have something obvious in common: they emphasize, this way or another, the importance of the culture for the organization and for the members of the organization since the culture helps the organization define itself and make its way into a potentially hostile environment. Culture serves as a mechanism for making organization members' world meaningful and predictable, and this way to decrease their anxiety. People working for one particular organization have a specific way of acting and interacting which sets them apart from people working for other organizations. This specific way is, in fact, the organizational culture of the company.

3.4 Sources and Levels of Organizational Culture:

Schein (1997) recognize three sources organizational culture spring from: the founders of the organization, the shared experience of group members as their organization evolves, and the new comers to the organization. Though each of these three sources plays in his eyes a crucial role, by far the most important of them he argues to be the impact of the founders. It may be described best way by figure 1:

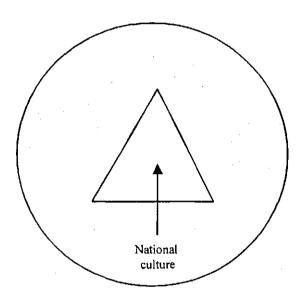
Fig.1: The impact of founders on the organizational culture



The most salient cultural characteristic of a new established organization is that they are the creation of the entrepreneur or founder who impose his thinking pattern on employees he hires. His beliefs become the shared beliefs and serve as the major glue for the new established organization and essence of the organizational identity (Schein, 1999). At this stage there is strong emphasis on differentiating the organization from the environment and from other organizations by making culture explicit and integrated as far as possible. The important role founders play in molding the organizational culture at the early stages of the OLC (Organizational Life Cycle) is replaced in the next stages with the role leaders have. Schein (1997) emphasize the main difference between 'managers' and 'leaders': only leaders are aware of the importance cultures has and dedicate a lot of time and effort in gaining and sustaining the proper organizational culture.

Shafritz & Russel (1999) present a different opinion. They disagree with Schein since they tend to believe that another source, the 'import' of culture from the national cultures in which organizations are embedded, is the most important one and has the biggest effect on the organizational culture. Recent studies point to many ways in which national culture influences the organization's culture (Hofstede, 1997). It may be described best way by figure 2:

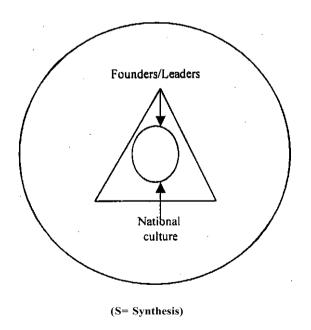
Fig.2: The impact of the national culture on the organizational culture



Shafritz & Russel (1999) view administrative institutions as a part of their wider society, and accordingly they pay the biggest attention to the influence the outside culture has on the organizational one through the interaction the institute has with the outside environment of the overall culture. Their approach fits with this of Deal & Kennedy (1982) who viewed the Japanese organizational culture actually as an expansion of the national Japanese culture, and vice versa.

In fact we can bridge between the first approach and the second by describing the organizational culture as a synthesis between the two different, and sometimes even opposing forces. Sometimes the leader is willing to encourage values and norms 'imported' by his employees from the national culture, and sometimes he will 'declare war' on others that do not fit with the culture he is willing to shape in the organization. The final result will be a synthesis between the 'import' and the 'home made' patterns. The stronger the leader is, the more consistent he is, the more charismatic he is, the more dedicated to achieving the desired culture he is, the more he plays a role model for his employees, the closer will be the synthesis to the leader's pattern (Schein, 1997). In case of a manager, as opposing the leader, whose behavior and attitude are much the opposite of the described above, the synthesis tends to be closer to the pattern imported from the national culture. Figure 3 illustrates the synthesis process:

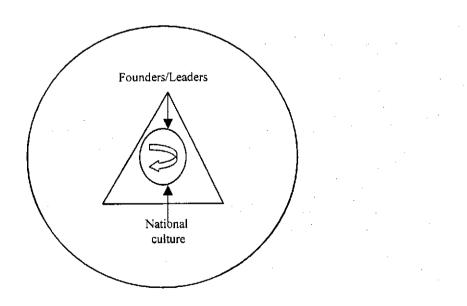
Fig. 3: The organizational culture as a synthesis



Now we are left with the third source organizational culture spring from: the shared experience of group members as their organization evolves (Schein, 1997). By definition this is the last one to effect culture since it needs time to become an influensive factor. The preliminary impact on organizational culture is the joint effect of the nathral culture and the early founders and/or leaders imposing their values and beliefs on the organization. The two sources together create the synthesis described above, which in fact is the early culture of the organization.

As the organization grow and become mature, employees gain a common experience, the culture evolves and is reshaped by them. Sticking to the same pattern of illustrations as used before, it will be best described by figure 4:

Fig.4: The three sources organizational culture spring from

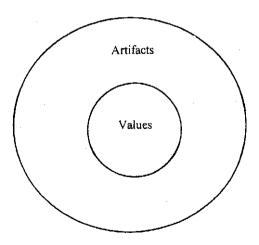


We can summarize all three sources together stating that cultural orientations emerge within an organization as members interact with one another and with people outside the organization and try to make sense out of these interactions, while the managers make their efforts to influence the final result.

Schein (1997) believes that the most useful way to think about culture is to view it as the accumulated shared learning of a given group (presented by the middle arrow in figure 4), covering behavioral, emotional, and cognitive elements of the group members' total psychological functioning. Accordingly he views the major phenomena that are associated with culture as the aggregation of observed behavioral regularities, group norms, espoused values, formal philosophy, rules of the game, climate, embedded skills, habits of thinking, mental models, shared meanings, and root metaphors.

Ouchi (1981), Cameron & Quinn (1999), and others describe the culture as compound of two layers: artifacts and values. While the artifacts are obvious, laying on the surface of any organization, the values lay much deeper and can be found only by an organizational survey. This basic description of the organizational culture levels is illustrated in figure 5:

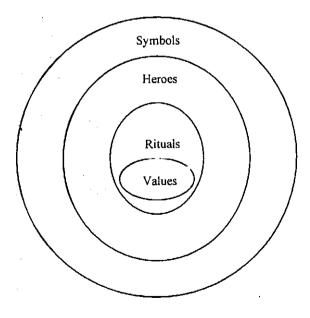
Fig.5: The basic levels of organizational culture



Artifacts are most easily fixed and identified but Schein (1997) argues that managers cannot assume that everyone within an organization interprets events or symbols in the same way and in result shares the same norms, values and beliefs. Nor can it be assumed that particular cultural manifestations, such as office decor or company stories, provide valid indications of underlying cultural features, such as cognition and values. These must be investigated and developed on their own and artifacts have to support them and be consistent with.

Hofstede (1984) is more specific offering a more sensitive tuning by dividing the artifacts itself into three various levels which makes the above mentioned model a more detailed one. His typology of organizational culture is illustrated in figure 6:

Fig.6: Hofstede's levels of organizational culture



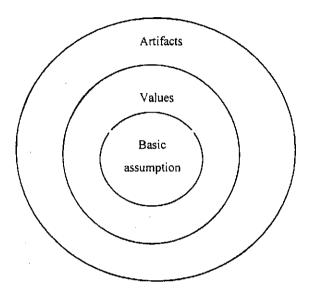
Schein (1997) differs with his approach since he underline especially another level - the basic assumptions. He describes it as the deepest and most important level, and he views these assumptions as the basis, on which the organizational policies, practices, and values are built. These assumptions offered by Shein (ibid.) may be defined as a constellation of concepts and perceptions shared by a group that determines how the group views the world. The set of assumption hold by a group is normally beneath members' awareness and therefore is rarely questioned.

The basic assumptions are often called also 'the organizational paradigm' (e.g. Johnson & Scholes, 1999) since they evolve when a solution to a problem works repeatedly, and it comes to be taken for granted that nature really works this way. That is why Schein (1997) calls a set of integrated basic assumptions of the organization members "a thought world or mental map" (ibid. pp. 22). Once we have developed such a set it becomes obvious to us "what to pay attention to, what things mean, how to react emotionally to what is going on, and what actions to take in various situations" (ibid.).

This way the basic assumptions supply the members of the organization with the cognitive stability they need so much, through building of shared identity and mission. As already mentioned the assumptions are not necessarily conscious, since they are taken for granted and people around the organization tend not to discuss them. From this reason there is no reliable, quick way to identify cultural assumptions, and one can bring them to the surface only by probing the organizational strategic decisions. It is the leader responsibility to communicate the assumptions by totally systematic and consistent behavior (ibid.).

Schein's typology of organizational culture levels is illustrated infigure 7, and has gained the name 'the culture' onion':

Fig.7: Schein's 'culture onion'



The values of the organization lie in the middle of the 'culture onion' offered by Schein (1997), beneath the artifacts and above the basic assumptions. If to find the artifacts it was enough to look around the organization, and to excavate the assumptions it required a long and deep digging, to espouse the core values of an organization it requires intensive scratching of the surface. The core values of the organization may be defined as a "broad tendency to prefer certain states of affairs over others" (Hofstede, 1984, pp. 18).

Between the deepest and shallowest levels Schein (1997) introduces 'espoused values'. These are values connected with moral and ethical codes and determine what people think ought to be done, rather than what they necessarily will do. Often organizations present a particular view of their culture through formal documents, such as annual reports, mission statements, speeches by senior managers and even by demonstration of a laminated and framed list of the organizational core values. While these predict much of the behavior that is observed at the 'practice' or 'artifact' level, especially with regard to what people say, they may conflict with what people do (Schein, 1997). For example,

we shall often have heard organizations declare their customers satisfaction is their most important asset, yet sometimes their service practices contradict this espoused value. It is difficult to ascertain whether the espoused values are congruent with employees' values or underlying basic assumptions or simply aspiration for the future.

There is a wide range of common values and each organization can be recognized by the set of core values he decided to choose out of this range and to stick to. Hereby is presented a partial list of the most common values as collected from a big variety of companies' credo:

- · Personal initiative
- Perfect customer service
- Honesty and creditability
- Breaking through innovation
- · Coping with challenges
- Pioneer leading in technology
- Self confidence and assertiveness
- · Fearless risk taking
- Mutual responsibility
- Personal responsibility
- Individual opportunity
- Respect to each employee
- Strive for excellency
- Social responsiveness
- Solidarity
- Encourage employees' creativity
- · Tough and enjoyable work
- Enthusiastic work
- Teamwork
- Fast decision making
- - Change orientation

- Dynamism
- Integrity
- Employees as the most important asset

Etc

No organization can carry all flags at a time and therefore it is necessary to concentrate on not more than eight core values, and to ensure they are consistent with each other. For instance: an organization can not stick to a core value like 'always be at the edge of technology' and at the very same time to the value of avoid risk taking'.

The core values, same as the assumptions, begin with the leaders who impose their own values on a group, and they lie mainly in the strategies, goals, and philosophies. The values are in fact the justifications for the organizational activity and behavior, while the assumptions are the ultimate source of these values (Schein, 1997). Some examples of basic assumptions: most people are basically honest, everybody is against us, the environment is unfair, etc.

The values are transmitted and maintained by often-told stories, legends, and by rituals, reinforced by heroes, and all this serve to enhance the socialization of the members (Shafritz & Russel, 1999). Since experience suggests that human beings make sense of themselves and their world mainly narratively, it is obvious that stories have particular power to build and support organizational culture. For one thing they convey the norms, values, attitudes, and behaviors that define organization probably more fully than any other kind of communication. The virtually universal human fascination with stories argues for their social importance and shared stories really draw people together. Organizations use to tell and retell their stories, sharing tales of who they are and what they believe, passing on their understanding of what it means to be a member of this particular organization (Cohen, 2001).

The persuasive power of stories and their ability to meld behaviors and attitudes made story telling an important pillar in shaping organizational culture. Stories run around organizations tell more about them than any official pronouncements. These stories of organizational identity do much more than vision and mission statements to create the sense of membership and engagement that is part of a good company since the power to and motivate gives stories advantages over more abstract forms of communication. The recognition of the importance of stories is best demonstrated by the establishment of the 'Storywork Institute' in the US (initiated by Rick Stone), a company engaged in helping organizations by collecting 'identity stories' that capture their values and norms (Cohen, 2001). Stories exist in any organization and the main question is either it will be stories chosen by the manager, such that inspire andgalvanize employees, or stories arise bottom-up from the floor, such stories that not necessarily serve the culture intended by the manager. Stories engage listeners mainly because a hero is at their center and smart companies take a direct hand in choosing people to play the heroic roles and building around them the heroic mythology of the company, knowing that others will try to emulate the heroes' behavior. Those achievers show every employee what has to be done in the company to succeed around there. They do things out of the ordinary that everyone else should do but is afraid to try, and as such, serve as the great motivators.

The heroes are very often the early founders and shapers of the organization, and they personify the culture's values and as such provide tangible role models for employees to follow. If values are the soul of the culture, then heroes are the realization of those values and epitomize the strength of the organization (Deal & Kennedy, 1982). These stories about the heroes in early critical events and turning points, remind members and tell the newcomers what this place is all about: what it exists to accomplish; how they relate to customers, competitors, and society at large.

As already mentioned before, on the surface of the organization lie the artifacts, which are the visible organizational structures and processes. Deal & Kennedy (1982), Cameron & Quinn (1999), and others, treat the artifacts as reinforcement mechanisms for the core values, while Schein (1997) describes the values and the artifacts together as support systems for the basic assumptions. At the very same time the values are converted into the practices, using all the tangible mechanisms.

Another way of viewing the levels of organizational culture is offered by Johnson & Scholes (1999). They call the basic assumptions of Schein 'the organizational paradigm', and like Shein they too recognize this level as the deepest and most important one. On the upper level they define six interconnected artifacts which are woven together with the 'paradigm' and create the so-called 'cultural web' as illustrated in figure 8:

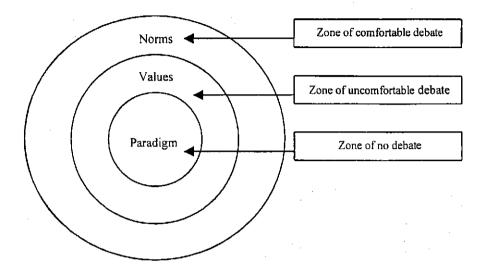
Organization Symbols
Rituals Paradigm Stories
Controls Power

Fig. 8: The cultural web

For the managers the six artifacts on the upper level of the web serve as important reinforcing mechanisms to the paradigm and for the outsider consultant they serve as an essential tool for creaking the code of the organizational paradigm.

Now that we are familiar with the concept of paradigm' we can look at Bowman's (1995) model for the culture layers:

Fig. 9: The zones of debate



Norms - defined by Bowman as 'the zone of comfortable debate' since people are reasonably happy discussing norms of behavior;

Values - defined by Bowman as 'the zone of uncomfortable debate' sirce people may discuss values but this would be outside of formal meetings, as values often concern vested interests and personal reputations;

Paradigm - defined by Bowman as 'the zone of no debate' since the core assumptions in organization are not discussed, often because they are never surfaced.

Either the upper layer of culture are the artifacts (Schein, 1997) or the norms (Bowman, 1995), they reflect the organizational culture. It includes the jargon used in the company, the way people are dressed, the premises' design, the symbols used by the company, the procedures and routines, the day to day practices, and the definitions of success that makes an organization unique (Cameron & Quinn, 1999). Among the most important

artifacts, if not the most important of them, are the rituals and ceremonies that combine all other mentioned above factors, into meaningful and expressive events. "Without these events any culture will die. In the absence of ceremony or ritual, important values have no impact. Ceremonies are to the culture what the movie is to the script" (Deal & Kennedy, 1982, pp. 63). In fact, what managers and workers do each day is also ritual, but the most significant is to ritualize events like hiring and firing, employee indoctrination, promotion celebration, rewards ceremonies, retirement dinners, etc. For understanding to which level these rituals are important for the employees, it is worth to quote the statement made by Deal & Kennedy (1982, pp.69): "Meetings are often for managers like going to church". All organizational rituals include messages about the way that things are done; they are strong communicators of what leaders truly mean and believe in. An organization must examine the messages sent by these rituals to determine whether they are aligned with the vision and values that being put into place.

The significance of the rituals comes from giving the culture a tangible, cohesive form; they put culture on display and dramatize and reinforce company's values and beliefs. Since the rituals are conducted differently in every organization, organizational cultures differ by definition from each other, and rituals that work well in one culture, becoming powerful levers to maintain culture, may fail in another because of the differing environments (Bamberger, 1996). Ritual became in fact a generic word while behind it there are three various levels (Kunda, 1992):

- 1. Ceremony a concentration of meaningful symbols repeating perpetually.
- 2. Ritual more dramatic than the ceremony and includes series of actions crystallizing various cultural expressions into a single event.
- 3. Festival includes some rituals at a time, connected to a single central event. It is wider, more dramatic, and with a bigger number of participants than the ceremony or the ritual.

Figure 10 illustrates the hierarchy of rituals:

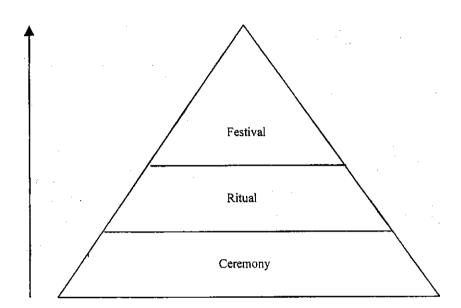


Fig.10: The basic levels of rituals

Arrow D indicates that the higher we move on the scale the more dramatic become the event and the higher we be on the scale the event is less frequent. For instance hereby are short samples for all the three levels:

- 1. Ceremony a retirement dinner
- 2. Ritual launching a new product
- 3. Festival celebrating the 75 anniversary of the corporate

All three belong to the artifacts level of the organizational culture and should serve the managers for reinforcing the core values and the basic assumptions. At the very same time they may serve the researcher and the consultant in a better understanding of the deeper levels of culture.

Harrison and Shirom (1999) offer a more detailed model, which includes all layers mentioned in the former ones:

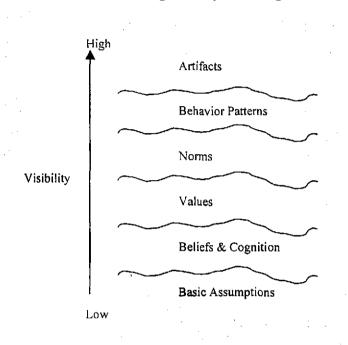


Fig. II: Layers of organizational culture

The model starts at the surface with entirely visible artifacts like dress patterns, organizational logos, office decor, behavior patterns like jargon, stories, work routines, rituals, and others as already mentioned before It ends with the two deepest layers: the beliefs & cognition and the basic assumptions, which combine together the cognitive elements of the culture. Of course, when we view culture as the collective personality of the organization, there should be consistency between the various layers meaning for instance that everyday behavior reflects and expresses the underlying cognition. Organizational cognition that become widely accepted and taken for granted within an organization can crystallize into consistent way of understanding events and accordingly into a day to day routines.

