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THE ROLE OF LEADERSHIP IN THE ORGANIZATIONAL CHANGE PROCESS

(Doktora Tezi)

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ÖZET

Günümüzde örgütsel değişimle ilgili çeşitli başarı öyküleriyle karşılaşmaktayız. Ama her başarı öyküsününe karşılık bir de önemli başarısızlık yer almaktadır. Bazı firmalar dikkat çekici değişimlere imza atarken neden bazıları değişim programlarının yükü altında ezilmektedir?

Başarılı organizasyonların farklılığı çevrelerini değerlendirmelerinden, stratejik ve operasyonel değişimi birbirlerine bağlamalarından, insan kaynaklarını yönetişlerinden, değişim sürecinin tamamında uyumu sağlamalarından kısaca değişime kılavuzluk etmelerindeki farklılıktan kaynaklanmaktadır.

21. yy.'ın kritik deyimi organizasyonların başarısının ve hayatta kalmasının dayanağı haline gelen "değişime liderlik etmek" olmuştur.

1980'lerden başlayarak Burns'ün dönüştürücü ve yönetsel liderlik kavramları örgütsel değişim ve çalışanların bağlılığı üzerine çalışmakta olan yönetim teorisyenleri tarafından büyük ilgi görmüştür.

Dönüştürücü liderler değişim ihtiyacını tanımlayabilen, yeni vizyonlar yaratabilen ve bu vizyonları doğrultusunda insanları örgütsel değişime yönlendirebilen liderlerdir. Buna karşılık yönetsel liderler iş standartlarını, hedef odaklı görevleri vurgulayan ve çalışan peformansını etkilemek için ödül ve cezaya dayanan liderlerdir.

Örgütsel değişim ve dönüştürücü liderlik konuları birbirleriyle ilintili olmakla beraber bu günü kadar bu iki konuyu birlikte ele alan çok az sayıda çalışma yapılmıştır. Bu doğrultuda bu çalışmanın amacı bu iki konuyu birlikte ele almak ve örgütsel değişim sürecinin algılanışını ölçmek ve liderliğin bu süreçteki rolünü incelemek olmuştur.

İlk olarak örgütsel değişim modeli oluşturulmuş ve bu modelin ölçüm aleti geliştirilmiştir. Değişim anketimiz beş ölçekten oluşmaktadır: değişim güçleri, değişmeme, değişim stratejisi, değişim araçları, değişim sonuçları.

Liderliği ölçmek için Bass ve Avolio'nun Çoklufaktör Liderlik Anketi (Multifactor Leadership Questionnaire) kullanılmıştır. Elimizde bu anketin Türkiye'de

daha önce uygulandığına dair bir bilgi olmadığından ilk olarak anketin çevirisi yapılmış daha sonra da güvenilirlik ve faktör analizleri uygulanmıştır.

Araştırmamızın uygulaması farklı sektörlerden yedi özel şirkette yapılmıştır. Bu çalışmanın amacı değişim modeli geliştirip bununla liderlik tiplerinin etkileşimini incelemek olduğundan anketler değerlendirilirken bütün şirketler bir bütün olarak ele alınmış ve şirketler arası analizlere bu araştırmada yer verilmemiştir.

Araştırma bulgularımız bize dönüştürücü liderlik tipinin değişim araçlarının kullanımını arttırdığını ve değişime direnci azalttığını; dönüştürücü liderliğin bir boyutu olan "kural dışılıklarla yönetim"in ve "liderlik etmeyen–bırakınız yapsınlar (laissez faire)" liderliğin ise değişim üzerinde olumsuz etkisi olduğunu göstermiştir. Ayrıca tanım olarak yönetsel liderliğin bir boyutu olmasına karşın "şartlı ödüllendirme"nin değişim süreci için gerekliliği ortaya çıkmıştır.

Değişim ölçeği ile ilgili ilginç bir bulgu proaktif değişim stratejisinin denek grubumuz tarafından yorumlanışıyla ilgilidir. Proaktif değişim stratejisi performans düşüsü veya öngörülmüş sorunlar olmamasına rağmen değişim ihtiyacının hissedilmesi olduğundan değişim sürecinde çok önemli bir yeri vardır. Proaktif değişim stratejisi yaratıcılığı ve yenilikçiliği desteklerken bizim denek grubumuz proaktifliği riskten kaçınma ve taklikçilik olarak algılamıştır.

Bir diğer önemli bulgu ise çalışanların pozisyonlarının değişimi algılayışları üzerindeki etkisi olmuştur. Araştırmamızda ast ve üstlerin değişimi algılayışlarında büyük farklılıklara rastlanmıştır. Genel olarak astlar içinde bulundukları ortamlarından daha hoşnut, değişime daha fazla direnç gösteren, risk almaktan kaçınan ve üstlerine oranla daha az yaratıcı olan kişiler olarak gözükmektedirler.