It is also obvious from the above that much can be learned about a company's culture, beginning at the surface and proceeding inward, toward the company's unconscious. Furthermore - we can to certain extent predict a company's performance by diagnosing the character of its heroes, values, and so on.

3.5 The individual within the organizational culture:

"Every individual needs the collective in order to fully reach his individuality."

Carl Yung

Culture within an organization is clearly to do with the individual employees. It places considerable emphasis upon the way an organization manages people, through their recruitment and selection, their performance appraisal and management, the training and development programs they follow, the hierarchies in which they are placed, the behavior they are expected to and the credo they share. As such the organizational culture has a tremendous impact on their day to day life not only within the organization but also in other social circles they participate in. It is obvious now how important is the contribution of the HRM (human resource management) function on shaping the culture together with organization's leader (Hendry, 1995).

This scholar adopts in his present research Beer et al.'s (1990) model of change, which emphasizes that change needs to occur at the level of employees' rather than as a consequence of senior management's edicts. Thus although a culture change process might be initiated by senior management, for it to work it needs to be internalized by individual employees. This approach will lead in further chapters to the assumption that prior to successful change in the culture must be recognized by the individual employes' strong dissatisfaction with the present one.

3.6 Organizational Culture Dimensions and Typologies:

For many years there was a wide spread use of an expression among managers all over the western world: 'only whatever is measurable is also manageable'. This expression was so widely spread since managers are measurement-oriented and this feature became part of the management culture. Robert McNamara's paradox (1989) describes the pattern of thinking managers are going through when they have no ability to measure any particular phenomenon:

- 1. Only what is measurable matters;
- 2. If you cannot measure it does not matter;
- 3. If it is does not matter you can ignore it;
- 4. If you ignore it for enough time probably it does not exist.

The early researchers of organizational culture were aware of this deep belief among managers and since they had not yet tools for culture measurement they declared that 'soft is hard'. The meaning of this statement was that culture and other ill defined and difficult to assess features of organizational life can decisively affect bottom-line results. This was the first tool to overcome the rejection of organizational culture theories by managers but soon afterwards the 'soft' became a bit 'harder' by offering dimensions and measuring tools.

Nowadays organizational culture is considered a multidimensional concept: it is deep, wide and complex (Schein, 1997). Although it is still a 'soft' characteristic, managing the culture calls for 'hard' measures. That is why so many scholars make efforts to define the main dimensions of culture in a way that will allow them measuring and comparing between different cultures, and between same organization's culture in different periods. The first one to offer such dimensions was Hofstede (1980), in his famous research on IBM's employees in forty different countries, based on data analysis from over 116,000 questionnaires. Since it was a long research (over four years), and was conducted in two

stages, the number of dimensions evolved from four at the beginning to five at the end. The first four included:

- 1. Power distance measured boss/subordinate relationship;
- 2. Uncertainty avoidance measured the readiness to face unclear situations;
- 3. Individualism measured the preference of individualism over grouping;
- 4. Masculinity measured the equality women were given.

The fifth dimension, added later, was:

5. Confucian dynamism - measured long term orientation.

While first Hofstede's study was conducted in the early 1970's, his second famous research project was carried out between 1985 and 1987 under the auspices of IRIC (Institute for Research on Intercultural Cooperation) in 20 Northwest European companies (Hofstede, 1997). On the IRIC project he had used other dimensions to determine corporate culture than he did on the first one:

- 1. Process oriented vs. result oriented
- 2. Employee oriented vs. job oriented
- 3. Parochial vs. professional
- 4. Open system vs. closed system
- 5. Loose control vs. tight control
- 6. Normative vs. pragmatic

One of the most important findings claimed in this research was that organizational cultures are mainly composed of practices, while they have only a modest value component (opposed to the findings in the IBM study, which was on the national culture basis).

Trompenaars (1998) is another Dutch consultant and researcher who provide us a model for measuring national cultures and understanding their effects on organizations. His

model is based on findings from 15,000 employees in 47 cultures. He suggests that cultures differ on seven dimensions:

- 1. Universalism vs. particularism;
- 2. Individualism vs. collectivism;
- 3. Neutral vs. emotional:
- 4. Specific vs. diffuse;
- 5. Achievement vs. ascription;
- 6. Perception and use of time;
- 7. Perception of physical environment.

All the above-mentioned models, those of Hofstede and the one of Trompenaars, help managers classify cultures, predict organizational styles, and to explain cross-cultural differences in managing people and organizations.

While Peters and Waterman (1982) present 8 conditions for excellence, meaning there is 'one best way', Hofstede oppose this statement. He argues, according to IRIC project results that what is good or bad depends in each case on where one wants the organization to go. He believes that a cultural feature that is an asset for one purpose is unavoidably a liability for another. Also Schein (1997) is afraid that quantitative measurement of cultural dimensions may lead to a mistaken conclusion that there is one best pattern. Later on Schein (1999) even objected categorically any attempt to measure culture and have listed three reasons "why culture surveys do not and cannot measure culture" (pp.60):

- 1. You don't know what to ask;
- 2. Asking about shared processes is ineffective;
- 3. What employees complain about may be unchangeable.

Deal & Kennedy (1982), unlike Hofstsde, did not conduct a quantitative research, but they too offered dimensions to recognize cultures from each other. The first dimension offered by them was the degree of risk associated with the company's activities, which is very similar to the second Hofstede's measure listed above. The second dimension was the speed at which companies, and their employees, get feedback on whether decision or strategies are successful. These two factors, both effected by the marketplace, determine four general categories or types of cultures:

- 1. The tough-guy, macho culture;
- 2. The work hard/play hard culture;
- 3. The bet-your-company culture;
- 4. The process culture.

Within their book, they represent a third dimension of the culture, which is not included in the above typology, probably because it is more convenient to deal with a 2x2 matrix. This dimension deals with inward focus vs. outward focus, and their belief is that when a culture focuses inward, the company is in great danger in the marketplace. This dimension, neglected somehow in the typology of Deal & Kennedy (1982), is in the center of typology offered by Cameron & Quinn (1999), together with another dimension:

- 1. External focus and differentiation vs. internal focus and integration;
- 2. Flexibility and discretion vs. stability and control.

Once again, we receive a 2x2 matrix, determining four different types of cultures, within the space created by these two dimensions: clan, adhocracy, market, and hierarchy. Cameron & Quinn (1999) found in their research that new or small organizations tend to progress through a predictable pattern of organizational culture in accordance with the organizational life cycle. In the earliest stages of the organizational life cycle, organizations tend to be dominated by the adhocracy - without formal structure and characterized by entrepreneurship. As they develop over time, they supplement that orientation with a clan culture - a family feeling, a strong sense of belonging, and personal identification with the organization. As the organization grows, a potential crisis

frequently arises. It eventually finds itself faced with the need to emphasize structure and standard procedures in order to control the expanding responsibilities. Order and predictability are needed, so a shift to hierarchy cultuie occurs. A focus on the market culture - competitiveness, achieving results and an emphasis on external relationship eventually supplement the hierarchy orientation. While almost always one type of culture dominate an organization, it is possible to recognize other cultures in various units (e.g., in R&D department it is expected to find adhocracy culture, whatever the dominant culture of the whole organization is).

Handy (1993) describe too four types of culture based on how organizations differ primarily in terms of power and control and the individual versus the organization. In other words, based on how organizations characterized by concentration of power and hierarchy, the relationship of the individual to the organization and the centrality of tasks or of the individual. In accordance the four types of culture also differ in their members' attitude to change:

- 1. Personal culture, in which organizational change can be slow;
- 2. Power culture, in which rapid response to changing circumstances is expected;
- 3. Role culture, in which change is likely to be slow;
- 4. Task culture, in which change can be fast.

Joanne Martin (1992) at Stanford University, one of the best analysts and investigators of the concept of 'organizational culture', differentiated among three perspectives or approaches to culture:

- 1. The integration perspective assumes that culture is what people share, or the glue that holds them together;
- The differentiation perspective assumes that cultures exist in an organization by differences among sub-units;

3. The fragmentation perspective - assumes that culture is ambiguous and unknowable, and it describes the inherent nature of the organization.

This is in fact a typology of approaches to culture, rather than typology of the cultures themselves, and it is essential for understanding the typologies offered by scholars, based on various dimensions of culture (this model will be discussed again when we come to the chapter about sub-cultures). Probably elements of all three perspectives are present in organizations, but each scholar emphasizes another one. Cameron & Quinn (1999) have for instance in their typology a strong bias toward the integration approach to culture.

Wallance et al. (1999) noticed six aspects of the organizational culture: management supports, teamwork, conflict-handling, professional atmosphere, role importance and mutual confidence. It is some how surprising to find at the end of the second millenium, a scholar emphasizing in the culture merely aspects concerning inward focus. This disadvantage is overcome by Trompenaars (1998), who claims that cultures vary from each other in three dimensions: the attitude toward individuals, the attitude toward time (probably adopted from Hofstede), and the relative importance paid to person's power to influence the environment. This third dimension is an important contribution, since moving toward more and more turbulent environment the proactive behavior of organizations becomes crucial to their success.

What is the importance of those culture dimensions offered by various scholars? Hofstede (1997) points out some practical uses of measuring culture:

- 1. Identifying subcultures;
- 2. Testing whether the culture fits the strategies;
- 3. Identifying potential areas of conflict in the case of M & A;
- 4. Finding out the extent to which culture changes have materialized.

But all in all, this does not mean that the dimension score togetherare the culture:

"Missing the essence of culture as a whole...can easily become mechanistic" (ibid. pp.184). And furthermore: "Organizational cultures are wholes *(Jestalts)* and their flavor can only be fully appreciated by insiders... (but) it allows a comparison of the cultures of different organizations or parts of organizations in meaningful terms" (ibid, pp.197).

Schein (1997) is far away not happy with the sequences, on which those culture dimensions are measured by other scholars, since in a complex world we live at, both "individualism and grbupism are appropriate, both authoritarian and participative systems are appropriate... both task and relationship orientation are desirable" (ibid, pp.373).

This chapter will be most properly finalized with the words of John Van Maanan (1997) of MIT, an outstanding researcher on organizational culture in the organizational sciences: "leaving readers with the suggestion that four and only four cultures represent the wonderful world of organizations is a mistake. One can almost hear our anthropological ancestors turning over in their graves" (ibid. pp. 17).

3.7 The Merit in Understanding Organizational Culture:

An increasing number of researchers, practitioners, and managers, have found the concept of 'organizational culture' useful and necessary in analyzing and managing organizations. Leaders, especially, have become more aware of the critical role understanding of culture plays in their efforts to stimulate performance (Schien, 1997). It is clear by now that the cultural network is a powerful means of communication within the organization, and has a very strong influence on a company's behavior over time. Trompenaars (1998) claims that organizational culture has a tremendous effect on the solutions chosen by the organization whenever facing a particular problem. That effect is predictable (Deal & Kennedy, 1982). since culture provides the context for the employees and managers to behave in a manner consistent with the mission and values of the organization. The culture is the psychological 'glue' that holds the organization together, supplying members of the organization with the guiding beliefs, the theories-in-use, the mental models, and the basic principles for common

action. All these means to the member's stability and meaning they are seeking for, and it integrate and bind them together into a coherent whole to become organization. An organization's culture provides a framework for shared understanding of events, defines behavioral expectations, and serve as a source of and focus for members' commitment and as an organizational control system through group norms (Kunda, 1992; Shafritz & Russel, 1999). The power culture has comes about through the fact that the basic assumptions are shared and therefore mutually reinforced (Schien, 1997). It reflects the prevailing ideology that people carry inside their heads and conveys a sense of identity to employees, provides unwritten and, often, unspoken guidelines for how to get along in the organization, and enhance the stability of the social system that they experience (Cameron & Quinn, 1999). In consequence, the culture is like a security blanket for the individuals in the organization, and serves an important anxiety-reducing function. It tells them what to do and reassures them that if they do it they will be not just accepted by the people around them, but also rewarded (Deal & Kennedy, 1982). By all these means organizational culture has a big impact on individuals within the organization: employee moral, commitment, productivity, physical health, emotional well being, employee loyalty, and burnout (Lahiry, 1998; Cameron & Quinn, 1999). Furthermore, the culture assists the individual to canalize and control his own feelings without giving up his identity (Trice & Beyer, 1993).

The culture is especially important for new recruits to the organization since it stimulus their assimilation into the organization, by supplying a mechanism serving the human needs for adaptation. Each time we join another organization we expect to, indeed we are usually eager to, learn jargon and accepted ways of the new group's culture. An organizational culture is transmitted to new comers through socialization processes; it is maintained and transmitted through a network of rituals and interaction patterns; it is enforced and reinforced by group norms and the organization's system of rewards and controls. All these serve as important mechanisms to communicate culture content to newcomers. "It is the unseen and unobservable force that is always behind those organizational activities that can be observed" (Shafritz & Russel, 1999, pp.73).

Why at all do we need to understand culture? Schein (1997) pointed out four reasons:

- 1. Cultural analysis illuminates sub-cultural dynamics within organizations;
- 2. Cultural analysis is necessary if we are to understand how new technologies influence organizations;
- 3. Cultural analysis is necessary for management across national and ethnic boundaries
- 4. Organizational development and planned change cannot be understood without considering culture.

Such understanding of the culture is essential for taking the right strategic decisions by management. "If an organization is to understand its own strengths and weaknesses and if it is to make informed strategic choices based on realistic assessments of external and internal factors, it must study and understand its own culture" (Schein, 1997, pp.195). Johnson & Scholes (1999) go a step ahead by describing the culture ('paradigm') as a filter through which internal and external forces are translated differently by each particular organization into it's strengths and weaknesses, threats and opportunities. Figure 12 illustrates their theory:



Fig. 12: The role of culture in strategy formulation

It is important to mention that not all scholars agree about the contribution culture has to the individual and to the organization itself. Ogbor et al (2001) believe that the culture restrict the functioning of the individual since he is expected to perform according to a cod that not always fits his own values, and as a result his initiatives are often depressed.

3.8 Leaders' role in the context of culture:

Leaders can and should do more than simply understand the culture and work within it. The assumption that top managers play a distinctive role in creating and shaping culture shows up in the title of one of the most influential books articulating Martin's integration approach: Organizational Culture and Leadership (Schein, 1997). Given that an organization's culture is the sum of its salient values, the challenge for senior leaders is how to create or develop a set of values that gains the commitment and energy of all employees toward a strategically viable direction. This direction might be increasing innovation, enhancing the importance of service, improving products' quality, etc. This is well demonstrated by Schein (1997) claiming that the leaders are the shapers of the organizational culture and those who are totally responsible for achieving a good fit between the culture and the objectives of the organization. As a consequence one of leaders' key role is to recognize the need for an intervention which will lead culture reshaping and to manage the entire process since they have the power to alter it. In his later published book Schein (1999) argues for two way influence: "Whereas leadership created culture in the early stages,- culture now creates leaders, in the sense that only those managers who fit the mold are promoted to top positions" (ibid, pp.143).

The power of top managers to clarify, integrate, maintain, and evolve the cultural orientations derives'from their influence on organization design, and in particular from their dominance of decisions concerning human resource shape functions, such as staffing and controlling performance. Top managers shape culture by setting agendas for decision making and strategy formation and their most important tool in this process is

their own behavior (Harrison & Shirom, 1999). This includes every aspect of the behavior starting with the CEO through management to supervisors and team leaders. The ability to reshape the culture must similarly start with the behavior of its' executives since it communicates most powerfully which values they truly hold for themselves and for others. They must recognize how the mission statement, the vision and the values come alive in the organization and reinforce the process. If their behaviors are communicating a message different from the organization's formal communications, the creditability of the leaders diminishes very quickly (Howard, 1994). Only by demonstrating the critical behaviors that are in accordance with the desired culture can leaders show they are genuinely committed to achieving it. Their personal example inspires managers throughout the organization to likewise provide an environment in which employees feel a higher level of commitment to the organization's way. Schein (1997) argues that the importance paid to culture is the most important attribute of leaders, but among leaders too there is a difference in their attitude to culture. There are leaders who prefer to shape a strong culture in the traditional meaning of the concept (strictly homogenous), since it serves well their short term objectives: all employees behave as one entity. Long term-oriented managers prefer to focus on a more flexible approach to culture and this will be further discussed in next chapters.

3.9 Organizational Culture and Effectiveness:

Over the last 25 years, a complex and often contradictory body of research and theorizing has developed about culture and its consequences. All in all there is a consensus among the scholars that culture matters. But can the right culture lead to improved performance? Hofstede (1984) was among the first to offer empirical evidence for strict correlation between one of the culture dimensions and national effectiveness. After achieving results for 40 countries considering the extent of individualism in their culture he matched the results versus their national wealth measured by GNP per capita that is usually taken as a criterion for national effectiveness. He found almost a linear correlation between the two:

the more is the culture individualistic the higher was the GNP per capita (regression results presented ibid, pp.168).

As to the approach of organizational behavior, the organization has to operate according to symbolic patterns to achieve effectiveness, and the culture is the one to supply these patterns. The organizational culture is not just the reflection of the collective personality of a particular organization but is viewed by most researchers as good predictor for the organizational performance. The culture creates a pattern that explains the success or failure of the organization in overcoming its external and internal challenges (Schien, 1997; Zammuto & Krakower, 1999). Most organizational scholars and observers, like for instance Glazer (2000), recognize that organizational culture has a powerful effect on the performance and long-term effectiveness of organizations. Empirical research has produced an impressive array of findings demonstrating the importance of culture to enhancing organizational performance by providing a competitive advantage (Cameron & Quinn, 1999). This findings are supported by the research conducted by Elass & Veiga (in Eero, 2000) about the big influence culture has on organizational performance. Among the earlier scientific studies that report a positive relationship between dimensions of organizational culture and organizational effectiveness we can mention the one conducted by Kotter & Haskett (1992). These two scholars interviewed seventy-five highly regarded financial analysts whose job is to closely follow certain industries and corporations. Each analyst compared the performance of twelve highly successful firms to ten lower-performing firms. Although analysts are stereotyped as focusing almost exclusively on hard 'data, only one out of the seventy-five indicated that culture had little or no impact on firm performance. All acknowledged culture as a critical factor in long term financial success.

We can summarize this part of the review with the statement of Nahavandi and Malekzadeh (1999, pp.91): "One of the marks of a successful organization is a corporate culture that supports its mission and encourages employees and managers to engage in behaviors that will achieve that mission." It should be remembered that just as the culture can support a company's mission and strategy, it can also work against

effectiveness. For example, in the corporate this research took place, since it was engaged for many years in traditional industries, the old culture did not encourage initiative, fast response, or creativity. Moving into the IT industry the old culture blocked every single chance to succeed.

The first to start the new genre of 'excellence in business' were Peters & Waterman (1982), and they pointed out the strict relationship between culture and business-success. They found that six out of eight success factors of the 64 outstanding companies in the US, was a consequence of their organizational culture. Accordingly, they stated that without exception, the dominance and coherence of culture proved to be an essential quality of the excellent companies. Moreover, the more it was directed toward the marketplace, the less need was there for policy manuals, organization charts, or detailed procedures and rules. In these companies, people way down the line know what they are supposed to do in most situations because the "the handful of guiding values is crystal clear" (Peters & Waterman, 1982). This genre was followed years later by Collins & Porras (1994) who found a common characteristic among the most effective and outstanding 18 companies of the US: unique culture that binds together all members to achieving organizational goals. No one of these scholars neglect the importance of strategy, market presence, or technology, but they all emphasize the fact that highly successful firms have capitalized on the power that resides in developing and managing a unique corporate culture. Such culture is found recently more and more responsible for gaining and sustaining a competitive advantage (Golnaz, 2002; Fiol, 1991). As stated by Cameron & Quinn: "The major distinguishing feature in these companies (the successful ones - J.B.A.), their most important competitive advantage, the most powerful factorthey all highlight as a key ingredient in their success, is their organizational culture" (1999, pp. 4).

Not everybody shares this approach. For instance, Hendry (1995) suggests that the link between an organization's culture and its performance is weak. He argues that an organization's culture is unlikely to accentuate positive attributes already possessed such as competitive advantage, overall performance or success. With no doubt cultural

orientations can also lead to ineffectiveness when managers share assumptions that encourage misinterpretations of critical environmental or technological developments (Kotter & Heskett, 1992). Culture can also block effectiveness and cause ineffectiveness when cultural orientations do not provide sufficient support for company's strategy and programs.

But there is broad and growing research evidence supporting the thesis that culture does affect positively performance, including financial (Collins & Porras, 1994, Cameron & Quinn, 1999, Elass & Veiga in Eero, 2000). It depends upon a good fit between organization's culture and its environment on one hand and between the culture and organizational goals on the other. In addition the professional experience of this scholar justifies too this approach, and from this reasons he opposes the approach hold by Hendry (1995). Of course, this scholar believes that organizations fail or succeed for many reasons. It would be foolish to present organizational culture as the only villain or hero of the story, but its contribute to the organizational effectiveness is more complex than originally thought but still undoubtful.

3.10 Organizational culture in context of environment:

As mentioned already before organizational culture is not shaped in vacuum. While most of this paper deals with the internal processes within the organization which have to do with culture, this one will focus on cultural links between organizations and their environments. The approach calling attention to these links is a part of 'institutional theories' of organization. According to this approach, many symbols and work practices are adopted by organizations because powerful actors within the organizations' environment view them as correct and appropriate. In many cases, members of an organization 'import' external cultural orientations as part of their beliefs and values (see fig. 2, pp.18). They take them so much for granted that they are not even aware of the process described above.

The environment may influence culture also another way, mainly in youig organizations which are acting in mature industries. Managers of those organizations tend to copy long established structures and practices that prevail widely among industry leaders. Adoption of these practices helps the young company gain legitimacy among the main actors in the relevant environment: government regulators, customers, the public at large, etc. This legitimization is critical to organizations that operate within 'institutional environments', which are dominated by supervisory and standard setting bodies (Harrison & Shirom, 1999). The above mentioned adoption which grant the organizations legitimacy entitle them to funding, to other forms of support, and helps them buffer from intervention by regulators and customers as well. Once the expected structures and practices is build into the organization, the external stakeholders assume that internal operations will run smoothly and exercise minimal control over the organization.

Therefore when we come to diagnose organization's culture we shouh incorporate the insights of 'institutional theories' by examining the ways that environmental culture is influencing the organizational one through the interactions between the two. Some of the influences are on the symbolic features of the organizations culture while others contribute to its legitimization, reputation, prestige, etc.

3.11 Sub-cultures in organizations:

The ideal of an integrated whole organization culture in which all members hold same norms and beliefs is unlikely to occur in reality. Instead of consensus and consistency we often find with growth and aging of the organization inconsistency in cultural orientations between groups and consensus within them. Each distinct group in the organization may develop its own worldview and unique values and norms and constitutes a sub-culture. It brings us to a definition stating that a "a sub-culture is a smaller group in the organization who may agree with the organization's basic assumptions and core values but whose

values and behaviors differ from those of the general culture" (Nahavandi & Malekzadeh, 1999).

Organizational sub-cultures often emerge within functions, ranks or subunits within organizations since each of them evolves to adapt to its particular environment. Is it a negative phenomenon the managers should be afraid of? Not at all: good managers are not really interested in achieving same culture in all departments and divisions of the organization. For instance they are usually looking for high level of risk taking in the R&D department, but will they accept same risk taking in the finance department? Probably not, and as a consequence almost in all organizations people in separate functional areas formed distinctive sub-cultures. In IT companies line managers outline product innovation as the main source of organizational success while middle managers outline cash flow and market share. From these reasons line managers favor loose organizational procedures while middle managers prefer clear structures based on delegation, response to customer preferences, and meeting deadlines.

That's why the success of mainly big and complex organizations does not insist on one unique culture rather on the development of dialogue and cooperation between members of divergent sub-cultures. With no doubt it is quiet acceptable to have more than one culture within an organization, especially nowadays when cultural diversity is thought one of the most important triggers for creativity and innovation. On the other hand strong sub-cultures tend to build boundaries around themselves that make it difficult to communicate across them and integrate their efforts. They become power centers and their leaders become barons with an increasingly local agenda (Schein, 1999). When crucial communication problems with each other occurs, the gaps between the sub-groups will block any chance of cooperation between their members and as a result the organization will not last or at least will loose its identity.

How can we maintain a common culture and at the very same time to hold related subcultures? If we allow sub-units to develop their own sub-cultures, what is the competitive advantage of being a single organization? The mentioned before Martin's model (1992) offers a nice way to deal with these dilemmas:

Single
Organizational culture

Multiple
Ambiguous

Fig.13: Martin's perspectives on the study of culture

Differentiation Fragmentation

The differentiation perspective contrasts with the other two identified by Martin (1992): integration and fragmentation. The integration perspective implies that all the members of an organization share a common culture and there is consensus regarding beliefs held and the behaviors expected. This concept of one culture in an organization is easy to comprehend and would make the management of organizational culture more

Unfortunately, although assumed to be the only perspective by many managers of cultural change programs, the integration perspective is only likely to be visible at an aggregate level and sub-cultures are also likely to exist. Martin's (1992) fragmentation offers us an extreme alternative to the other perspectives. Within this researchers argue that they can detect very little consensus in the cultures they are studying. Rather than actually identify sub-cultures within organizations they suggest that consensus only occur around specific issues, which will rise and fall in their importance. As a consequence cultures are even more ambiguous, uncertain and difficult to comprehend than it was assumed in the former chapters of this paper.

It is also understood that not all sub-groups of the organization have similar power. The members of powerful sub-groups are likely to reinterpret mandates from above in keeping with their own norms and understandings that diverge from those of the top management. Leaders role that was defined in former chapters as creation of organizational culture, becomes now much more complicated: creating a common cultural umbrella for the organization as a whole and at the very same time managing the diversity of sub-cultures (Schein, 1997).

An organization such as the corporate discussed in the present research will exhibit only some organization-wide cultural consensus and consistency. There will be differentiation between the companies engaged in the business of traditional industries and between the new established IT division. The last one should represent a culture focused on more individualism and risk taking than the first one, but still sharing the basic assumptions and core values of the parent company - the corporate identity will be well maintained.

So far it should be clear that despite the divergence of the three Martin's (1992) perspectives we can derive analytical frameworks from each of them that contribute to the diagnosis of any organizational culture:

1. The integrative perspective leads analysts to search for consensual orientation;

- 2. The differentiation perspective points toward sub-cultural differences;
- 3. The fragmentation perspective leads toward exploration of ambiguity in cultural meanings and orientations and toward the processes by which people negotiate and interpret the nature of organizational life.

It is important to point out that this typology of perspectives is focused merely on internal factors of the organizational culture and do not consider at all the links between the culture and the external environment. All three perspectives can apply to any organization and in fact very often more than one is used at time. Schein(1997) argues that diagnostic investigators can usefully characterize organizations as more or less consensual, divided into clear sub-cultures, or fragmented. How does it match together? Just as the integration perspective can discern consensus within differentiated organizations, the differentiation perspective can focus attention on subgroup differences within highly integrated culture. At the very same time the fragmentation perspective attunes managers to instances of cultural ambiguity, disagreement, and negotiation.

We can summarize this chapter stating that the existence of sub-cultures is a normal part of any organization and can be beneficial or detrimental, depending on what values are shared. If the sub-cultures generally agree on basic assumptions and core values but disagree on the behaviors required to achieving them, the organization will probably benefit from the diversity and creativity. In case sub-cultures disagree with the basic assumptions, then achieving the mission is unlikely because people will behave in manners inconsistent with it.

In the corporate this current research deals with, a new division of IT was established besides the veteran divisions engaged in traditional industries. The new division varies from the veteran ones since the environmental context is entirely different: turbulent in the case of the IT division and much more stable in the traditional. So was the size different too: 700 employees in the IT in comparison to 45,000 in the traditional. This was a classic case for shaping in the IT sub-culture that fit with the particular

environment and size, but at the same time is also consistent with the basic assumptions and core values of the parent company culture.

3.12 Strong Cultures:

From all the above it is clear that in culture there is strength. It sounds best in the words of Cameron & Quinn (1999): "The power of culture... lies in the ability to bring people together, to overcome the fragmentation and ambiguity that characterize the external environment, and to lead organizations toward extraordinary success" (ibid. pp. 54). Already in the early 80's, for the first time, strong organizational culture was viewed as a serious source for sustainable competitive advantage. It was following Ouchi's writing (1981)that made managers to believe that the meteoric success of the Japanese companies was mainly the result of their strong organizational culture. Deal & Kennedy (1982) reinforced this concept with their statement that "the people who built the companies for which America is famous all worked iobsessively to create strong cultures within their organizations" (ibid. pp.8). In their book they point out companies like IBM and P&G to prove the concept that successful companies did well through sustaining and evolving strong cultures over generations. They claim also that those strong culture companies create meaning for people and communicate exactly how they want their people to behave, and this lead them to success. In those companies "nothing is too trivial; any event that occurs in a work context is an event to be managed" (ibid, pp.60).

There is a common agreement that strength of culture depends on the degree of sharing and consistency of cultural forms and orientations. Accordingly, for achieving strong culture organization, managers should mould all the elements of culture into an overall corporate culture by structuring the cultural web, and the stronger this web is, the better it tend to keep people moving in roughly the same direction. In order to build a strong culture top management must be convinced that it can adhere faithfully and visibly to the values it intends to promote. "Any inconsistency in adhering to or failing to promote the company's enunciated values will begin to undermine the strength of the culture" (ibid, pp.36).

Schein (1999) argues that the members of a young company cling to their assumptions more than members of a more mature company since the assumptions are their own invention and are strongly imposed, by the founder who is still in power. This scholar's assumption is an opposite one believing that the elder the company is, the stronger the resistance will be to any planned change in the culture. This assumption sucks from the rationale that the elder the company is, the deeper the shared beliefs become, the more rooted the values are, and as a result it is more difficult to abandon them. This approach is supported by Finlay (2000) who believes the older and larger an organization is, the stronger its culture is. Neither his approach nor Schein's follows any research or any empirical evidence to support their arguments.

We have mentioned before, in a former chapter, that each organization 'imports' culture from the wider society and this 'import' is one of the main sources of the organizational culture. Now it is worthwhile to mention an opposite phenomenon: big and prosperous corporate, dominant in their field, with strong culture, are sometime in a position to influence, and even radically change, the outside cultural environment (IBM, Coca-Cola, McDonalds, etc). Using a similar metaphor to the one which was presented in chapter 3.4 while dealing with the sources of organizational culture, here it will be proper to speak about an 'export' of culture from a given company to the national level. It is described by figure 14:

National culture

Fig.14: The impact of strong organizational culture on the national level

Peters & Waterman (1982) were next to identify strong organizational culture as a key for the success of the company, claiming that 'strong cultures' are more effective than 'weak' ones. Their book was a turn point in raising the interest in organizational culture, bringing managers of many companies to seek for ways to change their organizational cultures according to the pattern pointed out by those two authors (Beer & Walton, 1987). Reilly (2001) followed this approach stating that strong culture creates strong organizational commitment and high morale among the employees (same as found by Denison, 1990), and these two lead to a better organizational performance. Furnham and Gunter (1998), and Klein et al. (1995), emphasize the contribution of a strong culture to the creation of a social control system, which brings as a result the desired organizational behavior, and this will be followed by the required performance. It fits the findings of Peters & Waterman (1982) that the stronger the culture is, the less need was there for policy manuals.

Trice & Beyer (1993) are also aware of the importance strong culture has, and they sum-up five main contributions of such culture to the organization

- 1. It reduces collective uncertainties;
- 2. It creates social order;
- 3. It creates continuity.
- 4. It creates a strong collective identity and commitment;
- 5. It elucidates a vision of the future.

To the above list it will be adequate to add another contribution of strong culture, following (Kunda, 1992):

6. It serves to gain the required image in public

And of course, when a culture is weak or in trouble people get frightened, and the organization fails to achieve its goals. Deal & Kennedy (1982) recognize in this context five

main symptoms of weak culture: inward focus, short term focus, morale problems, fragmentation, and emotional outbursts.

How can a manager build a strong culture? He shoild implicitly communicate key values and inculcate them in employees via day-to-day actions. Values determine what actions are taken, and when any of the core-values conflict, the manager forces the conflict to the surface and resolves it. This what happens at a Technology Company that has a strong and very thoughtful culture (Deal & Kennedy, 1982; Kunda, 1992).

Not all scholars agree about the influence strong organizational culture has on the organization (Raynolds, 1986; Hofstede et al, 1990) and some even believe that companies seek for strong culture without understanding exactly what does it mean (Lewis, 1999). Schein (1989) doubt about the relationship between strong culture and organizational effectiveness, while Bate (1995) doubt in general about the morality of creating a strong culture. Leisen (2002) found out that a company with strongly held values, when it has lost marketplace or economic relevance, it generally has great difficulty adjusting successfully, meaning that the strong culture has become an obstacle.

The most popular definition agreed among scholars for strong culture states that it is a wide consensus about the corporate mission, goals, means used to achieve goals, measurement of performance, and remedial strategies (Schein, 1997). Hofstede (1997) gives a similar definition, offering an operational measure for culture strength: a 'strong culture' will be counted as such if it, is a homogenous one. Nahavandi and Malekzadeh (1999) present a similar approach, a more complex one but also a more practical, stating that a strong culture is composed by three elements:

- The number of values, beliefs, and assumptions shared by the members of the organization. The more of them members have in common, the stronger culture is;
- 2. The proportion of members sharing these values, etc. The bigger the proportion is, the stronger culture is;

3. The preference of these values, etc. The more similar is the prioritizing of the norms, principles and beliefs the stronger culture is.

Using the last definition for strong culture, IBM in the 60's and 70's of the twenty century will be a good example for a strong culture: 450,000 IBM's employees worldwide were dressed, looked, thought and acted alike.

Shenhav (1995) defines culture as a strong one when the organizational philosophy is accepted as a 'religion' and no one in the organization even dare to criticize any part of it. As such, the 'strong culture' put of course big barriers for change when such a change is required. Also Saffold (1988) believes that 'strong culture' creates rigidity that may prevent adaptation of the organization to the changing environment. Those scholars see 'strong culture' as a conservative one, and as an obstacle for changes and for innovation, since 'strong culture' is very often a rigid one (Cameron et. al, 1988). An entirely different approach to strong culture can be defined as the 'organizational culture paradox': on one hand the culture support the stability, and on the other one - the culture is essential for any change (Lakomski, 2001).

So, is a strong culture always a positive factor in organization contributing to its performance? There is not a clear-cut answer for the question. Before concluding that lack of agreement among members concerning cultural orientations creates fundamental sources of weakness and ineffectiveness, we should recall that sub-cultural diversity, internal pluralism, and lack of consensus within organizations could also contribute to organizational flexibility and adaptation. Probably the more traditional is the industry in which the organization is engaged, a strong culture in the traditional meaning of the phenomenon will fit it best. Moving into turbulent environment like the one characteristic for IT, either we should abandon this concept or define it differently. Very cohesive organizational culture, subject to managerial control, that was suitable for the former environment, is wrong for the new circumstances. The organization requires now divergent norms, values, and cognition that will enable criticism of current organizational practices and may pave the way for organizational learning and adaptation.

Summarizing this chapter and the former one dealing with the cultural impact on effectiveness we come to the conclusion that the answer to the above raised question whether strong culture is a positive factor depends on whether the culture supports overall effectiveness and this varies according to the changing circumstances.

3.13 Changing Culture and Culture within Change:

As it was outlined above, there has been considerable debate as to whether culture can be managed, much of it focusing on whether it can be modified. In the present chapter this scholar tends towards the perspective that organizational culture is 'something an organization has'. This implies that organizational culture is something, which might feasibly be altered, manipulated and managed. It therefore follows that if managers can manage organization's cultures they can not only change culture but also prevent its change as well as abandon or destroy it (Ogbonna, 1993). Despite all this the author of this paper recognizes that implications for cultural change associated with the 'is' approach are still likely to be of relevance, in particular the complexity and time consuming nature of the change process.