Değişim ölçeğimiz bundan sonra da organizasyonlarda değişime yatkınlığın ölçülmesi ve örgüt içi farklı grupların değişimi algılayışlarının kıyaslanmasında kullanılabilir. Dönüştürücü liderlik ve değişim ile ilgili bulgularımızda farklı liderlik tiplerindeki yöneticilerin eğitim ihtiyaçlarının değerlendirilmesinde yararlı olabilir.

ABSTRACT

There are many success stories of organization transformations. But for every successful organizational change, there is at least one equally outstanding failure. It seems clear that knowledge about best practice does not equal successful adoption. Why some firms are able to make recognizable progress in their change process while others only replace their bureaucracies with change program overload?

The successful organizations differs in the way they conduct environmental assessment, link strategic and operational change, manage their human resources, manage coherence in the overall process of change. In fact they differ in the way they lead change.

"Leading change" has become the critical phrase in management in the 21st century as organizational success and survival depends on it.

Starting from 1980s Burns' ideas on transformational and transactional leaders had great appeal to organizational theorists struggling with issues of organizational change and employee commitment.

Transformational leaders define the need for change, create new visions, mobilize commitment to those visions, and ultimately transform an organization. Whereas transactional leaders emphasize work standards, assignments, and task-oriented goals, and rely quite heavily on organizational rewards and punishments to influence employee performance.

But to date there has been little integration of organizational change and transformational leadership. In this direction the purpose of this study was to integrate these two bodies of literature by measuring perception of change process in organizations and unfolding the role of leadership in this process.

We first developed an organizational change model and its relevant instrument to measure change. Our change questionnaire has five scales: Forces, no change, strategy, means, and ends.

To assess leadership we used the Bass and Avolio's Multifactor Leadership Questionnaire. As we could not find a previous study conducted in Turkey that used MLQ we translated it and performed reliability and factor analysis.

We conducted our research in seven private Turkish organizations operating in different industries. As our aim was to develop a change model and find out the affect of leadership style on it, we conducted our analyses on the sample as a whole we didn't compare the companies.

Our findings showed that transformational leadership increased the use of change means and decreased resistance where as management by exception and laissez faire leadership had negative impact on change. We also found contingent reward, although by definition a dimension of transactional leadership, is a necessary requirement for change processes.

An interesting finding was related to change questionnaire's strategy scale. Proactive change strategy, especially important in an organizational change process analysis as it occurs in the absence of recognized problems or declining performance was interpreted differently by our sample. They considered risk avoidance and imitation as proactiveness, which in fact should be just the opposite as proactiveness supports creativity and innovation.

Another important finding was perception to change differed by the respondent's job position. There were major differences between superiors and subordinates. Subordinates were more content with their present situations, they resisted more to change, they were not ready to take risk and they were less creative than their superiors were.

Our change questionnaire can be used further to assess receptiveness to change and compare perceptions of different groups, departments, or SBUs. And the findings related to transformational leadership and change can be used to review training needs of managers with different leadership styles.

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INTRODUCTION

The increasing chaotic nature of the environment, new realities of telecommunication, global networks, restructuring, mergers, and strategic alliances have caused a paradigm shift in management, where the belief was in equilibrium and stability. (Daft, 1997; Harper, 1998).

At a time when the world of and around organizations is ever competitive and changing very fast, the need to invent new approaches to organizations and their management is apparent (Beer & Nohria, 2000; Kimberly & Bouchikhi, 1995). The need is for knowledge about how to lead and manage organizational change rapidly, efficiently and effectively. (Beer & Nohria, 2000).

Beer and Nohria (2000) stated "leading change" is the management mantra in the 21st century. In this direction the aim of this study will be to develop an organizational change model and its instrument to measure the change perception in organizations and to unfold the role of leadership in this process.

First we will start with examining major organizational change theories, and our organizational change process model will be introduced, then leading organizational change and transformational/transactional leadership styles will be discussed and we will relate the leadership styles with the change process model.

1. ORGANIZATIONAL CHANGE

Organizational change can be defined as the adaptation of a new idea or behavior by an organization; to change is to take different actions than previously (Daft, 1997; Martin, 2000). Change is an alteration of status quo (Hodgetts & Kuratko, 1991) it is either an essential difference amounting to loss of original identity or a substitution of one thing for another (Daft, 1997).

Watzlawick et al have said "With change such a pervasive element of existence, one might expect that the nature of change and the ways of affecting it should be clearly understood, but the most immediately given is often the most difficult to grasp" (Harung, 1997).

Although, academics, executives and consultants, all agree that change is a constant in today's world and challenge is to produce knowledge that transforms the status quo, they have very different views on the process of change and their advice is full of gaps and inconsistencies. An integrated theory or framework for understanding change does not exist (Argyris, 2000; Beer & Nohria, 2000).

Van de Ven and Poole (1995) conducted a literature review to identify alternative theories used to explain change processes and found about twenty different theories, which they grouped into four basic schools of thought: The four ideal process theories of organizational change.

1.1. Four Ideal Process Theories of Organizational Change[1]

In their articles " Explaining development and change in organizations" Van de Ven and Poole (1995) named four ideal theories of change process as: life–cycle, teleological, dialectic, and evolutionary. These four theories provide fundamentally

[1] This section is written referring to Van de Ven and Poole's (1995) article.

different progression of change events that unfold to explain the process of change in an organizational entity (Van de Ven & Poole, 1995) and presented graphically in Figure 1.

1.1.1. Life-cycle theory

Life cycle is perhaps the most common metaphor used to explain development in an organizational entity from its initiation to its termination in the management literature (Van de Ven & Poole, 1995).

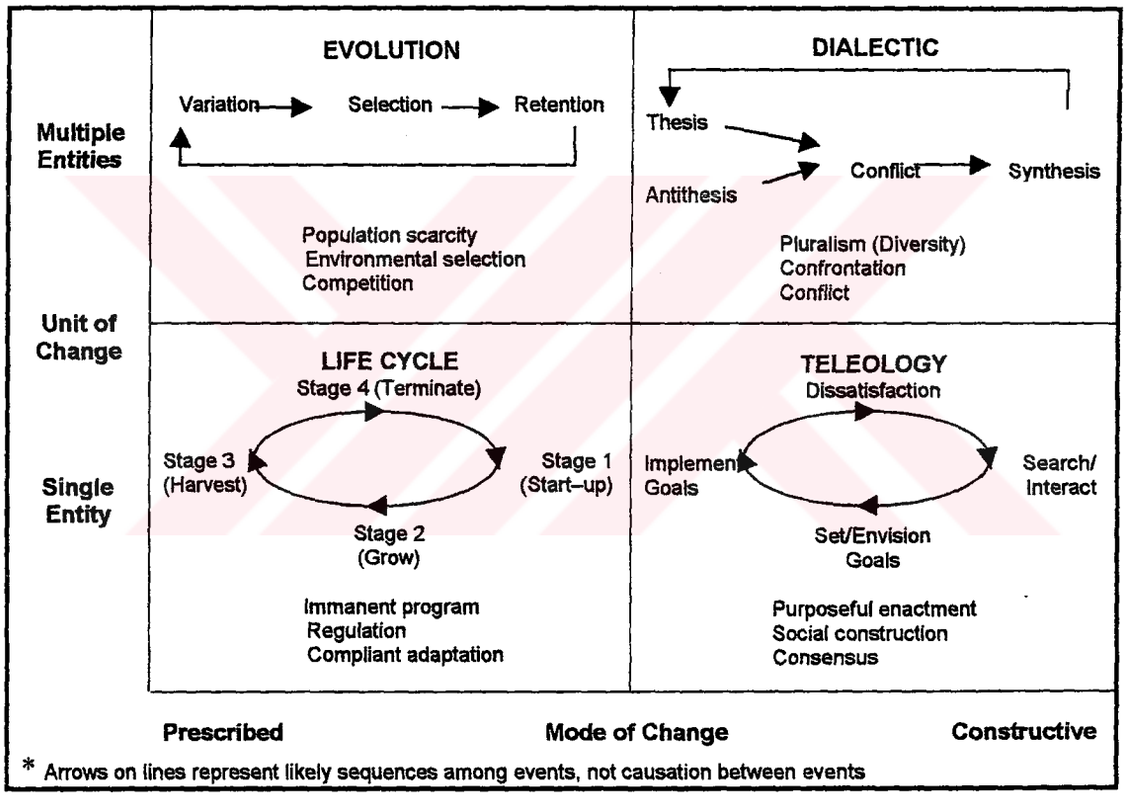

Figure 1: Four Ideal Process Theories of Organizational Change
Source: From A.H. Van de Ven, & M.S Poole. (1995). Explaining Development and Change in Organizations. *Academy of Management Review*. Vol. 20, No.3, 510-540.

According to life cycle theory, change is immanent. The developing organizational entity has within it an underlying logic, rules or programs that regulates the process of change. Environmental events and processes can influence how the entity expresses itself, but they are always mediated by the immanent logic or programs.

The typical progression of change events in a life cycle model is a unitary sequence: it follows a single sequence of stages or phases. Characteristics acquired in earlier stages are retained in later stages, so it is cumulative. It is also conjunctive; the stages are related such that they derive from a common underlying process. Each stage of development is seen as a necessary precursor of succeeding stages.

1.1.2. Teleological theory

Another school of thought explains change by relying on teleology: that purpose or goal is the final cause for guiding movement of an organizational entity. This approach underlies many organizational theories of change, including decision making, adaptive learning, and most models of strategic planning.

According to teleology, development of an organizational entity is a cycle of goal formulation, implementation, evaluation, and modification of goals based on what was learned by the entity. It is assumed that the entity is purposeful and adaptive. Although teleology stresses the purposiveness of the organization as the motor for change, it also recognizes the organization's environment and resources constrain what it can accomplish.