Deal & Kennedy (1982), while speaking about strong culture, were already aware of the risk of obsolescence: what if the external environment changes and necessitates different responses? What if the beliefs, values and learned ways no longer work? One of the most serious risks of a potent system of shared values is that economic circumstances can change while shared values continue to guide behavior in ways no longer helpful to the organization's success. Over twenty years after the book of Deal & Kennedy was published, stability is interpreted more often as stagnation than steadiness, and organizations that are not in the business of change and transition are generally viewed as recalcitrant. Change has become such a regular activity in the business world that

companies suddenly become suspect if they stay the same. They not only change to keep pace with tangible shifts in technology or the business environment, today they change because they're expected to (Nadler, 1998). The frightening uncertainty that traditionally accompanied major organizational change has been superseded by the frightening uncertainty now associated with staying the same (Cameron & Quinn, 1999). The more dynamic the external environment, the more likely it is that some elements of culture will become maladaptive, following dissatisfaction of members in the organization, and then more easily it will therefore be for leadership to actively hasten the process of cultural evolution and change (Weiss, 2001). All at all it brings us to an understanding that culture must not been seen as a static entity, rather as an dynamic and organic process which is created, sustained and continuously changed by people (Bate, 1995). In other words, organization's culture may be seen as an evolutionary process which to support the organizational objectives is unlikely to remain the same over time. How does the culture effect the changes organizations are supposed to go through? And on the other hand, how does the change effect the organizational culture?

Moran & Brightman (2001) set, that organizational change influences three main components in the workers' behavior: goals, identification and expertise, all of them reflections of the organizational culture. Since resistance is regarded as the way to protect the value and belief system the members of the organization hold, and since steadiness and sticking to the target are prominent among the core values of most organizations, this is an obvious explanation to their resistance (Mabin et al., 2001). Butkus & Green (1999) found that as a result of shaking the normative system by organizational transformation occurs a severe decline in the motivation of the employees.

The estimated rate of organizational change processes that actually fail, is about seventy percent (Kotter & Heskett, 1992; Kotter, 1996; Beer & Nohria, 2000; Burke, 2002). Consultants and managers know how frustrating it is when so much effort yields so little change. But managers gain a much better perspective if they realize that most organizational change usually involves some changes in culture. The importance of dealing with the culture before and in course of the organizational change becomes

obvious (Potter, 1995). Even Hendry (1995) who claimed that the link between organizational culture and its performance is weak, argues that the way in which an organization's employees behave, and the assumptions upon which they base their behaviors, are likely to reduce the impact of negative attributes such as resistance to necessary change. This approach neglects the strength of culture in its traditional meaning and accordingly opposes the approach presented by Schein (1999) stating that culture is a strong conservative force. Schein claims that employees and managers take it for granted that what worked to make the organization successful must still be right. From here this scholar will derive an assumption about a positive correlation between the dissatisfaction with the current organizational culture and the success of the change process.

The meaning of the above review is that no successful change can be conducted without dealing first with the organizational culture. Those managers, who are not aware of this fact, will probably fail in their attempt to manage successfully a change process. This is probably the case described in the research conducted by Burke & Greenglass (2001) among 1,362 hospital nurses. The findings prove that changes in the work team composition led to reduction in organizational efficiency and weakening of important cultural elements. Cunha & Cooper (2002) found in their research the strong impact radical change (privatization in their case) has on the corporate culture. Another research conducted by Allen et al (2001) among 106 senior managers in various organizations that had gone through a downsizing process came to very similar conclusions. Very much the same conclusions came from Decker et al (2001) in their research, and so many others.

All in all the literature and the empirical evidence support the connection between the pre-adjusting of the organizational culture and the success of a change process. The more radical the change is, the more significant is the effect of the organizational culture on its success. The better one wants to prepare his organization for change, the more he has to invest in gaining the proper culture modifications to fit the supposed change (Harr, 2000). Whilst a large number of views and prescriptions for changing culture abound, in reality

the process is long term and complex needing careful study prior to attempting any strategy of change (Thompson, 1992; Bate, 1995).

But Few scholars still oppose any attempt to change culture by managers, mainly from the ethics point of view (Sutton & Nelson, 1990; Bate, 1995; Shandur, 1995). Some others doubt about the ability of managers to change the deeper levels of organizational culture (Schein, 1989; Critchley, 1993). Hofstede (1984; 1997) reflects a belief that culture may change over time but not as a result of an intended process conducted by managers. Nevertheless, most scholars do believe that changing the organizational culture in accordance with the changes in the turbulent external environment, is one of the most important roles of nowadays managers (Deal & Kennedy, 1982; Peters & Waterman, 1982; Van Donk & Sanders, 1993; Cameron & Quinn, 1999). The meaning of the last approach is that managers should have a proactive attitude toward this issue, defining which kind of culture serves the best way the goals and strategies of their organization. In the next stage they are expected to draw a systematic way to achieve the required changes in the given organizational culture. When the external context changes, requiring new kinds of responses, it will not only be difficult for the managers to learn new things but even more difficult to retrain members of the organization who have become used to the way culture was structured in the past (Schein, 1997).

Probably the most ambitious and dramatic cultural change planned recently is the one approved by the Japanese Parliament after adopting the recommendation of a national committee (French, 6.8.2001). It started with the recognition that the miracle of the fast growing economy is over and that ever improving efficiency is not any more a sufficient growth engine for economies in the so called 'the knowledge era'. During the last decade of the 20th century a single Japanese scientist was awarded a Nobel Prize in comparison to forty-four American scientists. The current Japanese culture was recognized as the main constrains for the country entrance to the new era, since it is group focused, consensus oriented, conflict rejecting and so on. A very common expression in Japanese says, 'Deru kugi wa utareru', and in English translation: 'the prominent nail should be knocked'. The

meaning is very clear: if there is any outstanding scientist, thinking in a different way than his colleagues do, you should force him to accept the common paradigm. A highly

ambitious national goal was set: to achieve fifty Nobel Prizes in the next thirty years. The plan leading to this goal is a revolutionary change in organizational cultures in Japanese universities and companies. The desired culture is defined as encouraging personal competition vs. the old collectivism, disagreement vs. the old consensus, mobility vs. the old employment stability, etc. According to the approved change it should start with kindergartens which will effect the organizations a century later. It is important to notice the huge resistance among parents of the kindergartens' attendees when they were asked first to give up the traditional uniform as a start point, to understand how difficult it is to change culture.

This example will lead us to the following question: what should be changed in the culture? When the environmental changes are slight, changes in organizational practices can often be achieved by building on existing assumptions. That is, the culture deciphering process often reveals that new practices can be derived from the existing paradigm, by changing merely the upper layers of the culture onion. In fact managers tend to think that just through changing the visible practices or artifacts they are able to effect a culture change. But if the environment changes dramatically, for real change the process also needs to occur far more deeply, in the less visible levels. In such case some cultural assumptions will be perceived as helping the organization to achieve its strategic goals or resolving its current issues, while others will be perceived as constraints.

Changing the basic assumptions means challenging the identity of the organization. Someone who can break the tyranny of the old culture must lead it. This requires not only the insight and diagnostic skills to determine what the old culture is, but also to realize what alternative assumptions are available. Leaders play a key role at this stage since they must recognize what may be culture's strengths worth preserving and what are the maladaptive assumptions that require change. Next step will be to find how to start a change process

toward their acceptance. Change in cultural assumptions, if necessary, will rarely, if ever, involve the whole culture. This will always be a matter of changing one or two assumptions in a broader cultural context. "Only rarely does the basic paradigm have to change, but if it

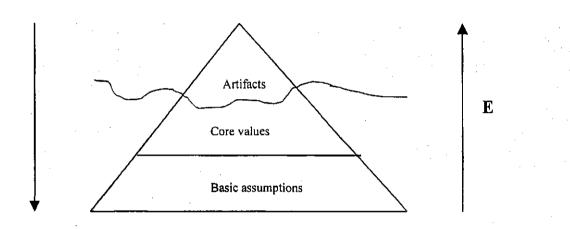
does, the group faces a multi-year major change process" (Schein, 1997; pp.149). Hence, it is important for the group members to have a process to sort cultural assumptions into these categories. Then, the organization must find a way to change or replace those assumptions that come to be incorrect, a process that is exceptionally difficult if the founder is still in control of the organization. Such change is difficult particularly because over time founder leaders have multiple opportunities to embed their assumptions in the various routines of the organization. This is, with no doubt, the management role to assist employees in the process: "Leadership now is the ability to step outside the culture ...and to start evolutionary change processes" (ibid. pp. 2). Such a process involves first unlearning old ways of thinking, former beliefs, attitudes, values, and assumptions as well as learning new ones. Very often the first stage (unlearning) occurs to be much more complicated than the second one since it is fundamentally more threatening and that almost invariably creates resistance to change.

In any case the recommended changes in the basic assumptions and core-values must be reinforced by massive use of artifacts. In such attempted culture changes, new symbols often receive a lot of attention. They are easily visible: a new name, logo, uniform, slogans, and portraits on the wall, all that belong to the fashionable area of corporate identity'. But symbols are only the most superficial level of culture. New symbols without the support of more fundamental changes at the deeper levels of heroes, rituals, and the values of key leaders just mean a lot of hoopla, the effects of which wear out quickly (Ashkenasy et al, 2000).

It brings us to another way of illustrating the organizational culture, this time not as an 'onion' as before, but as an iceberg. Each iceberg has most of his volume under water and only a small part of him is above water. Figure 15 illustrates the hidden part of culture,

including the basic assumptions and the core values of the organization, being hold under water, while only the artifacts are above:

Fig.15: The organizational culture as an iceberg



The meaning of arrow T is that the deeper the change in culture is the more time it will take to achieve it. Just to change some artifacts as mentioned before by Ashkenasy et al (2000) is the shortest procedure, while a change in the core values will take much more time and of course much more effort. Now it is easy to imagine what will a change in the deepest assumptions of an organization require.

The meaning of arrow E is that the deeper the change in culture is it effects all levels above. If an organization decides to change only some of his artifacts it does not require changes in the level of core values nor in the basic assumptions the members of the organization hold. But any change in the core values must be escorted with changes in artifacts as well. And no doubt about it that any change in the basic assumptions must be followed by changes in the two levels above.

As mentioned before, Hofstede (1997) represents a minority opinion arguing that organizational culture can not be manipulated. The deepest level identified by him is the core values, and he believes that changing collective values of adult people in an intended direction is extremely difficult, if not impossible. Values do change, but not according to someone's master plan. On the basis of the IRIC research project conducted by him, he proposes that practices are features of the important role in organizational cultures, and they can be considered somewhat manageable. Collective practices, however, depend on organizational characteristics like structures and systems, and can be influenced in more or less predictable way's by changing these. Hofstede views organizational cultures, in a way, as integrated wholes. Changes in practices represent the margin of freedom in influencing these wholes. Because they are wholes, an integrating and inspiring type of leadership is needed to give these structural and systems changes a meaning for the people involved. "The outcome should be a new and coherent cultural pattern" (ibid, pp.200).

How should an organization manage its cultural change? Lewis (1996) reviews a range of frameworks for managing such a change, all of them emphasize the importance of knowing and understanding the current culture and strategic direction of the organization prior to instigating any culture change. They then build upon this using a relatively straightforward process. In essence this consists of the following: working out the desires strategy and the desired culture, presumably ensuring that the desired strategy and culture match, identifying gaps between actual and desired culture and taking steps to move the actual culture to the desired one. This process, we can very clearly observe considers the internal context (through the culture analysis) as well as the environmental context (through the strategic analysis).

Not only external changes require culture change but also adaptation of new evolving managerial theories, first the JIT, then the TQM, reengineering, downsizing, and other common theories at the end of the former millenium, and recently the concepts of the 'learning organization' and 'managing on the edge of chaos'. The failure of organizations to adopt these new concepts occurred in most cases because their culture remained the same."

The procedure was treated as a technique or program of change, not as a fundamental shift in the organization's direction, values, and culture" (Cameron & Quinn, 1999, pp.9). The successful implementation of new managerial concepts, as well as the resuling effectiveness of the organizations' performance, depended on having the improvement strategies embedded in a culture change. When TQM, downsizing, or other methods, were implemented independent of a culture change, they were unsuccessful. When the culture of these organizations was an explicit target of change, so that the TQM and/or downsizing initiatives were embedded in an overall culture change effort, they were successful and the organizational effectiveness increased. As Cameron & Quinn (1999) findings approve the culture change was key.

In fact the perpetual changes in the external environment, and the frequent adaptation of new managerial theories, are tightly connected to each other. Companies seek for the proper way to face the evolving challenges by switching from one managerial concept to another, and both, the challenges and the new concepts require cultural changes. Nowadays organizational development is increasingly oriented around the notions of learning, innovation, and fast adaptation, in response to the ever- increasing rates of technological, social, economic, and political change. As a stabilizing force in organizations, culture is one of the most difficult aspects to manage in a climate of perpetual change. Schein (1997) argues that the challenge lies in conceptualizing a culture in which learning, adaptation, innovation, and perpetual change are the central elements. He believes that a learning culture must contain a core-shared assumption that the environment context in which the organization exists is to some degree manageable. This will be followed by another core shared assumption that the appropriate way for employees to behave is to be proactive problem solvers and learners. If the culture is built on fatalistic assumptions of passive acceptance and the organization assumes that it must symbiotically accept its niche, it will have much more difficulty in learning, as the environment becomes more turbulent. The role of learning-oriented managers in a turbulent world, then, is to promote these kinds of assumptions. Managers themselves must first hold such assumptions and then be able to recognize and systematically reward behavior based on those assumptions in others.

When we pose the issue of perpetual learning in the context of cultural analysis, it is easy to observe that we confront a paradox :culture is a stabilizer, a conservative force, way of making things predictable. As mentioned before Managers attempt to mould strong culture that can control organizational behavior, but at the very same time it can also block an organization from making those changes needed to adapt to a changing environment (Shafritz & Russel, 1999). The wide agreement that the power of the culture can be a problem as well as a source of strength (Deal & Kennedy, 1982; Lakomski, 2001) was already described before in detail. Does this mean, then, that culture itself is increasingly dysfunctional, or is it possible to imagine a culture that by its very nature is learning oriented, adaptive, and innovative? Can one "stabilize perpetual learning and change? What would a culture that favored learning look like?" (Schein, 1997; pp. 361). This is the biggest challenge managers and scholars in the organizational behavior domain have to face nowadays.

Parker and Bradley (2000) found out that those organizations with strong internal focus, emphasizing integration, collaboration, communication, control and stability, usually opposed much more changes and rejected adaptation to the environment even when it was essential for their stirvival. Denison and Spreitzer (1991) observed same findings. So, we have at least a starting point for what should not be a learning organization. Burnes (2000) makes another advance by stating that the most intriguing leadership role in culture management is one in which the leader attempts to develop a learning organization that will be able to make its own perpetual diagnosis and self-manage whatever transformations are needed as the environment changes. All this is important since managers, especially, have become more aware of the critical role the understanding of culture plays in their efforts to stimulate innovation, learning and change (Schein, 1997; Zammutu et al., 1999, in Ashkenasy, 2000).

Culture change is difficult to accomplish for many reasons (Kilmannet al., 1985, Trice & Beyer, 1993):

- 1. Well established, widely shared beliefs, values and norms are very resistant to managed change;
- 2. Culture change programs often clash with members' interests and political alignments;
- **3.** The managerial techniques for generating change in cultural orientations are not well understood:
- 4. Interventions aimed at changing culture often produce unintended and undesirable results;
- 5. A successful program of culture change requires major resources and can take many years and meanwhile the objectives can shift several times;
- 6. Serious ethical questions arise when the change attempts to control or manipulate employees' basic values and beliefs.

The first reason listed above demonstrates how strength of culture afects the ability to change. Organizations with strong cultures find them often to be a barrier to successful change. Particularly companies that face uncertain and changing environment and need to be flexible to adapt frequently to those changes will find that their strong cultures resist change. Managers face in fact a difficult dilemma: to ensure the effectiveness of their organization and to be successful they need a strong organizational culture; but at the very same time they also need to assure that the culture will not prevent flexibility. The recommended ways to face this dilemma are either by allowing subcultures to develop, or by building organizational culture that values change and flexibility. Backing by top management is particularly crucial for major culture changes, because top leadership typically drives cultural transformations and require simultaneous transformation of most system elements (Kilmann et al., 1985, Schein, 1997). But considering the costs and risks mentioned above, managers are understandably hesitant to undertake broad programs of culture change. Instead they often prefer introducing modest incremental nature steps to change specific culture features that in contrast to major culture changes prove much easier. Another popular way among managers to cope with the difficulties in changing culture is to introduce new cultural orientations by setting up new units and allowing them freedom to develop a distinctive organizational culture. By taking such sub-cultural differences into

account, managers can adopt more flexible and pluralistic change program. It finds to be an easier solution than trying to intervene in a well established organizational culture as a whole (Trice & Beyer, 1993). By creating the new independent units the managers of the mature companies with the traditional culture hope to provide conditions that will support the emergence of an innovative and entrepreneurial culture, as opposed to the parent company's one.

All together brings us to an understanding about the significance of the organizational culture within a change process. Managers should not just diagnose and measure it, but be responsible for gaining and sustaining a strong culture that is at the very same time eager to change when it is required. This is especially vital for organization acting in a turbulent environment, undergoing frequent radical changes.

We find through the literature review that the two phenomena of organizational culture and organizational change are strongly interwoven. The more turbulent, ambiguous, and out of control the world becomes, the more vital it is to create and sustain a strong culture, and, at the very same time, to change perpetually. It brings us back to the paradox discussed before: managers of the 21° century are examined by their ability to establish organizational cultures that will themselves be more amenable to change. These managers therefore, need to be persistent and consistent culture-architects, yet as learners must be flexible and ready to change.

4. Research Rational

The change process comes out from the literature to be unavoidable for the modern organizations, and unfortunately, a very risky procedure with a low rate of success. The literature review Underpins the importance of the organizational culture within an organizational change process: the deeper the change is the more carefully should the culture be considered.

We found theories stating that a successful change requires, among others, dissatisfaction of the employees with the current situation of the organization. There are few research confirming the existence of a positive correlation between dissatisfaction with the business performance and the success of the initiated change process, but none of the research has checked the influence of dissatisfaction with the culture on the success of changing the culture itself. So, this is going to be the first aim of the research presented in this paper and its contribution to the relatively young fields of organizational culture and organizational change.