Once an entity attains its goal, influences in the external environment or within the entity itself may create instabilities that push it toward a new developmental path. There is no permanent equilibrium.

Unlike life cycle theory, teleology does not prescribe a necessary sequence of events to follow. However this theory implies a standard for judging change: development is something that moves the entity toward its final state.

1.1.3. Dialectical theory

In a dialectical process theory, stability and change are explained by reference to the balance between opposing entities. Struggles and accommodations that maintain the status quo between oppositions produce stability. Change occurs when these opposing values, forces, or events gain sufficient power to confront and engage the status quo.

So an entity subscribing to a thesis may be challenged by an opposing entity with an antithesis and the resolution of the conflict produces a synthesis. Over time this synthesis can become the new thesis as the dialectical process continues.

However, there is no assurance that dialectical conflicts produce creative syntheses. Sometimes an opposition group mobilizes sufficient power to simply overthrow and replace the status quo.

1.1.4. Evolutionary theory

As in biological evolution, change proceeds through a continuous cycle of variation, selection, and retention. Variations are often viewed to emerge by random chance. Selection of organization occurs principally through the competition for scarce resources by the environment. Retention involves forces (including inertia and persistence) that perpetuate and maintain certain organizational forms. Retention serves to counteract the self-reinforcing loop between variations and selection.

There are alternative theories of organizational evolution that can be distinguished in terms of how traits are inherited, and the rate of change. Organizational scholars who adopt Darwinian evolution argue that traits are inherited through intergenerational processes, whereas those who follow Lamarck argue that traits are acquired within generation through learning and imitation. Darwinian theorists emphasize a continuous and gradual process of evolution. Other evolutionists posit a saltation theory of evolution, such as punctuated equilibrium.

1.1.5. Unit of change

Change progresses take place in different organizational levels, including the individual, group, organization, and even larger communities of organizations. Therefore the change in question may focus on the change of a single organizational entity or on the interactions between two or more entities. Van de Ven & Poole's (1995) classification helps to highlight two different perspectives for studying change at any given organizational level. Change process in a ***single entity*** is examined using its historical processes of change, adaptation, and replication, and change process regarding ***multiple entities*** is examined by analyzing processes of competition, cooperation, conflict, and all forms of interaction between the entities.

When we consider the ideal theories we find out the unit of change that dialectical and evolutionary theories involve is multiple entities. Dialectical theory requires at least two entities to fill the roles of thesis and antithesis, and likewise in the evolutionary theory selection among competitors is made. Conversely, the life cycle and teleological theories operate on a single entity. Life cycle theory explains development as a function of potential immanent within the entity. Although environment and other entities may shape how this immanence is manifested, they are strictly secondary (Van de Ven & Poole, 1995). Teleological theory requires only a single entity's goals to explain change. A teleological theory can operate among many members of an organization too, but when there is sufficient consensus among the members to permit them to act as a single organizational entity (Van de Ven & Poole, 1995).

1.1.6. Mode of change

The four theories also can be distinguished in terms of whether the sequence of change events is prescribed a priori by either deterministic or probabilistic laws, or whether the progression is constructed and emerges as the change process unfolds.

A ***prescribed*** mode of change channels the development of entities in a prespecified direction, typically maintaining and incrementally adapting their forms in a stable, predictable way. A prescribed mode tends to create what is termed as *first–order change,* change within an existing framework that produces variations on a theme.

A ***constructive*** mode of change generates unprecedented, novel forms that, in retrospect, often are discontinuous and unpredictable departures from the past. A constructive mode tends to generate what is termed as *second–order change*, which is a break with the past basic assumptions or framework. The process is emergent as new goals are enacted. The outcome is unpredictable because it is discontinuous with the past.

Life cycle and evolutionary theories incorporate a prescribed mode of change whereas teleological and dialectical theories incorporate constructive mode of change.

Although modes of evolutionary and dialectical theories seem apparent there may be misinterpretations in life cycle and teleology theories. During the life cycle the immanent form is realized by steps, and although some steps may seem like a radical change, there is an underlying continuity due to the immanent logic, program that drives development. Many theories that draw on teleology also express gradual processes by which the goals are realized causing an interpretation problem. Such gradual accounts of goal implementation actually combine two of the ideal types, teleology and life cycle theory, to form a composite model.

1.1.7. Composite models

Most specific theories of organizational change are more complicated than the ideal types. This is so for two reasons. First because the organizational context of change extends over space and time in any specific case, it is possible more than one drives of change to come into play.

Diverse units and actors, both inside and outside the organization influence organizational change and different influences may be acting simultaneously on

different parts of the organization, each imparting its own particular momentum to the developmental process.

As time passes, there is opportunity for different "motors", types to come into play, especially given the dispersion of influences. The resulting process is multilayered and complex. Attempts to explain this process with a single type run the risk of oversimplification and selective attention to one aspect of the change process at the expense of others.