We found in the literature that scholars differ from each other in their approach to changing culture; some believe in the ability to change core values, some believe even in the ability to change basic assumptions, and some - like Hofstede - believe only in the ability to change procedures. In this research will be adopted the first approach, viewing successful organizational culture change as such when attitudes have been changed. Another very interesting phenomenon the literature review has pointed out is the strong culture. On the one hand such a culture is aspired by every manager since it will enhance the business performance, but on the other hand the theories emphasize such culture as a barrier to a successful change. Nevertheless, no research was found to support this claim empirically. So, this will be the second aim of this research and another contribution to the two sub-disciplines this paper deals with. None of the research reviewed in the former chapter has either examined the influence of company characteristics, or the human resource characteristics as moderators. Variables as company size and age, the professional

experience of the employees, and employees' education, were never examined in this context. So, the secondary purpose of this research will be to find out if they act as moderators in both the above-mentioned correlation. The research already conducted in this field has usually dealt with long existing companies or with companies not connected to each other, which still leaves us curious about what is going on in a new established division. This, again, will be another uniqueness of this research.

5. Theoretical Framework

5.1 Research Variables:

independent variable Strength of Organizational Culture

Theoretical definition: Strong culture means a wide understanding of the corporate

mission, goals, strategies, and measurement of the performance (Schein, 1997).

The power of culture lies in its ability to bring people to overcome the fragmentation and

ambiguity that characterize the external environment (Cameron & Quinn, 1999).

* Independent variable Dissatisfaction with Current Organizational Culture

Theoretical definition: The more dynamic the external environment, the more likely it is

employees feel that some elements of culture have become maladaptive (Schein (1997).

The employees are signaling that they are not comfortable with the work the way it used

to be done (Deal & Kennedy, 1982).

*Dependent variable Success of the Organizational Change process

Theoretical definition: Real change in the attitudes of people throughout the

organization (Deal & Kennedy, 1982).

Organizational change, as its root, is intimately tied to individual change. Unless

employees are willing to commit to personal change, the organization's culture will

remain recalcitrant (Cameron & Quinn, 1999).

*Moderator variable :Company Size

Theoretical definition: number of employees in the company.

^Moderator variable':Company Age

Theoretical definition: number of years since the company was established.

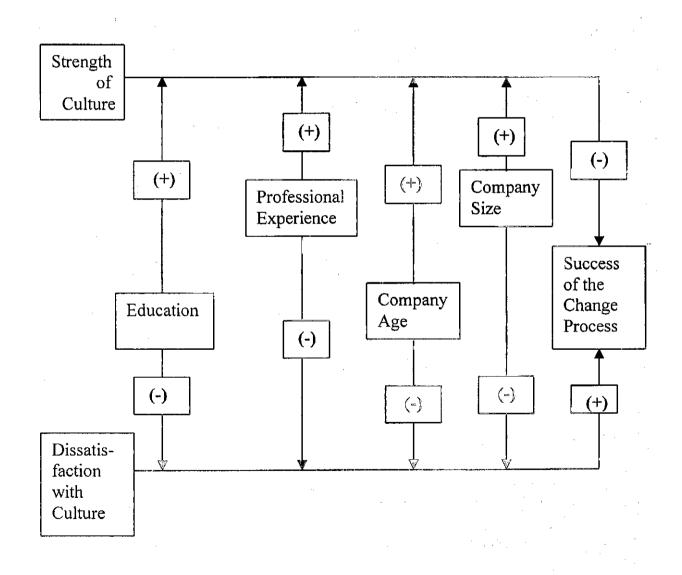
*Moderator variable **Employees' Professional Experience**

Theoretical definition: level of professional expertise, experience in profession.

*Moderator variable :Employees' Education

Theoretical definition: level of education/degree achieved.

5.2 Theoretical Research Model:



5.3 Hypotheses:

- 1. There is a positive correlation between the dissatisfaction with the current organizational culture and the success of the change process.
 - 11 The company size moderates this correlation: the bigger the company is, the above correlation will be weaker.
 - 1 2The company age moderates this correlation: the older the company is, the above correlation will be weaker.
 - i.3The professional experience of employees moderates this correlation: the bigger the experience is, the above correlation will be weaker.
 - i.4The employees education moderates this correlation: the higher the education of employees is, the weaker will be the correlation between the dissatisfaction with culture and the success of the change process.
- 2. There is a negative correlation between the strength of the organizational culture and the success of the change process.
 - 2.1 The company size moderates this correlation: the bigger the company is, the above correlation will be stronger.
 - 2.2The company age moderates this correlation: the older the company is, the above correlation will be stronger.
 - 2.3The professional experience of employees moderates this correlation: the bigger the experience is, the above correlation will be stronger.
 - 2.4Employees education moderates this correlation: the higher the education is, the above correlation will be stronger.

6. Methodology

6.1 Research Population:

This research was conducted in a European corporate existing over seventy five years, acting mainly in traditional industries. The board of directors decided to enter the IT field by establishing a division of twelve new companies, employing all together 700 employees, offering to the local market hardware, software, and various information's systems. For the first couple of years these companies worked each independently, directly under the auspices of the corporate headquarters. Since the environment in the IT field differs entirely from the environment the corporate was used to for so many years, the business results were not as expected. Then, after a short while, another decision was made, to establish a new division and to concentrate all IT activities under the new umbrella. It was not just a structural change, but a real transformation, moving managers and employees away from all traditional habits and procedures toward the dynamic shape such companies require in nowadays.

6.2 Sample:

All twelve companies and their 700 employees took part in the research. Actually 49% of the employees responded to the first survey and 59% to the second one. Two companies were eliminated from the analysis since employees' participation in them was too small.

Table 1: Employee's participation across the corporate companies

| Co | mpany | Employees N= | Survey 1 | % | Survey 2 | % | Difference |
|-------|-------|----------------|----------|-----|----------|------|------------|
| | | | N - | Res | N - | Res. | S2-S1 |
| No. | Est. | | | | | | |
| 1 | 1933 | 43 | 32 | 74% | 16 | 37% | 37% - |
| 2 | 1397 | 23 | 17 | 74% | 15 | 65% | 9%- |
| 3 | 2001 | 19 | 13 | 68% | 17 | 89% | 21% + |
| 4 | 1930 | 12/6 | 6 | 50% | 2 | 33% | 17%- |
| 5 | 2000 | ,65 | 13 | 20% | 3 | 5% | 15%- |
| 6 | 2001 | 12 | 9 | 75% | 8 | 67% | 8%- |
| * | 2000 | 9 | 1 | 11% | 5 | 56% | 45% + |
| 7 | 2000 | 15 | 10 | 67% | 12 | 80% | 13% + |
| 8 | 2001 | 5 | 4 | 80% | 3 | 60% | 20% - |
| | 2000 | 9 (Est) | Т | 11% | 1 | 11% | 0% |
| 9 | 2000 | 129 | 51 | 40% | 72 | 56% | 16% + |
| 10 | 1945 | 373 | 187 | 50% | 257 | 69% | 19% + |
| Total | | 700 | 344 | 49% | 411 | 59% | 10% + |

Since the samples of these two companies are too small, their results were not analyzed

6.3 Accessibility to the Research Field:

The researcher was a consultant, first to the board of the corporate and then to the president of the new established division. When the change itself took place, he served as a change agent and ran over all the companies of the division diagonal TFT's (Task Force Teams). The position the researcher hold within the companies enabled him to receive all required kinds of information and 'to achieve high level of cooperation from managers as well as from employees.

6.4 Information Sources:

Hard, quantitative studies of organizational cultures are very few and in general they are not necessarily very convincing. On the other hand, culture assessment based on hard or semi-hard methods (directly or indirectly quantifiable) has the advantage of reliability (independence of the person of the researcher) and stability of the instrument over time, thus allowing 'longitudinal' research. More easily than softdata-based research it helps to overcome resistance unpleasant news among the people concerned ('on how many interviews do you base this opinion?'). For larger organizations, in which the fear factor tends to be higher, anonymous questionnaires provide the best vehicle for collecting large amount of data that help identify patterns or trends in employee perceptions. And finally, managers, who receive hard data, bottom-line culture can incorporate it more readily in their consciousness. Questionnaires can provide volumes of data, but they do not provide specific examples of what really drives behavior in the organization, meaning the quantitative research is missing the essence of culture as a whole and can easily become entirely mechanistic.

From these reasons a decision was made that the best will be a study designed to include both a qualitative and a quantitative element, so as to get the best of both worlds: to use in-depth interviews as well as computerized survey. The outcome of such an analysis is a clear - as far as possible - picture of major barriers that are retarding or will retard a change effort, as well as clear indication of the remedial interventions that need to occur.

The first, qualitative phase of the research consisted of in-depth person-to-person interviews of 1-2 hour duration each with three informants per company (thus, a total of 36 interviews). These interviews served both to acquire a qualitative feel for the whole (the *Gesta.lt*) of the company's culture, and to collect issues to be included in the questionnaire for the ensuing survey. Informants where hand-picked in a discussion with the person who served as the scholar's contact in the company, on the basis that they would have something interesting and informative to say about the culture. The group of informants included, in all cases the general manager, a person from the second layer (mainly department manager), and a person from the third layer (mainly team manager). The interview team consisted of 3 members, all of them with social science training, but deliberately naive about the type of activity going on in the company studied. Each company's interviews were divided between two interviewers. All three interviewers received the same project training beforehand, and they used the same broad checklist of open-ended questions.

The interview checklist contained question like"What is the degree to which employees participate in the decision making process?" (Q11; appendix 1). Interviewers were also free to probe for more and other information if they felt it was there. Interviews were taped and the interviewers wrote a report for each interview using a prescribed sequence, quoting as far as possible the respondents' actual words.

The second, quantitative phase of the research consisted first on a paper-and-pencil survey, and second on a computerized survey, both with precoded questions. The questions were developed on the basis of the interviews of the first phase. Questions were formulated about all issues, which the interviewers suspected would differ substantially between companies. These included, in particular, many of the perceptions of daily practices.

6.5 Quantitative Research Tool:

With the help of a small team of experts who joined the researcher for this project, he conducted two organizational surveys:

- 1. SI just before the change process started
- 2. S2 nine month later

The findings of these two surveys were the preliminary source of information used in this research, while data from the files of the various companies and reports from the HR department served the researcher as secondary information source.

Same questionnaire was used for both surveys with a slight difference: on SI (the first survey) employees were asked to answer twice each question, once- regarding the current situation, and second time - regarding the expected situation, while on **S2** (the second survey) they were asked only about the current situation. Second difference was including on **S2** four additional questions: 21-24 (appendix 2).

Dissatisfaction with Current Organizational Culture

Measured by 9 items out of the 20 included in the questionnaire (items number 1,3,7,11,15,17,18,19,20), and calculated as the difference between current and expected values given on SI for the above questions. For example a question examining satisfaction (Q1): "I am involved in making decisions that affect my work". The employees were asked to grade their agreement with the statement on a Likert scale within the range of-5 (1=1 agree; 5=1 disagree). On each question they were asked to answer twice: grading the current situation, and then - *the* expected situation. The parameter of dissatisfaction is calculated as die weighting average of the gaps found in those 9 items.

Strength of Organizational Culture

Measured by 4 items out of the 20 (items numbers: 2,5,8,14) on SI for "current situation", and calculated as the average of the answers given on these questions. For example a question examining the strength of organizational culture (Q4): "I identify with the core values of my organization". The employees were asked to grade their agreement with the statement on a scale within the range of 1-5 (1=1 agree; 5=1 disagree). The parameter of strength is calculated as the weighting average of those 4 items.

Success of the Organizational Change process

This variable is based on two various parameters:

- 1. The gap between employees' attitudes toward the current situation as measured on S1 (prior to the change process), and their attitudes as measured on S2 (nine month later). The issues examined here are collaboration within the company, cross-departmental communication, encouraging of entrepreneurship, encouraging of innovation, and readiness for efforts on behalf of the company. All these wffe measured by the difference between grades given on S2 and on SI for the following questions: 6,9,10,12,13,16. , For example a question examining the success of the organizational change process (Q16): "I feel that there is a real sense of cooperation in my company".
- 2. On S2 are four questions, which were not included onS1 and are directly examining the success of the change process:
 - 21. "I feel that I am also a member of the corporate and not only a member of my company"
 - 22. "I believe in the success of the change process"
 - 23. "I am well informed about the change process"
 - 24. "I am using the corporate portal and Bulletin to be informed"

Accordingly the level of success of the Organizational Change process in each company will be calculated by a weighting average of the answers on these four questions on S2

Company Size

Type of variable: nominal (big/small). The ten companies of the research are divided into two groups according to their size as measured by the number of employees in each company as reported by the corporate HR department (presented in table 1). Four companies are defined as big (over 40 employees) and six companies are defined as small (less than 30 employees).

Company Age

Type of variable nominal (mature/new). The ten companies of the research are divided into two groups as to the year they were established. Six companies are defined as young ones (established between 2000 and 2001), and another four are defined as matures (established at 1930,1945,1983,1997). Information was given by the corporate headquarters and cross-checked with the corporate website.

Professional Experience of Employees

This interval variable is calculated according to the distribution of professional experience of employees (by years) in each company, as reported by the corporate HR department. On SI, personal data was collected regarding each employee. They were asked to grade their professional experience on four levels' scale:

1= up to two years

2=2-5 years

3 = 5 - 10 years

4= 10 years and more

The present research is based on this survey, but since the analysis unit is not a person but the company, a new parameter is required to reflect the professional experience of employees per company. To meet this requirement an assumption will be laid that the sequence of values in the variable "Professional Experience of Employees" is an ordinal scale, while "1" means a very low professional experience, and "4" means a very high professional experience. According to the distribution of the experience in years per each company, the average experience for each company will be calculated within the range *I* 4: the higher the grade is, the bigger the professional experience of employees in the company is.

Employees' Education

This interval variable was calculated on the distribution basis of education in each company. On SI personal data was collected regarding each employee. They were asked to grade their education on four levels' scale:

- 1= elementary school
- 2= high school
- 3= undergraduate
- 4= graduate and more

The present research is based on this survey, but since the analysis unit is not a person but the company, a new parameter is required to reflect the education level of employees in each company. To meet this requirement an assumption will be laid that the sequence of values in the variable "Education" is an ordinal scale, while "1" means the lowest level of education, and "4" means the highest level of education. According to the distribution of the education level in each company, the average education for each company will be calculated within the range 1-4: the higher the grade is, the higher is the average education level of employees in the company.

6.6 Research Procedure:

The questionnaire was translated from English to the local language and was pretested on a group of employees. SI was carried out with hardcopy form supplied on Monday to the employees by their managers and escorted by a letter describing the purpose of the research

and ensuring anonymity. During the whole week, a special box was located at the entrance to each company premises for collecting the forms back.

Nine month later S2 was conducted, and since the change process included establishing of an intranet web within 'the companies, the forms were distributed this time on the net, againensuring full anonymity. Once again, employees were given a week (Monday to Friday) for accomplishing and sending the forms back. Both surveys' results were first put on Excel, except for very few which were invalid, and then processed on SPSS.

7. Findings and Analysis

7.1 Descriptive Statistics:

Dissatisfaction with Culture

Before the construction of the parameter for 'dissatisfaction', a paired sample Ttest was conducted on pairs of items to find out if there is a significant difference between the values received for 'expected situation' in comparison to 'current situation'. The findings are presented in table 2:

Table 2: T-test for comparing values for 'dissatisfaction'- expected vs. current (n=10)

| | | | | Difference | | |
|-------|----------|---------|-----------|------------|-----------|-------|
| item | | Avorogo | Standard | Between | Standard | T(9) |
| item | | Average | Deviation | Averages | Deviation | |
| | | | | | | |
| | current | 2.55 | 0.49 | | | |
| | expected | 1.47 | 0.25 | 1.08 | 0.29 | •11.8 |
| | current | 3.41 | 0.50 | | | |
| | expected | 1.93 | 0.19 | 1.48 | 0.49 | "9.6 |
| | current | 1.96 | 0.21 | 0.66 | 0.21 | **** |
| | expected | 1.30 | 0.14 | 0.66 | 0.21 | "*9.8 |
| 11 | current | 2.52 | 0.50 | 1.21 | 0.50 | WO 2 |
| 11 | expected | 1.22 | 0.15 | 1.31 | 0.50 | "8.3 |
| 15 | current | 1.82 | 0.44 | 0.62 | 0.22 | 116.0 |
| 15 | expected | 1.20 | 0.14 | 0.62 | 0.33 | "6.0 |
| 17 | current | 2.80 | 0.64 | 1.47 | 0.66 | **7.0 |
| | expected | 1.33 | 0.14 | 1.47 | 0.00 | /.0 |
| 18 | current | 2.54 | 0.74 | 1.30 | 0.72 | "5.7 |
| | expected | 1.24 | 0.12 | 1.50 | 0.72 | 3.7 |
| 19 | current | 1.96 | 0.59 | 0.73 | 0.49 | **4.7 |
| | expected | 1.23 | 0.14 | 0.73 | 0.49 | 4.7 |
| 20 | current | 2.65 | 0.54 | 1.36 | 0.54 | "8.0 |
| 20 | expected | 1.29 | 0.18 | 1.30 | 0.34 | 8.0 |
| (* s | k) <0.01 | | | | | |

^(**)p<0.01

From the table it is clear that in all 9 items there are significant differences in the values given by the employees for the 'expected situation' vs. those given for the 'current situation'. In purpose to build a united parameter for 'dissatisfaction', were calculated the differences between'the answers describing the 'current situation' and hose describing the 'expected' one in each of the 9 items. The assumption laid behind is that the higher the difference is, the bigger is the dissatisfaction.

Reliability factor was calculated between the various items and was found a=0.92. The dissatisfaction factor was calculated as an average of the differences on the 9 items.

Strength of Organizational Culture

This variable is based on the average of answers given to items 2,5,8,14 on SI for 'Current Situation'.

Reliability factor was calculated between the various items and was found a=0.85. The 'Strength of Organizational Culture' factor was calculated as an average of the 4 items. In table 3 are presented the values received for the independent variables dissatisfaction and strength of culture for each of the 10 companies:

Table 3: Average, st. deviation, minimum & maximum values of the independent variables: 'dissatisfaction' and 'strength of culture'

| | Dissatisfaction factor | Strength of culture factor |
|---------------|------------------------|----------------------------|
| average | 1.1 | 2.0 |
| St. deviation | 0.4 | 0.3 |
| Minimum | 0.5 | 1.4 |
| Maximum | 1.7 | 2.4 |

The average value for 'dissatisfaction' is 1.1 (min. 0.5 and max. 1.7) and the average value for 'strength of culture' is 2.0 (min. 1.4 and max. 2.4).