A second reason for complexity of specific organizational change theories is the inherent incompleteness of any single type. Each type pictured in figure 1 has one or more components whose values are determined exogenously to the model. For example in the evolutionary model, it is assumed that variations arise randomly, but the process that gives rise to variation remains unspecified. In the dialectical model, the origin of the antithesis is obscure, as the source of dissatisfaction in the teleological model and the processes that trigger start–up and termination in the life cycle model.

Other motors can be used to account for the origin of these events. For instance, the selection process in the evolutionary model can be used to account for termination in the lifecycle; the implementation step in the teleological cycle can trigger the start–up event in the life cycle and the antithesis in the dialectic. In short events from other models are useful to remedy the incompleteness of any single model of change. Which results in composites of ideal type process theories.

1.2. Classifications of Organizational Change Process

Van de Ven & Poole used mode of change to classify the four theories in terms of their process. There are other classifications used to describe the nature of change such as continuous versus discontinuous change and emergent versus planned change.

1.2.1. Continuous versus Discontinuous Change

According to the consequences or outcomes of organizational change processes classifications made are continuous versus discontinuous change, incremental versus radical / revolutionary change, and as we mentioned in the previous section first–order versus second–order change.

Although different names are used basically they stand for two main approaches. Continuous, incremental and first–order change represents first approach and discontinuous, radical, second–order change represents second approach. Here we are going to use them interchangeably.

According to continuous change view, change is ongoing and cumulative (Weick, 2000) and organizations are continually expanding their capabilities to shape their future (Limerick etal. 1994). Whereas discontinuous change is innovation based breakthroughs with periods of status quo in between (Shiba etal, 1993) and it is a revolutionary view of coping with change especially when the rules of the game shift entirely (Limerick etal. 1994) as in highly competitive environments of today's business world.

Actually change process can take on a different character at different times (Beer & Nohria, 2000b). Punctuated equilibrium model of evolutionary biology is helpful in combining continuous and discontinuous change.

1.2.1.1. Punctuated Equilibrium Model

Eldredge and Gould postulate a very different view of evolution in punctuated equilibrium by conceptualizing change as an alternation between long periods when stable infrastructures permit only incremental adaptations, and brief periods of revolutionary upheaval. Punctuated equilibrium propose that lineages exist in essentially static form (equilibrium) and revolutionary "punctuations" of rapid change (Gersick, 1991).

Punctuated equilibrium paradigm has three main components: deep structure, equilibrium periods, and revolutionary periods.

Deep structure is the set of fundamental "choices" a system has made of the basic parts into which its units will be organized and the basic activity patterns that will maintain its existence (Gersick, 1991).

Deep structures contain high stability. Gersick (1991) explains it with two reasons. First reason is the trail of choices made by a system that rules many options out, while at the same time it rules mutually contingent options in, and second reason is that the activity patterns of a system's deep structure reinforce the system as a whole, through mutual feedback loops (Gersick, 1991).

Within ***equilibrium periods***, the system's basic organization and activity patterns stay the same; the equilibrium period consists of maintaining and carrying out these choices. Systems in equilibrium also make incremental adjustments to compensate for internal and external forces without changing their deep structures. In ***revolutionary periods*** revolutionary changes dismantles the deep structure (Gersick, 1991).

Continuous and discontinuous type of change processes are represented in Figure 2.

As change is a multilayered process even within the same organization there will be some entities keeping their status quo for long periods or some developing incrementally almost all the time and there will always be some unpredictable quantum leaps interrupting the sequence of events in an entity's life.

We believe the punctuated equilibrium model that embraces all from no change to continuous and discontinuous change is the best model representing the reality and complexity of change. In fact it is like the Japanese TQM approach where exists a balance between innovation (radical change) and continuous improvement (incremental change) (Shiba etal, 1993).

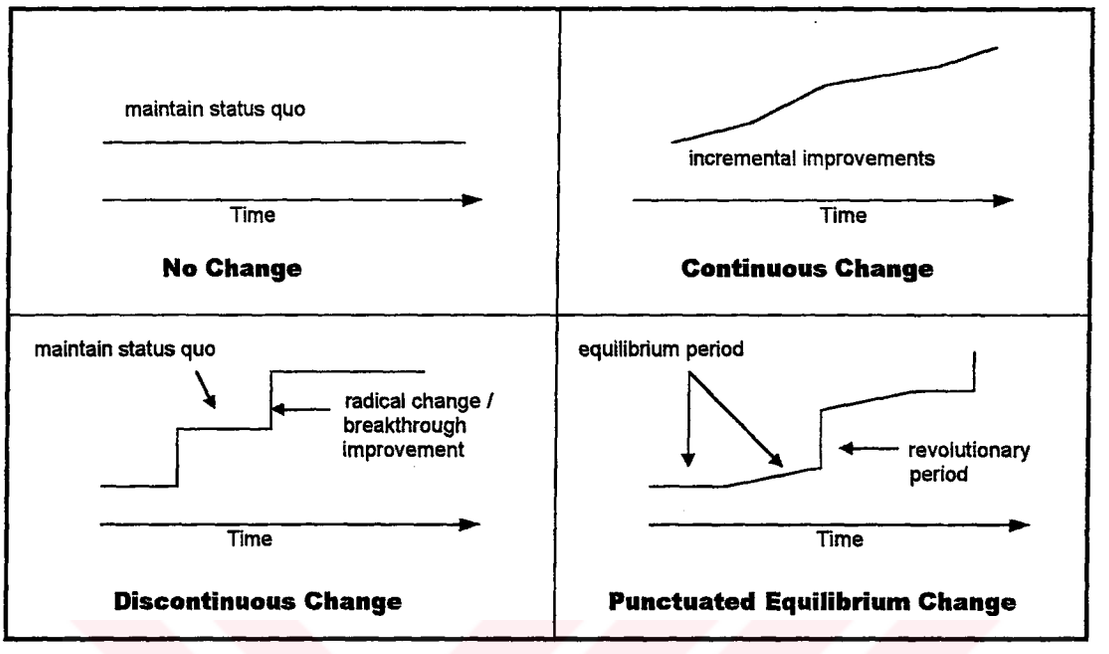

Figure 2: Continuous versus Discontinuous Change Process

1.2.2. Planned versus Emergent Change

Another classification of change process is planned versus emergent change.

Kurt Lewin has described planned change as a three phased process: unfreezing, changing, and refreezing.

Unfreezing is the phase during which creating a felt need for change is developed. It often helps people break old habits and recognize alternative ways of thinking about or doing things. ***Changing*** is the actual modification in organizational targets for change, including purpose, strategy, people, task, structure, and technology. ***Refreezing*** is designed to maintain the momentum of the change. The momentum of the change is reinforced by evaluating results and taking corrective actions (Hodgetts & Kuratko, 1991; Siegal etal, 1996).

We sometimes forget that Lewin presumed that there was high resistance to change and strong emotions are often needed to break the resistance (Weick, 2000). But there are times when people are in need and favor of change.

As people experiment with "the everyday contingencies, breakdowns, expectations, opportunities, and unintended consequences" of work, they improvise ongoing variations, and enact microlevel changes. Much of this change goes unnoticed because small changes are neither heroic nor plausible, but argument of emergent change is that as experiments are repeated, shared, amplified, and sustained, they can, over time, produce perceptible and striking organizational changes (Weick, 2000). Emergent change is the realization of new patterns of doing things in the absence of explicit a priori intentions and deploying them.

The greater the attachment to the idea that organizations build up inertial structures – inertia meaning inability for organizations to change as rapidly as the environment – and held in place by those structures, the greater will be the reliance on planned change rather than emergent change. If people want to change a system in which they feel inertia runs deep, then the best way is to start with Kurt Lewin's prescription for change: unfreeze-change-refreeze (Weick, 2000).

In an alternative portrait more attention is paid to processes of organizing than to structures of organization. Coordination is viewed as a dynamic process. When people reaccomplish the coordination that ties their activities together, they tend to alter it slightly so that it fits better with changing demands from internal and external sources. This continuous updating tends to produce units that change just as rapidly as their environments. Hence, inertia is no longer a problem. Which means it is no longer a determining factor in change (Weick, 2000).

Planned change is more centralized and easier to control from the top, which means it is easier to implement. The problem is when top management favors planned change, it often discards some of its best innovators, some of its best innovations, and some of its most adaptive processes (Weick, 2000). Emergent change on the other hand

can be slow to cumulate; too small to affect outputs or outcomes; less well suited for responding to threats than for exploiting opportunities. But as Weick (2000) argues emergent, continuous change can form the infrastructure that determines whether planned change will succeed or fail.

Planned change often takes the form of standardized solutions that focus on one issue and are driven through the organization by directives from top management. Beer and his colleagues (1990) demonstrate, these attempts often amount to false starts, because they fail to have simultaneous impact on three important drivers of effective change: coordination, commitment, and competence.

1.3. General Model of Organizational Change Process

These theories and categories are helpful in highlighting the way change unfolds and evolves through time. But as can be seen, change is a very complicated process and non-of the theories/categories are sufficient alone. We need a more general and overall picture.

A general sequence of events in change process, which is independent of those criterions and in fact quite simple, can be found in Figure 3.

Any significant change effort involves a process of getting from an old state to a new state (Beer & Nohria, 2000b) and change process starts when a need for change is recognized which may be the result of competition, dissatisfaction, conflict or an immanent program. Then ideas that will solve the perceived needs are developed and change model is constituted (Daft, 1995) planned or emergent.

To espouse a different principle from the past does not represent change, only if different choices lead to action, change is produced (Martin, 2000). Therefore next step is implementing change and when change is institutionalized it becomes a new status quo and there the change process ends. But as there is no permanent equilibrium, end is actually the beginning of a new process. Change processes are realized in cycles. A new

cycle of change may start as soon as the one ends (continuous change) or it may take some time (discontinuous change).