Success of the Change Process

Measured by comparison of the answers given for items 6,9,10,12,13,16 onS2 vs. SI (attitudes 'before' and 'after' the change). Before building the parameter of' Success of the Change Process', a paired sample T-test was conducted on the above pairs of items to find out if there is a significant difference between the values received for 'before change' in comparison to 'after change'. The findings are presented in table 4:

Table 4: T-test for comparing situation - 'before' vs. 'after' per each item (n=10)

| item | | average | St. deviation | Difference between averages | St. deviation | T(9) |
|------|------------|--------------|------------------|-----------------------------------|------------------|---------|
| 6 | 51 52 | 1.54 3.94 | 0.18 0.51 | 2.41- | 0.60 | **12.8- |
| | SI S2 | 1.96 3.72 | 0.40 0.27 | 1.76- | 0.44 | **12.8- |
| 10 | 51 52 | 2.45 3.70 | 0.58 0.82 | 1.25- | 1.06 | **3.7- |
| 12 | i SI S2 | 2.29 3.45 | 0.36 0.49 | 1,16- | 0.61 | **6.0- |
| 13 | SI S2 | 3.41 3.14 | 0.58 0.92 | 0.27 | 1.31 | 0.7ns |
| 16 | 51 52 | 2.42 3.74 | 0.67 0.50 | 1.32- | 0.86 | **4 9- |

(**)p<0.01

(***) Item 9 was manipulated to turn over (5-q9+1)

From the table it is clear that in 5 out of 6 items there are significant differences between employees' grading on S2 in comparison to S1. In item 13 the difference is not significant and is in the opposite direction. So, this item is eliminated from the analysis since it will cause a decline in the average difference if it is included.

Another examination of the difference between S2 and SI was conducted on variables that are an average of the two measuring dates. For this purpose a reliability factor (a) was calculated on the 5 items (without item 13 and with turning over item 9) and was found a=0.74on SI in comparison to a=0.69 on S2. On S2 was calculated also the a factor including the above mentioned 5 items plus the 4 additional items which examined the success, of the change process as appraised by the employees (items 2124 on S2), and was found ct=0.87.

Three factors were calculated:

- 1. Organizational characteristics before the change process (average of items on SI without item 9)
- 2. Organizational characteristics after the change process (average of items on S2 without item 9)
- 3. The difference between the results on S2 and SI

The average on SI and on S2 and the difference between them in each company is presented in table 5:

Table 5: The average values for 'organizational characteristic' on SI, S2 and the difference between them per company

| company | Organizational | Organizational | Success of the |
|---------|-----------------|-----------------|----------------|
| | characteristics | characteristics | change process |
| | SI | S2 | S2-S1 |
| 1 ' | 2.3 | 3.7 | 1.3 |
| 2 | 2.2 | 3.7 | 1.5 |
| 3 | 2.3 | 3.5 | 1.2 |
| 4 | 1.7 | 3.1 | 1.4 |
| 5 | 2.6 | 3.7 | 1.0 |

| 6 | 1.8 | 3.5 | 1.7 |
|---------------|-------|------|------|
| 7 | 2.4 | 4.1 | 1.7 |
| 8 | 1.9 | 4.2 | 2.3 |
| 9 | 2.4 | 4.0 | 1.5 |
| 10 | • 2.3 | 4.3 | 2.1 |
| average | 2.2 | 3.8 | 1.6 |
| St. deviation | 0.32 | 0.38 | 0.39 |

It is clear from the table that there exists a difference in all 10 companies and it goes same direction. A T-test was conducted and was found that the average difference is significant: t(9)=-12.8; pO.O1.

As mentioned before another parameter for the appraisal of the change process is based on items 21-24 on **S2** (these questions were not included on **S1**). The values received on these four items in each company are presented in table 6:

Table 6: values for items 21-24 on S2 (Appendix 2)

| Company | Q21 | Q22 | Q23 | Q24 | average |
|---------------|-------|-----|-----|-----|---------|
| 1 | 3.9 | 4.3 | 4.3 | 3.9 | 4.1 |
| 2 | 3.6 | 4.1 | 4.1 | 3.7 | 3.9 |
| 3 | 3.4 | 3.9 | 4.1 | 3.3 | 3.7 |
| 4 | 3.0 | 3.0 | 3.4 | 2.8 | 3.1 |
| 5 | 3.9 | 4.3 | 4.1 | 3.9 | 4.1 |
| 6 | 3.9 | 4.5 | 4.5 | 3.5 | 4.1 |
| 7 | 5.0 | 5.0 | 4.0 | 5.0 | 4.8 |
| 8 | 4.0 | 5.0 | 5.0 | 5.0 | 4.8 |
| 9 | 4.5 | 4.9 | 3.7 | 3.9 | 4.3 |
| 10 | 3.7 | 4.0 | 4.0 | 4.0 | 3.9 |
| average | 3.9 | 4.3 | 4.1 | 3.9 | 4.1 |
| St. deviation | , 0.6 | 0.6 | 0.4 | 0.7 | 0.5 |

The reliability factor (a) was calculated between the items and was foundcc=0.88.

Another factor for the appraisal of the change process was build by calculating the average of items 21-24 on S2. The findings show that in average there is a good sense of success almost in all companies.

The theoretical research model considers four moderating variables. The values found for them are presented in table 7:

Table 7: values of moderating variables per company

| size | age | professional | education |
|-------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | experience | |
| big | mature | 2.7 | 2.9 |
| big | new | 1.4 | 3.0 |
| big | mature | 1.9 | 2.8 |
| small | new | 1.0 | 2.8 |
| small | mature | 2.0 | 2.7 |
| small | new | 1.5 | 3.0 |
| small | mature | 2.2 | 3.7 |
| small | new | 1.3 | 3.1 |
| small | new | 1.6 | 3.2 |
| big | new | 1.2 | 3.5 |
| | big big small small small small small small | big mature big new big mature small new small new small mature small new small mature small new small new | big mature 2.7 big new 1.4 big mature 1.9 small new 1.0 small new 1.5 small mature 2.0 small new 1.5 small new 1.5 small new 1.5 small new 1.5 small new 1.6 |

Four out of ten companies are defined as 'big' and six are defined as 'small'. Four out of ten are defined as 'mature' and 'six' are defined as 'young'. The average employees' professional experience calculated for all companies together is 1.7, min. 1.0 and max. 2.7, which means experience between two and five years. All at all it is a big ratio of low employees' professional experience. The average employees' education level calculated for all companies together is 3.1, min. 2.7 and max. 3.7. This is an evidence for big number of graduates and under graduates among the employees.

7.2 Hypotheses Examination:

For the examination of the two main hypotheses, a Pearson Correlation was calculated between the parameters of dissatisfaction and 'strength of culture', and the parameters for 'the success of the change process'. The results are presented in table 8:

Table 8: Pearson Correlation between the independent and dependent variables

| Success of Change | dissatisfaction | culture |
|----------------------|-----------------|---------|
| S2-S1 | 136 | 382 |
| Mean21 4 | 496. | 062 |

The first hypothesis was '.

1. There is a positive correlation between the dissatisfaction with the current organizational culture and the success of the change process

The meaning of the above presented Pearson correlation calculated between the parameter of dissatisfaction and the two parameters for the success of the change process, is that **the findings confirm this hypothesis.** There was found a positive correlation (r=0.496) between the level of 'dissatisfaction' and 'the success of the change process' (measured by the average of questions 2134): the higher the dissatisfaction level is, the better is also the level of success of the change process.

The second hypothesis was:

2. There is a negative correlation between 'the strength of the organizational culture' and 'the success of the change process'.

The Pearson correlation, which was calculated between the parameter for the 'strength of culture' and the parameters for 'the success of the change process', **confirm this hypothesis.** There was found a negative correlation $(r^-0.382)$

between the strength of culture and the success of the change process as measured by the difference between S2 and SI: the stronger the culture is, the success of the change process will be smaller.

The first moderating variable, was the company size, and for examination of the two hypotheses considering the effect of this variable, a Pearson correlation was calculated separately among big companies and among the small ones. The comparison between the results is presented in table 9.

Table 9: Pearson Correlation between 'dissatisfaction' and 'strength of culture', and parameters of 'success of the change process'- small vs. big companies (*)

| | dissatisfaction | | cult | ure |
|----------|-----------------|---------------|-------|-------|
| | | Big (n=4) | | |
| S2-S1 | 0.19- | (n=4) 0.27 | 0.68- | *0.98 |
| mean21 4 | 0.59 | 0.61- | 0.08 | 0.20 |

(*) Small - less than 30 employees, Big - 40 employees and over

From the results in the above table it is obvious that the correlation between 'dissatisfaction' and 'the success of the change process' is similar in intensity but opposite in direction among small companies in comparison to the big ones. As well it is obvious that the correlation between 'strength of culture' and 'the success of the change process' is stronger in the big companies than in the small ones.

The first original hypothesis regarding size of company was:

1.1 The company size moderates the correlation between 'dissatisfaction' and 'the success of the change process': the bigger the company is, the above correlation will be weaker.

The Pearson correlation between 'dissatisfaction' and 'the success of the change process' (the average of questions 21-24) was calculated separately for the big companies' (over 40 employees) and for the small companies (less than 30

employees). The correlation is very much the same in intensty but opposite in direction in small companies (r=0.59) in comparison to big companies (r=0.61). In small companies the higher the dissatisfaction is, the better is the appraisal of success of the change process by employees. In big companies the higher is the dissatisfaction the lower is the appraisal of success of the change among employees.

The findings do not confirm this original hypothesis, but anyhow there is a difference' between big companies and small ones in the direction of the correlation.

The second original hypothesis regarding size of company was

2.1 The company size moderates the correlation between 'strength of culture' and 'the success of the change process': the bigger the company is, the above correlation will be stronger.

The Pearson correlation was calculated separately for the big companies (over 40,employees) and for the small companies (less than 30 employees). The correlation between 'strength of culture' and 'the success of the change process' (measured by the difference between S2 and S1) is higher and opposite in direction in big companies (r=0.98) in comparison to small companies (r=-0.68).

The findings confirm this hypothesis

The second moderating variable was the company age, and for examination of the two hypotheses considering the effect of this variable, a Pearson correlation was calculated separately among mature companies and among the young ones. The comparison between the results is presented in table 10:

Tabid 0: Pearson Correlation between 'dissatisfaction' and 'strength of culture', and parameters of 'success of the change process' mature vs. young companies(*)

| | dissatis | faction | Cul | ture |
|----------|----------|-------------|-----------------|-------|
| | Mature | Young | Mature | Young |
| | (n=4) | (n=6) | (n=4) | (n=6) |
| S2-S1 | 696. | 064. | 698. | 349 |
| mean21 4 | 770 | <u>587.</u> | <u>(*)</u> 964. | 247 |

(*) Mature companies - established before 1999

Young companies - established between 2000 and 2001

From the results in the above table it is obvious that the correlation between 'dissatisfaction' and 'the success of the change process' is higher among mature companies in comparison to the young ones. As well it is obvious that the correlation between 'strength of culture' and 'the success of the change process' is stronger and positive among the mature companies in comparison to the young ones in which it was found to be negative.

The first original hypothesis regarding age of company was:

1.2The company age moderates the correlation between 'dissatisfaction' and 'the success of the change process': the elder the company is, the above correlation will be weaker.

The Pearson' correlation was calculated for the mature companies (established before 1999) and for the young ones (established between 2000 and 2001). The correlation between 'dissatisfaction' and 'the success of the change proosss' is higher 'at the mature companies in comparison to the young ones in both parameters of the success:

Using the parameter of difference between S2 and SI for measuring the success of the change process: the correlation at the mature companies was r=0.70, in comparison to r=0.06 at the young ones

* Using the parameter given by the average for questions 21-24 in **S2**: the correlation at the matures companies was r=0.77, in comparison to r=0.39 at the young ones.

The findings do not confirm this hypothesis but the opposite one: the more mature the company is, the stronger is the positive connection between 'dissatisfaction' and 'success of the change process'.

2.2The company age moderates the correlation between 'strength d culture' and 'the success of the change process': at the mature companies, the above correlation will be stronger

The Pearson correlation was calculated for the mature companies (established before 1999) and for the young ones (established between 2000 and 2001). The correlation between 'strength of culture' and 'the success of the change process' is higher among the mature companies in comparison to the young ones in both parameters of success:

- * Using the parameter of difference between S2 and SI for measuring the success of the change process: the correlation at the mature companies was r=0.70, in comparison to r=-0.35 at the young ones
- * Using the parameter given by the average for questions 2124 in **S2:** the correlation at the more mature companies was r=0.96, in comparison to r=-0.25 at the young ones.

The findings confirm this hypothesis.

The third moderating variable was the 'professional experience of employees' in each company. For examination of the two hypotheses considering the effect of this variable, a Pearson correlation was calculated separately among companies with high average of professional experience and among those with low average of professional experience. The comparison between the results is presented in table 11:

Table 11 :Pearson Correlation between 'dissatisfaction' and 'strength of culture', and parameters of 'success of the change process' -high professional experience companies vs. low professional experience companies

| | dissatisfaction | | Cui | lture |
|----------|-----------------|---------------|-----------|------------|
| | low (n=6) | high (n=4) | low (n=6) | High (n=4) |
| S2-S1 | 064. | 696. | 349 | 698 |
| mean21 4 | 387. | 770. | 247 | (*)964 |

From the results in the above table it is obvious that the correlation between tie two independent variables ('dissatisfaction with culture' and 'strength of culture') and the dependent one ('success of the change process'), is higher among companies in which the average professional experience of employees is higher. The above correlation is weaker among companies with a lower average of employees' professional experience.

The first original hypothesis regardingemployees 'professional experience was:

1.3The professional experience of employees moderates the correlation between 'dissatisfaction' and 'the success of the change process': the bigger the experience is, the above correlation will be weaker

The Pearson correlation was calculated for the companies in which the average professional experience of employees was higher, and compared with this achieved for companies in which the average professional experience was smaller. The findings indicate that in companies with higher professional experience in average, the correlation between 'dissatisfaction' and the two various parameters for measuring success was higher in comparison to the companies with smaller average professional experience.

Using the parameter of difference between S2 and SI for measuring 'the success of the change process': the correlation at the 'more professional' companies was r=0.70, in comparison to r=0.06 at the 'less professional' ones.

* Using the parameter given by the average for questions 21-24 in S2: the correlation at the 'more professional' companies was r=0.77, in comparison to r=0.39 at the 'less professional' ones.

The findings do not confirm this hypothesis but the opposite one: at the more professional companies, the positive connection between 'dissatisfaction' and 'success of the change process' is stronger.

The second original hypothesis regardingemployees 'professional experience was:

2.3The professional experience of employees moderates the correlation between 'strength of culture' and 'the success of the change process': the bigger the experience is, the above correlation will be stronger

A Pearson correlation was calculated for the companies in which the average professional experience of employees was higher, and compared with the one received for companies in which the average professional experience was smaller. The findings indicate that in companies with higher professional experience in average, the correlation between 'strength of culture' and the two various parameters for measuring success was higher in comparison to the companies with smaller in average professional experience.

- * Using the parameter of difference between S2 and SI for measuring 'the success of the change process': the correlation at the 'more professional' companies was r=0.70, in comparison to r=-0.35 at the 'less professional' ones.
 - * Using the parameter given by the average for questions 21-24 inS2: the correlation at the 'more professional' companies was r=0.96, in comparison to r=-0.25 at the 'less professional' ones.

The findings confirm this hypothesis.

The forth-moderating variable was employees' education, and for examination of the two hypotheses considering the effect of this variable, a Pearson correlation was

calculated separately among high educated workers' companies and among the low educated ones. The comparison between the results is presented intable 12:

Table 12 :Pearson Correlation between 'dissatisfaction' and 'strength of culture', and parameters of 'success of the change process'- high education companies vs. low education companies

| | dissatisfaction | | Culture | |
|----------|-----------------|---------------|--------------|------------|
| | low (n=6) | high (n=4) | low (n=6) | High (n=4) |
| S2-S1 | 757 | 890 | 544 | 678 |
| mean21_4 | 494. | 064 | 386. | 618 |

The first original hypothesis regardingemployees' education was:

1 ^Employees' education moderates the correlation between 'dissatisfaction' and 'the success of the change process': the higher the education level of employees is, the weaker will be the correlation between 'dissatisfaction' and 'the success of the change process'.

A Pearson correlation was calculated among the 'more educated' companies in average, in comparison to the 'less educated' in average. The findings indicate opposite results:

- * Using the parameter of difference between S2 and SI for measuring 'success of the change process', the correlation between the independent and the dependent variables at the 'more educated' companies is r=-0.890 in comparison to r=-0.757 at the 'less educated' ones.
- * Using the parameter given by the average for questions 2t24 in **S2** for measuring 'success of the change process', the correlation between the independent and the dependent variables at the 'more educated' companies is r=-0.064 in comparison to r=0.494 at the 'less educated' ones.

The findings confirm this hypothesis about the education of employees as moderator only when using the second parameter for 'success of the change process'.

The second original hypothesis regarding employees' education was:

2.4Employees' education moderates the correlation between 'strength of culture' and 'success of the change process': the higher is employees' education level, the stronger will be the correlation between 'strength of culture' and 'the success of the change process!

A Pearson correlation was calculated among the 'more educated' companies in average, in comparison to the 'less educated' in average. The results indicate in the 'more educated' in average, a negative and higher correlation between 'strength of culture' to the two parameters of 'success of the change process' in comparison to the 'less educated':

- * Using the parameter of difference between **S2** and **SI** for measuring the 'success of the change process', the correlation between the independent and the dependent variables at the 'more educated' companies is r=-0.678 in comparison to r=-0.544 at the 'less educated' ones.
- * Using the parameter given by the average for questions 21-24 in **S2** for measuring 'the success of the change process', the correlation between the independent and the dependent variables at the 'more educated' companies is r=-0.61 8 in comparison to r=0.386 at the 'less educated' ones.

The findings confirm this hypothesis about the education of employees as moderator: the higher the education is the stronger are the correlation between 'strength of culture' and 'the success of the change process'.