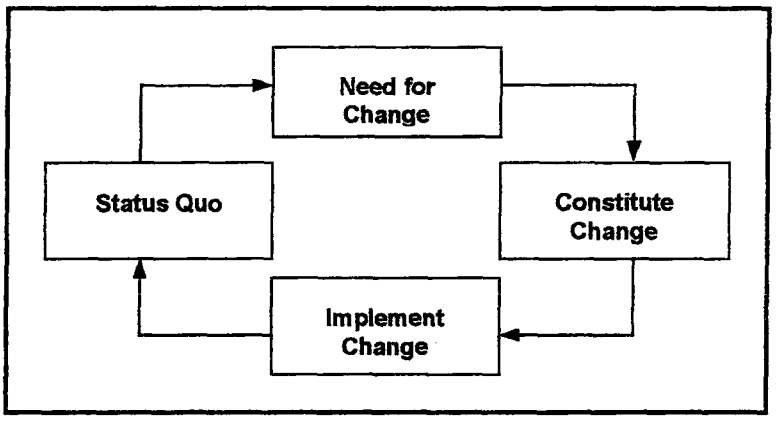

Figure 3: Organizational Change Process (a)

The most important part in the change process cycle is the status quo. To understand change we must first understand the status quo (Martin, 2000).

1.3.1. Status Quo

In a change process there are two poles: change and no change. In any given situation we want to change that which needs improvement, and maintain that which is acceptable. Even though these two poles initially may appear to be opposed to each other, they are in fact complementary. Without a stable basis, change becomes risky; and stability without change leads to stagnation (Harung, 1997).

If we understand status quo well then we know what to change and what to keep and also we may have a better understanding of the resistance dynamics too.

It is useful to conceptualize the status quo as a set of cascading choices, which cascade from the top of the organization right to the bottom. Employees throughout the organization from top to bottom, who make real choices, take action to define the status quo (Martin, 2000).

A CEO may make a typical higher order choice; such as in what business the firm should compete. A frontline employee may make a lower order choice, such as how to serve the customer standing at the counter.

Choices are influenced directly by aspirations, insights, and incentives. Aspirations, insights, and incentives are influenced by learning capacity –capacity of members of the organization to detect and correct errors and to seek new insights that would enable them to make choices that better produce outcomes that they seek– which thereby influences the choice cascade indirectly (Martin, 2000).

To bring about change, one must change the choice cascade. Changes in the choice cascade at all levels of the organization are important. Changes at the top of the choice cascade can be undermined by lack of change lower down in the cascade. To take different actions than previously means to make different choices. Different choices produce change. The same choices produce sameness, a reinforcement of the status quo (Martin, 2000).

The construct of a deep structure that keeps systems basically stable during equilibrium periods (Gersick, 1991); and the concept of cascading choices pervading the organization that manifests and maintains the status quo (Martin, 2000) offers a new way to understand system's resistance to change

1.3.2. Resistance To Change

Change models based primarily on the change drivers, ignoring the forces of resistance, are prone to failure (Strebel, 1994).

The importance of resistance was pointed out already in the 1940s by the psychologist Kurt Lewin, who introduced the force field analysis to show the tension between change and resistance forces (Daft, 1997; Hodgetts & Kuratko, 1991; Strebel, 1994). The forces of resistance reflect the response of the company's internal and external stakeholders to the change requirements (Strebel, 1994).

Resistance comes in four basic forms. Rigid structures and systems reflecting organizations, business technology, and stakeholder resources that are not consistent with the change process. Closed mindsets reflecting business beliefs and strategies. Strong cultures reflecting values, behaviors, and skills that are not adapted to change. Counterproductive change momentum driven by historical or other change drivers that are not relevant to the most urgent change (Strebel, 1994). Employees usually fear and resist change when they don't understand the intended purposes; don't trust in intentions behind it or perceive it as loss of power, prestige, pay or some other self interest (Daft, 1997).

By creating a climate for change in the organization it is possible to get support for change and avoid resistance. There are five preconditions to have a climate for change. A general willingness to take risks or break from the status quo as change entails moving in a new direction and will be accompanied by some degree of risk. Presence of a high level of trust among organizational members to accept change attempts. Operational freedom, the ability to openly voice concerns and share ideas and information that will result in the crucial understanding of, and commitment to, change. Openness of communication is another precondition. The final precondition to be considered is employee development. By enhancing employee skills, the organization is capitalizing on the prospect that employees will not only recognize change opportunities when they emerge, but will also have the capacity and confidence to take such opportunities (Tierney, 1999).

We can now improve our change model as in figure 4 and add a " get support for change" step between constitution and implementation stages to avoid resistance. The reason we used a dashed box in the figure is because this step will not be necessary in all change situations.

If change is continuous and emergent, then the system is already unfrozen with Lewin's terminology. Further efforts at unfreezing could disrupt what is essentially a

complex adaptive system that is already working (Weick, 2000) and have a counter effect on the change dynamics.

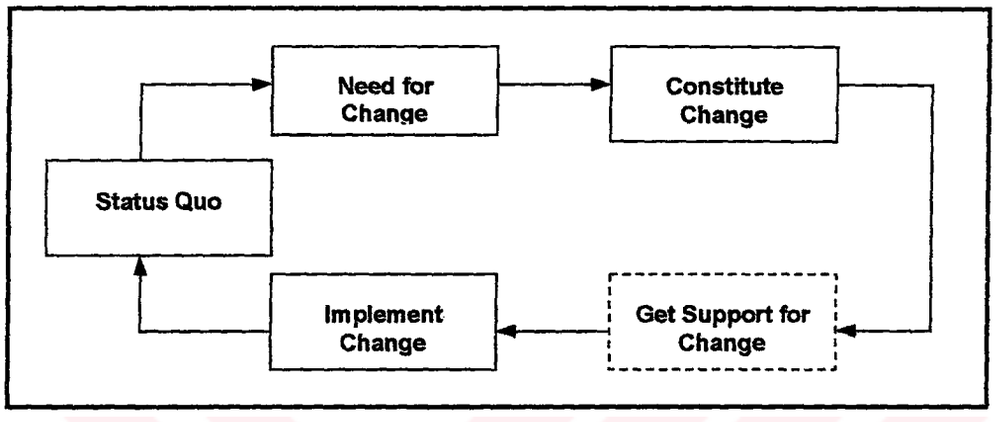

Figure 4: Organizational Change Process (b)

Programs based primarily on the change drivers, ignoring the forces of resistance, are prone to failure. So as those dealing primarily with the forces of resistance, ignoring the change drivers (Strebel, 1994).

1.3.3. Forces of Change

During an equilibrium state why would anyone need change? The answer given to this question is change forces.

Change forces come in three basic forms. First form is established trends in the socio–political, economic, technological, competitive, and organizational environments. Second form is turning point that reflects the limits to the established trends (limits to the existing resources, capacity, investment, growth) and the stimuli promoting new trends (innovation, life cycle shifts, new players) (Strebel, 1994). These two forms of change forces are external forces that are outside the control of the organization (Hodgetts & Kuratko, 1991). The last form is internal change drivers in the form of

company problems and needs, plans and goals, organizational shifts, new managers, and change agents (Strebel, 1994; Daft, 1997).

From the company perspective, the strength of a change force is determined by its current or future impact on the company's performance. A strong change force creates a substantial decline in the performance of a company that is not adapted to it, and improvement in performance of a company that is adapted (Strebel, 1994).

In the below figure change forces are too added to the sequence of events in the change process and the process is completed. See Figure 5.

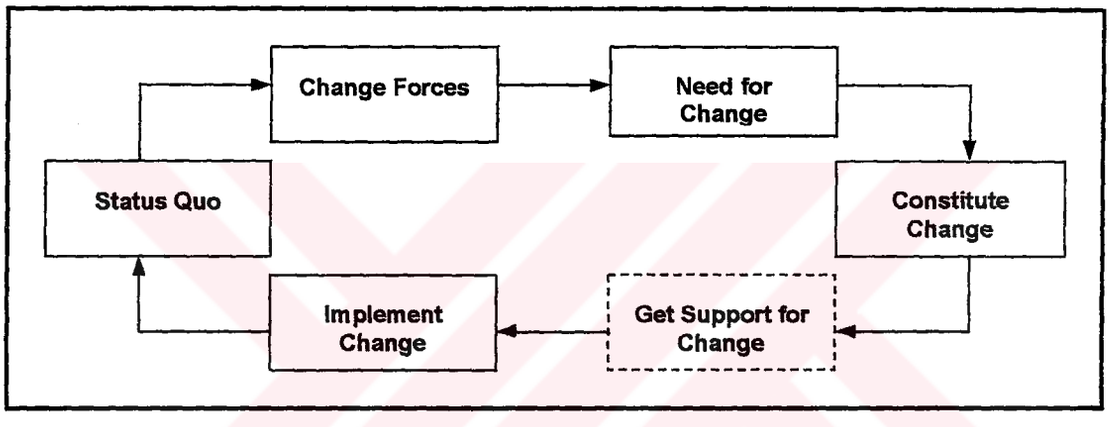

Figure 5: Organizational Change Process (c)

1.3.4. Reactive or Proactive Change

Different organizations seek to deal with environmental pressures in different ways; some rely largely on reaction, others are proactive (Thompson, 1998).

1.3.4.1. Reactive Change

When change forces cause a disparity between actual and desired conditions, it triggers actions to reduce disparity, which is defined as reactive change (Beeson & Davis, 2000).

Reactive change processes have four possible consequences depending on the strengths of the change force and resistance (Figure 6).