(Further findings - see appendix 3)

7.3 The Research Limitations:

In the present study the analysis units are the companies itself and not a representative sample of employees from all companies. This leads to some limitations as follows:

- 1. Sample size. In the research was analyzed data about only ten companies, and the number of observations was accordingly. This is a small sample for statistical analysis which has implications in several areas:
- 1.1 **Low significance.** In spite the fact that high correlation was achieved in the linear correlation analysis (r>0.3), these results are not significant because of the small sample.
- 1.2 Lack of sufficient variance between the observations. Since the data for each company is calculated as the average grade of all participants from the particular company (data from SI and S2), the original variance existing among various employees has no impact in the analysis of the companies as a whole.
- 1.3 Extremely high/low correlation. The lack of sufficient variance between the observations has caused extremely high correlation (for instance: r=0.99), that does not look logic and probably would not been received using variables with a wider range of variance.
- 1.4 Lack of feasibility to conduct a multiple regression test. A desirable way to analyze the theoretical research model used in this paper (two independent variables, moderating variables, and one dependent variable) should be multiple regression. Unfortunately the use of such statistical model require at least about 15 observations on each variable, which did not exist in the present study.
- 2. **Company size.** All companies have received same weight neglecting their number of employee: the smallest company has 9 employees and the biggest has 373, and both have been given same weight in the analysis.

Analysis of the moderating variables 'employees' education' and 'employees' professional experience'. The data collected for these variables before the change process (SI) was based on artificial nominal-ordinal variables (see appendix 2, the questionnaire). Since the file constructed on the basis of companies did not allow the use of these variables (the existing data was only the deviation in each company), the average for each company was calculated to represent it.

Comparison between S2 **and SI.** OnS2 the participation of employees was 59% in comparison to 49% on **SI.** But furthermore: there is no full identity between the employees participating on both surveys.

8. Debate

The change initiated, in the conipanies participating in this research was mainly cultural: changing from a reactive, bureaucratic culture to the proactive 'can-do' attitude. According to Head's (1997) classification it was a second class change, large range, including change of the extant thinking patterns, value change, paradigm shift. Since there is a significant differences in the employees' attitudes toward the desired ones \$2 in comparison to SI), the change process was successful. This result oppose Hofstede's (1997) approach as if culture may change over the long run as a result of trends, of changes in the GNP per capita, etc., but not as a result of initiated change by management.

The above mentioned results were achieved nine month after launching the change process (the period between SI and S2). This fit with Deal & Kennedy (1982) that argue it takes approximately 6 months to reach the point of breakthrough at which there is a clear set of agreed-upon priorities (one of the parameters used in this research for measuring success).

The findings confirm the hypothesis of positive correlation between 'strength of the organizational culture' and 'the success of the change process'. These findings fit with Schein (1997) argument that it is more difficult to retrain members of an organization who have become strongly used to the way things were structured in the past. It fits also with Shafritz & Russel (1999) who claim that while a strong culture can control organizational behavior, it can also block an organization from making those changes required to adapt to a changing environment. The findings reinforce the statement of Deal & Kennedy (1982): "the force of the old culture can neutralize and emasculate a proposed change...the stronger'the culture, the harder it is to change. Culture causes organizational inertia: it's the brake that resists change " (ibid, pp. 158-159). Our present findings fit with those of Leisen (2002) who found out that a company with strongy held values, when it

gets into trouble, it generally has great difficulty adjusting successfully. The confirmation of this hypothesis by the present study fit also with Saffold (1988), Carr (2000), Cameron et al. (1988), and many others. They see strong culture as a conservative one, which creates rigidity, and as an obstacle for changes. Those scholars view the power of the culture as a potential problem as well as a source of strength, while this study examined and confirmed the first part of the above statement.

Also the hypotheses stating that company's age and size moderates positively the correlation between 'strength of culture' and 'success of the change process' was confirmed by the findings. This conclusion fit again with Schein (1997) argument that cultural change is exceptionally difficult process if the company is a mature one (probably a mature company had also the opportunity to reach a big size). Also Cameron & Quinn (1999) claim from the findings of their research that new organizations teid to progress through a predictable pattern of organization culture changes, which means that they are more willing to accept those changes than the big and mature ones. In the bigger and more mature companies the change is more difficult particularly because over time founder leaders have multiple opportunities to embed their assumptions in the various routines of the organization, as explained by Schein (1997). The expected impact as confirmed by the findings of the present research, is taller barriers for the success of the change process.

No evidence was found in the literature, neither the theoretical nor the empirical, for any consideration of the employees' professional experience or education as possible moderators of the above discussed correlation. A possible explanation for the employees' professional experience and employees' education serving as positive moderators in this correlation is that richer experience and higher level of education mean also bigger expected losses due to the change. Once again it means taller barriers for the success of the change process.

The second main hypothesis of the present research was about negative correlation between 'dissatisfaction' and 'the success of the change process', and was confirmed too by the findings. We should remind here that the corporate the research was conducted at decided to enter the IT field after 75 years of successful activity in the traditional industries. Very quickly it became clear to the corporate headquarters that patterns that were efficient in the environment typical to the traditional industries, may become a disaster in the highly turbulent IT environment. Very soon it was found also by the IT companies' employees: their dissatisfaction was raised and served as an important motivator for collaboration in achieving success on the change process. The conclusion of the research that the higher the dissatisfaction is the more successful will be the change process fit with most theories described in the literature. For instance Weiss (2001) claims that the more dynamic the external environment is, the more likely it is that some elements of culture 'will become maladaptive. This phenomenon, Weiss claims, is followed by dissatisfaction of members in the organization, and then more easily it will therefore be for leadership to actively hasten the process of cultural change.

Also Schein (1997) believes that leaders "have to provide the discontinuing information that initiate the change process, and they have to induce the anxiety and guiltto motivate change" (ibid, pp.332). All in all it is clear from the literature and reinforced by the present research findings that a high level of dissatisfaction with the current situation is an important condition for a better acceptance of the need for change.

The hypothesis that employees' education moderates the correlation between 'dissatisfaction' and 'the success of the change process' was confirmed by the findings. No evidence was found in the literature either for this hypothesis or for the opposite one. The possible explanation for this finding is that more educated employees do not need so much conviction in the need for change, since they recognize the need much before they get dissatisfied.

The hypothesis concerning companies size has not been confirmed in this study, even though, we found difference in the effect of this variable between big and small companies: in big companies the bigger dissatisfaction is the appraisal of the success in the change process is less positive. In small companies - the opposite: the bigger

dissatisfaction is the appraisal of the success in the change process is more positive. This result may be explained by the higher rigidity in bigger companies vs. small companies, which are more flexible. This result fits again with Cameron & Quinn (1999) findings that small companies tend more than big ones to progress through a predictable pattern of organization culture changes.

Also the hypotheses about the moderating influence of company age and employees' professional experience on the correlation between 'dissatisfaction' and 'the success of the change process' was not confirmed. The findings confirm in fact the opposite hypotheses than these lay in the theoretical framework of this study: it was found that employees' professional experience and company age moderate positively the above correlation. The meaning is that more intensive experience employees have and more mature the company is, the stronger is the correlation. These oppose theories reviewed in the literature according to which long experience - either in company or in profession -will increase the sticking to the present culture in spite the dissatisfaction with current situation. For instance Schein (1997) argue that over years culture becomes more rigid and Shenhav (1995) even speaks about turning the culture over time into a religion. Instead, the findings show lower barriers to change, as the dual experience (company's and employees') is bigger. A possible explanation for these results is through the organizational commitment which was not examined in this study, and probably increased over years and had a stronger influence than the intention to stick to old and well known habits. Another possible explanation for these results opposing the literature is by the fact that there was not a big variance in employees' average professional experience over the ten companies: the shortest experience was two years and the longest was five years.

9. Recommendations

9.1 Managerial Consequences:

If an organization is to understand its own strengths and weaknesses, as a part of it's strategic decision-making process, it must study and understand its own culture. The findings of the present study especially emphasize the importance and even the necessity of considering culture by the management in analyzing and managing organizational change. Managers must be particularly aware of the critical role culture's strength plays in their efforts to stimulate change when environmental forces make it necessary. Gaining a strong culture means getting useful glue binding all employees together and making them all stick to the company's way. One of the most central tools to give such power to any culture is by bringing the members of the organization to recognize and identify with the corporate mission, goals and functions. No doubt, it is a desired result every manager is looking for. But at the very same time the power of culture is definitely aprimary source of resistance to change: the stronger the culture is the mere difficult it will be to achieve success in the change process. Thus, a strong culture, managers worked obsessively to create within their organizations, may become sometimes a destructive one, as the power of the culture turned be a problem more than a source of strength. This difficulty caused by the culture strength to achieve successful change will increase whenever we deal with companies which are bigger, more mature, employing professionals with longer experience and with lower education level. Especially managers of companies with such characteristic should pay attention to the paradox of strong culture. While strong culture can contribute to organizational effectiveness acting as a stabilizing force, it can also at the same time become increasingly dysfunctional, blocking an organization from making those required changes to adapt to the ever-changing environment. A culture that is an asset for a given company in one period is unavoidably a liability in another, andthe stronger the culture is, the harder the change would be, since culture causes

organizational inertia. How should managers deal with this paradox when they confront it? Willing to enjoy benefits of a strong culture without being hurt by its disadvantages, a very particular culture must be considered. The challenge lies in reshaping old cultural patterns, by conceptualizing a culture of innovation in which learning, adaptation, innovation, and perpetual change are the stable elements. This openness to evolutionary change has to become a central belief in the value system of a successful company. Building such a responsive and adaptive culture is the best way to institutionalize a real capability to adapt. Managers are examined today by their ability to create and to sustain such a culture whose strength comes not because of sticking to their present way, but because they tolerate changes and even seek for them.

It takes years to mould such a culture and big efforts to manage it afterward, but this is the most suiting type of culture for aclimate of perpetual change. The most useful way to think about culture in the typical circumstances of our turbulent world is to view it as the accumulated shared learning of a given group. The basic assumption such culture should hold is that the appropriate way for humans to behave is to be proactive problem solvers and learners. Changing such a basic assumption hold by members of a certain culture involves challenging the identity of the organization, which means the deepest change the organization has to go through. Adopting such an approach is tough, risky, and a heavy time consumer, but if managed properly, it is due to lead to attempts to develop a learning organization that will be able to make its own perpetual diagnosis and self-manage whatever transformations are needed as the environment changes.

Unlikely if the company has a strong, yet traditional culture, effort must be paid to change culture first, before any attempt to adopt other organizational change. Such a change will be eased if managers consider dissatisfaction with the current situation as an essential tool to start breaking the status quo the organization is used to. Most mangers worry a lot about their employee's dissatisfaction, and too few are aware of the contribution this dissatisfaction has to a successful change process since it increases the sense of urgency. If the old culture has supported people well for years they will be reluctant to abandon it to embrace a new one. Real changes in direction may not become

possible until the organization members experience serious survival difficulties and begin to communicate their dissatisfaction with the current situation. Unless something can be done to provide support for transitions from the old to the new, the force of the old culture can neutralize and emasculate a proposed change. Managers should encourage the feelings of dissatisfaction and these will motivate employees to collaborate on the change process and increase the prospect of success.

Change cannot be imposed on employees; they should be convinced in its necessity before collaborating with the management efforts to implement the change successfully. Therefore the change process can be accomplished with far better results if a sufficient level of dissatisfaction among employees is obtained. Managers should recognize the sources and level of dissatisfaction hold by employees at the point their organization has to change; it will make them more sympathetic to their resistance and better focused about which attitudes should be changed and how to manage it successfully. In other words, the managers as change-agents will gain this way a much better perspective on the whole process. Such an approach will enable the managers' achieving two important goals at a time. They will be in a position to provide employees with the disconfirming information that initiate and induce the change process, and at the same time to provide enough psychological safety to get them accept the need for change and begin the traumatic learning process that is typically involved. The more mature the company is, the longer the professional experience of its employees is, the lower education level the employees have, the more important it is to invest in generating the proper level of dissatisfaction in order to achieve better results in the change process.

When managers get serious about change, they should recognize that to achieve change they would have to wrestle with their company's culture. They should know that successful companies have been able to maiintain a competitive edge by building a culture that pays extremely close attention to the perpetual changes nowadays requires. If managers of today want to create organizational cultures that will themselves become more amenable to change (as described before) they will have to

set the example by becoming learners themselves. As a starting point they should first learn the culture of their organization and the satisfaction/dissatisfaction of their employees with the current situation.

9.2 Further Research:

To improve the academic value of findings it is worth on further research to measure 'success of the change process' not the way it was done here by measuring change of employees' attitudes, but by measuring improvement of performance criteria.

To avoid present study limitations it is recommended to conduct another research, with a bigger sample (at least 20 companies, same as in Hofstede's IRIC study), and using the employees themselves as analysis unit. It will be also a nice contribution to the validity of the findings if further research will match same employees before the change and after.

Some interesting research questions that were not examined in this paper because of lack of data/time/resources are waiting for another scholar. Among the most curious are the following variables as moderators: training intensity, leadership style, and the involvement level of the corporate headquarters. It may be very interesting to check the correlation between the two independent variables: 'strength of culture' and 'dissatisfaction with culture'. As well it is worthy to examine the opposite correlation to those in the present paper: between the success of the change process and the strength of culture and dissatisfaction with culture just after.

The present research leads also this scholar to offer a new definition for strong culture to be used in further research:

Strong culture is based on homogenous and widely spread norms and values system that reinforce the existing way of the organization in stable periods. At the very same time the culture holds basic change-oriented assumptions that enable the organization an easy change in the above system when the particular circumstances require it.

10. BIBLIOGRAPHY

- 1. Adizes, Y. (1991) Corporate Lifecycles, Ateret (Hebrew)
- Allen, T.D., Freeman, D.M., Reizenstein, R.C., Renz, J.O. and Russell, J.E.A.(2001)
 "Survivor Reaction of Organizational Downsizing: Does Time Ease the Pain?",
 Journal of Occupational and Organizational Psychology, Vol 74(2): 145-167
- 3. Ashkenasy, N. et al (2000), Handbook of Organizational Culture and Climate
 Tousand Oaks, California, Sage publication
- 4. Bamberger, P.A. et al (1996), "Cross-Culture Analysis of Organization", **Research** in the Sociology of Organization, Greenwich, Conn, JAI Press, Vol. 14
- 5. Bate, P. CI9951. Strategy for Cultural Change Butterworth-Heinmann, Oxford
- 6. Beer, M., Eisenstat, R.A. and Spector, B. (1990) "Why Change Programs don't Produce Change", **HBR**, November-December, 158-166

i

- Beer, M. & Walton, A.E. (1987), "Organization Change and Development", <u>Annual</u> <u>Review of Psychology</u>, Vol. 38, pp. 339-367
- 8. Beer, M. and Nohria, J. (2000) "Creaking the Code of Change" J3BR, December
- 9. Bowman, C. (1995), "Strategy Workshops and Top Team Commitment to Strategic Change", <u>Journal of Managerial Psychology</u>, Vol.10, No.8, pp.4-12
- Bovey, W.H. and Hede, A.(2001) "Resistance to Organizational Change: the Role of Defense Mechanisms", Journal of Managerial Psychology, September

- 11. Burke, R.J. and Greenglass, E.R. (2001) "Effect of Changing Hospital Units During Organizational Restructuring", **The Health Care Manager**, Vol 20(1): pp 10-18
- 12. Burke, W.W. (2002), Organization Change: Theory and Practice, Sage
- 13. Burnes, B. (2000) Managing Change, Prentice Hall
- 14. Butkus, R. and Green, T.B. (1999) Motivation, Benefit and Organizational Transformation. Quorum
- 15. Cameron, K. S. & Quinn, R.E. (1999), <u>Diagnosing and Changing Organizational</u>
 <u>Culture: based on the competing values framework</u> Reading Mass, Addison-Wesley
- **16.** Cameron, K., Sutton, R.I., Whetten D.A. (1988). <u>Issues in Organizational Decline</u> Cambridge, Ballinger
- 17. Carr, A. (2000), "Critical Theory and the Management of Change in Organizations", **Journal of Organizations**, Vol. 13, No. 3
- 18. Cohen, D. (2001), <u>In Good Company: How Social Capital Makes Organizations</u>
 <u>Work</u> HBS Press
- 19. Collins, J.C. *So* Porras, J.I. (1994). **Built to Last: Successful Habits of Visionary**Companies, Pecker (Hebrew Edition)
- 20. Critchley, B. (1993), "Managing Organizational Culture is it just an illusion?", Leadership and Organization Development Journal, Vol. 14, No. 1, pp. i-iii
- 21. Cunha, C.C. and Cooper, C.L. (2002) "Does Privatization Effect Corporate Culture and Employee Well Being?", **Journal of Managerial Psychology**, v 17, pp 21-49

- 22. Deal, T.E., & Kennedy, A.A. (1982) Corporate Cultures. Addison-Wesley
- 23. Decker, D., Johnson, J., Parsons, R.J. and Wheeler, G.E. (2001)' "Effect of Organizational Change on the Individual Employee", The Health Care Manager, Vol 19(4): 1-12
- 24. Denison, D.R. (1990), <u>Corporate Culture and Organizational Effectiveness</u>, John Wiley & Sons, NY
- 25. Denison, D.R., & Spreitzer, G.M. (1991), "Organizational Culture and Organizational Development", Research in Organizational Change and Development, 5,1-21
- 26. Eero, V. (2000), "Construction of Cultural Differences in PostMerger Change Process: a Sense Making Perspective of Finnish-Swedish Cases", <u>Management</u> <u>Science</u>, Vol. 3, No. 3, pp. 81-110
- 27. Erwing, J. Douglas, P. (2000), "It is not difficult to change company culture", Supervision, Vol 61
- 28. Finlay, P. (2000), Strategic Management an Introduction to Business and Corporate Strategy, Financial Times & Prentice Hall
- 29. Fiol, CM. (1991), "Managing Culture as a Competitive Resource: an identity based view of sustainable competitive advantage". <u>Journal of Management</u> Vol. 17, No. 1, pp. 191-211
- 30. Fitzgerald, T.H. (1988), "Can Change in Organizational Culture Really be Managed?", **Organizational** Dyinamies, Vol. 17, pp. 4-15

- 31. French Howard (6.8.2001), "The Goal: 30 Nobel Prizes in Science in the Next 50 Years", New-York Times
- 32. Furenham, A. & Gunter, B. (1998), "Corporate Culture, Definition, Diagnosis and Change", <u>International Review of Industrial and Organizational Behavior Psychology</u>, 233-261
- 33. Glazer, N. (2000), "Culture and Achievement", Public Interest, National Affairs Inc., Washington; In: http://www.global.umi.com (24 July 2000)
- 34. Golnaz, Z. & Lees, B. (2002), "Developing Corporate Culture as a Competitive Advantage", Human Resource Management International Digest Vol. 10, No. 3
- 35. Hall, E.T. (1959), The Silent Language, Garden City, NY; Anchor Press
- 36. Handy, C. (1993)', Understanding Organizations, Penguin Books
- 37. Harrison, M.I. & Shirom, A. (1999), <u>Organizational Diagnosis and Assessment</u>
 Sage Publications
- 38. Head, C.W. (1997), <u>Beyond Corporate Transformation: a Whole System</u>

 <u>Approach to Creating and Sustaining High Performance</u> Productivity Press,

 Portland
- 39. Hendry, C. (1995), <u>Human Resource Management: a Strategic Approach to</u>

 <u>Employment</u> Butterworth-Heinmann
- 40. Hofstede, G. (1980), <u>Culture's Consequences International Differences in</u>

 <u>Work-Related Values</u>, Sage

- 41. Hofstede, G. (1984), <u>Culture's Consequences International Differences in</u>

 <u>Work-Related Values</u>, Abridged edition, Sage
- 42. Hofstede, G. (1997), <u>Cultures and Organizations -Software of the mind</u>
 McGraw-Hill
- 43. Hofstede, G., Neuijen, B., Ohavy, D.D., and Sanders, G. (1990), "Measuring Organizational Cultures: a qualitative and quantitative study across twenty cases", Administrative Science Quarterly, Vol. 35, No. 2, pp. 286-316
- 44. Howard, A. (1994), <u>Diagnosis for Organizational Change Methods and Models</u>,

 The Guilford Press
- 45. Johnson, G. & Scholes, K. (1999), Exploring Corporate Strategy, Prentice-Hall
- 46. Kilman, R.H., et al., eds. (1985), <u>Gaining Control of the Corporate Culture</u>. Jossey-Bass
- 47. Klein, A., Masi, R., and Weidner, C. (1995), "Organizational Culture -Distribution and Amount of Control", **Group and Organization Management** Vol. 20, **No.** 2, pp. 122-148
- 48. Kotter, J.P. (1996). Leading Change, HBS Press
- 49. Kotter, J.P. & Heskett, J.L. (1992). Corporate Culture and Performance NY: Free Press
- 50. Kunda, G. (1992), <u>Engineering Culture: Control and Commitment in a Higfo</u> <u>tech Corporation</u>, Philadelphia, Temple University Press

- 51. Lahiry, S. (1998), "Building Commitment Through Organization Culture", Training& Development MCB University Press
- 52. Lakomski, G. (2001), "Organizational Change, Leadership and Learning: Culture as Cognitive Process", **The International Journal of Educational Management,** Vol. 15, No. 2, pp. 68-77
- 53. Leisen, B. (2002), "The Effects of Organizatonal Culture and Market Orientation on Effectiveness of Strategic Marketing Alliances", <u>Journal of Services Marketing</u>, UK
- 54. Lewis, D. (1996), "The Organizational Culture Saga- from OD to TQM: a Critical Review of the Literature. Part 2 Applications", **Leadership and Organization**<u>Development Journal</u> 17(2), 9-16
- 55. Lewis, R.D. (1999), When Culture Collide, Nicholas Brealey Publishing, London
- 56. Macionis, J.J. (2001), Sociology, Prentice Hall
- 57. Mabin, V.J., Forgeson, S. and Green, L. (2001) "Harnessing Resistane: Using the Theory of Constraints to Assist Change Management", <u>Journal of European Industrial Training</u>, pp 168-191
- 58. Martin, J. (1992), <u>Cultures in Organizations: Three Perspectives</u>, NY: Oxford University Press
- 59. McNamara, R.S. (1989). Out of the Cold, Simon & Schuster

- 60. Moran, J.V. and Brightman (2001) "Leading Organizational Change" <u>Career Development International</u> (6) pp 111-119
- ól.Nadler, D.A. with Nadler, M.B. (1998). <u>Champions of Change</u>, Jossey-Bass Publishers
- 62. Nahavandi, A. & Malekzadeh, A.R. (1999), <u>Organizational Behavior</u> <u>the</u>

 <u>Person-Organization Fit</u>, Prentice-Hall
- 63. Nielsen, R.P. (2000) "Intrapreneurship as a Peaceful and Ethical Transition Strategy Toward Privatization", Journal of Business Ethics, May
- 64. Ogbonna, E. (1993) "Managing Organizationd Culture: Fantasy or Reality?", Human Resource Management Journal 3(2), 42-54
- 65. Ogbor, J.O. & Jones, J.H. (2001), "Critical Theory and the Hegemony of Corporate Culture", <u>Journal of Organizational Change Management</u>, Vol. 14, No. 6, pp. 590-608
- 66. Osland, J.S., Kolb, D.A., and Rubin, J.M. (2001), <u>Organizational Behavior</u>
 Prentice Hall
- 67. Ouchi, W.G. (1981), <u>Theory Z how American Business Can Meet the Japanese</u>
 <u>Challenge</u>, Addison-Wesley
- 68. Paséale, R. & Athos, A. (1981), <u>The Art of Japanese Management</u>, Simon & Schuster
- 69. Parker, R. & Bradley, L. (2000), "Organizational Culture in the Public Sector: Evidence from Six Organizations", <u>The International Journal of Public Sector</u> <u>Management</u>, Vol. 13, No. 2, pp. 125-141

- 70. Peters, T.J. and Waterman, R.H. (1982). <u>In Search of Excellence: Lessons from America's Best-Run Companies</u>, Harper & Row
- 71. Peters, T. (1995) The Tom Peters Seminar Crazy Times Call for Crazy Organizations, California Partnership
- 72. Potter, C.C. (1989), "What is Culture and Can it be Useful for organizationa Change Agents?", **Leadership and Organization Development Journal**, Vol. 10, No. 3, pp. 17-24
- 73. Reilly, C. (2001), <u>Organizational Culture and Organizational Commitment</u>
 UCD College
- 74. Reynolds, P.D. (1986), "Organizational Culture as Related to Industry, Position and Performance: a Preliminary Report", **Journal of Management Studies (UK)**, Vol. 23, pp. 333-345
- 75. Saffold, G.S. (1988), "Culture Traits, Strength and Organizational Performance: Moving Beyond 'Strong Culture' ", <u>Academy of Management Review</u>, Vol. 13, 546-558
- 76. Schein, E.H. (1989), "Conversation with Edgar H. Schein", **Organizational Dynamics**, Vol. 7, No. 4, pp. 60-76
- 77. Schein, E.H. (1997), **Organizational Culture and Leadership**, Jossey-Bass Publishers
- 78. Schein, E.H. (1999), <u>The Corporate Culture Survival Guide</u>, Jossey-Bass Publishers

- 79. Senior, B. (200J) Organizational Change. Pitman
- 80. Shafritz, J.M. & Russel, E.W. (1999), Introducing Public Administration,
 Longman
- 81.Shandur, M. (1995), "Total Quality Systems Survive Cultures Change", <u>Long Range Planning</u>, Vol. 28, No. 2, pp. 116-126
- 82. Shenhav, Y. (1995), <u>The Organization Machine</u>, Shoken, Tel-Aviv (Hebrew Edition)
- 83. Smircich, L. (1983), "Concepts of culture and organizational analysis", Administrative Science Quarterly, 28, 339-358
- 84. Stacey, R.D. (1996) Complexity and Creativity in Organizations, Berret-Koehler
- 85. Sutton, CD. & Nelson, D.1. (1990), "Elements of the Cultural Network: the Communicators of corporate Values", <u>Leadership and Organization Development</u>

 <u>Journal (UK)</u>, Vol. 11, No. 5, pp. 3-10
- 86. Thompson, K. (1992), "Cultural Strategies: Introduction", in Salaman, G., Cameron, S., Hamblin, H., lies, P., Mabey, C. and Thompson, K. (eds), Human Resource Strategies, Sage, pp. 189-191
- 87. Trice, H. & Beyer, J. (1993). <u>The Culture of Work Organizations</u>. Prentice-Hall, Englewood Cliffs, NY
- 88. Trompenaars, F. (1998), <u>Riding the Waves of Culture</u> London, Nicholas Brealey Publishing

- 89. Van Donk, D.P. & Sanders, G. (1993), "Organizational Culture as a Missing Link in Quality Management", **International Journal of Quality and Reliability**, Vol. 10, No. 5, pp. 5-15
- 90. Van Maanan, J. & Bearley, S. (1985), "Cultural Organization: Fragments of a Theory", in Frost, P., Moore, L., Lewis, M., Lundberg, C, and Martin, J. (eds)

 Organizational Culture Sage
- 91. Van Maanan, J. (1997), Personal Communitation, November 30th
- 92. Wallance, J., Hunt, J., Richards, C. (1999), "The Relationship Between Organizational Culture, Organizational Climate and Managerial Values", <u>The International Journal of Public Management</u> Vol. 12, No. 548-564, MCB University Press
- 93. Weick, K.E. (1987), "Organizational Culture as a Source of High reliability", California Management Review, Vol. 29, pp. 112-127
- 94. Weiss, J.W. (2001) <u>Organizational Behavior and Change Managing Diversity</u>, <u>Cross Cultural Dynamics and Ethics</u>, Bentley
- 95. Zammuto, R.F. & Krakower, J.Y. (1999), "Public Administration or Public Management: Organizational Culture in the Queensland Public Sector", <u>Academy</u>
 of Management Review, Chicago, IL
- 96. Zammuto, R.F., Gifford, G., Goodman, E.A. (1999), "Managerial Ideologies, Organization Culture and the Outcomes of Innovation: A Competing Values Perspective", <u>The Handbook</u> <u>of Organization Culture and Climate</u>, Sage, Thousands Oaks,'CA

11. Appendix 1: Qualitative Questionnaire

Preliminary Survey

- 1. According to your opinion, what are the main reasons requiring the restructure of IT activities?
- 2. What to your opinion other managers are thinking about the same issue?
- 3. What, in your opinion are the main determinants that may insure the future success of the IT division?
- 4. Can you point out the main values and competencies that make the difference between your company from other companies in the division?
- 5. What is the hierarchy of values guiding the corporate? (Or: can you grade the importance of values such as tradition, stability, innovation, collaboration or others for the corporate headquarters?)
- 6. What do you think are the main internal strengths and weaknesses of your company?
- 7. As it looks to younow, what are the main organizational projected problems related with the restructure of the IT activities?
- 8. What do you think are the main internal obstacles that may affect or prevent the accomplishment of this process? (If the answer is not enough explicit, rephrase the question Let me put itthis way: do you think that there might be any obstacle because of a certain function? Or because of any specific internal structure? Or because any department? Or because a certain field of activities?)
- 9. Are there in your company any written procedures regulating the day by day work?
- 10. Is there a usual pattern of doing things in each area of your company
- 11. What is the degree to which employees participate in the process of decision making?

- 12. What in your opinion is the level of autonomy and influence that employees enjoy in their job? (Or: what ratio of the employees participates in the decision making process?)
- 13. Who is setting the goals for the company? (Or: is there any pattern of periodically set new goals? Who is setting the pattern?)
- 14. Are the company goals made explicit to the empbyees? Are they getting any feedback regarding their progress toward the goals
- 15. Speaking of feedback, to what degree are the employees provided with different types of company information? (Or: are there any channels of communication reaching all the employees of the company?)
- 16. To what extent teams vs. individual employees are performing the jobs? (Or: what is the ratio of employees working in permanent conduct teams vs. employees doing their job on an individual basis?)
- 17. Would you like to elaborate on any of the points risen in our discussion or in any other relevant issue?

12. Appendix 2: Quantitative Questionnaire

Used on SI and S2

- 1. I am involved in making decisions that affect my work
- 2. I am familiar with the core values of my company
- 3. I am frequently asked about my opinion on the main company issues
- 4. I get regular feedback on my performance from my managers
- 5. I am familiar with the strategy of my company
- 6. I am ready to stay at work completing my tasks as long astitakes even if it will hurt my private life
- 7. I think that I have a major contribution to make to the progress of my company
- 8. I am familiar with the business results of my company
- 9. Employees must only know the things that may influence directly his/her job
- 10. My managers encourage me to come up with new ideas
- 11. I have the feeling that my knowledge and expertise are greatly appreciated
- 12. Whenever I suggest another way of performing a job, I am praised by my managers
- 13. I am regularly informed about the activities of other departments in my company
- 14. I identify with the core values of my organization
- 15. Working with my colleagues gives me great satisfaction
- 16. I feel that there is a real sense of cooperation in my company
- 17. The company's systems, policies & procedures help me to perform my job
- 18. The company structure helps me and my coworkers perform our jobs
- 19. My managers encourage open communication
- 20. My contribution to the company is truly recognized

On S2 only:

- 21.1 feel that I am also a member of the corporate and not only a member of my company
- 22. I believe in the success of the change process
- 23. I am well informed about the change process
- 24. I am using the corporate portal and Bulletin to be informed

Your professional experience:

1= up to two years

2= 2-5 years

3= 5-10 years

A- 10 years and more

Your education:

1= elementary school

2- high school

3= undergraduate

4= graduate and more

13. Appendix 3: Further Findings

Variance examinations between the various moderators and dependent and independent variables

Company age

| | Company age | N | Mean | .Std. Dev | (F(1,8 |
|-------------------------------|----------------|---|------|-----------|--------|
| Dissatisfaction | mature | 4 | 1.34 | 28. | 2.79 |
| Dissatisfaction | young | 6 | 96. | 39. | |
| Strength of culture | mature | 4 | 2.15 | 08. | 1.07 |
| Strength of culture | young | 6 | 1.93 | 40. | |
| Success of the change process | mature | 4 | 1.32 | 28. | 3.95 |
| (S2-S1) | young | 6 | 1.75 | 37. | |
| Success of the change process | mature | 4 | 4.15 | 44. | 0.23 |
| (Q21-Q24) | young | 6 | 3.99 | 56. | |

Company size

| (F(1,8 | .Std. Dev | Mean N | Company size | |
|--------|-----------|---------|-----------------|-------------------------------|
| 0.07 | 5012. | 1.085 6 | small | D'anating at |
| | 1299. | 1.154 4 | big | Dissatisfaction |
| 2.50 | 3588.' | 1.898 6 | small | Strength of culture |
| | 1436. | 2.201 4 | big | |
| 0.12 | 4296. | 1.617 6 | small | Success of the change process |
| | 3774. | 1.523 4 | big | (S2-S1) |
| 0.65 | 6243. | 4.162 6 | small | Success of the change process |
| | 1668. | 3.899 4 | big | (Q21-Q24) |

Employees' education

| (F(1,8 | .Std. Dev | Mean N | Employees' education | |
|--------|-----------|---------|----------------------|-------------------------------|
| 2.75 | 3312. | 963. 6 | low | Dissatisfaction |
| | 3798. | 1.338 4 | high | Dissatistaction |
| 0.06 | 2370. | 1.999 6 | low | Strength of culture |
| | 4617. | 2.050 4 | high | Strength of Culture |
| *8.18 | 2313. | 1.365 6 | low | Success of the change process |
| | 3699. | 1.902 4 | high | (S2-S1) |
| *5.22 | 4077. | 3.816 6 | low | Success of the change process |
| | 4076. | 4.417 4 | high | (Q21-Q24) |

Professional experience

| (F(1,8 | .Std. Dev | Mean N | Professional experience | |
|--------|-----------|---------|-------------------------|-------------------------------|
| 2.79 | 3859. | 962. 6 | low | Dissatisfaction |
| | 2783. | 1.339 4 | high | Dissatisfaction |
| 1.07 | 3992. | 1.934 6 | low | Strength of culture |
| | 0815. | 2.148 4 | high | Strength of culture |
| 3.95 | 3676. | 1.753 6 | low | Success of the change process |
| | 2844. | 1.319 4 | high | (S2-S1) |
| 0.23 | 5574. | 3.993 6 | low | Success of the change process |
| | 4404. | 4.153 4 | high | (Q21-Q24) |

14. Appendix 4: Jacob Ben-Ami - Latest Publications

- 1."Is organizational culture the ultimate source for competitive advantages?- a dynamic approach" (Forthcoming on November 2003), **Organizacija- Journal of Management Information and Human Resources**, Letnik 36, stevilka 11
- 2."Alapveto forrasa-e a szervezeti kultura a versenykepessegnek? Egy dinamicus megkozelites" (October 2003), <u>Marketing & Menedzment</u> xxxvii Evfolyam 2003/2
- 3."Absenteeism at work and the organizational performance" (August2003), <u>States</u>, Vol.146, pp.30-34
- 4."Achieving a competitive advantage through architectonic fitness"(March 2003), **Status**, Vol.141, pp.34-41
- 5."Dynamic approach to strategy" (March 2003) ,Nihul, Vol.150, pp.28-35
- 6."Will ever a manager change his rature?" (Nov. 2002), Status, Vol.137, pp.30-37
- 7. "Employees' retention" (28.3.01), Haaretz, pp.30
- 8."The business world of 2000" (January 2000), Spiral Vol. 3, pp. 12-18
- 9."The future of the Israeli Textile industry" (May 1999) <u>Textile & Fashion</u>. Vol.149, pp. 21-27
- 10." A new leverage required for business" (6.11.96), Globes, pp.19
- 11."Can you turn your company to an entrepreneurial one?" (4.8.95) , Arim, pp.6

- <u>Comments</u>: 1. The two first publications were written together with Prof. Ferenc Farkas;

 The first one in English(The Slovenian journal of management) and the second one in Hungarian (The Hungarian journal of marketing and management);
 - 2. The rest were Hebrew written and published in Israel;
 - 3. Publications no.4 and 9 were written together with Prof. Zwi Segal;
 - 4. "Status" is a monthly journal for managerial thinking, published under the auspice of the faculty of management in TelAviv University;
 - 5. "Nihul" is a bi-monthly journal published by The Israel Management Center, the professional association of the Israeli managers;
 - 6. "Haaretz" is the most prestige daily newspaper in Israel, targeted mainly to decision makers in politics and in economy;
 - 7. "Spiral" is the Derby University journal for research and managerial thinking;
 - 8. "Textile & Fashion" is a quarterly published journal by the Association of the Israeli Industry in cooperation with "Shenkar" academic institute for fashion and design;
 - 9. "Globes" is a daily business newspaper in same format as the "Wall street Journal";
 - 10. "Arim" is a weekly family magazine.

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A kölcsönzés határideje:

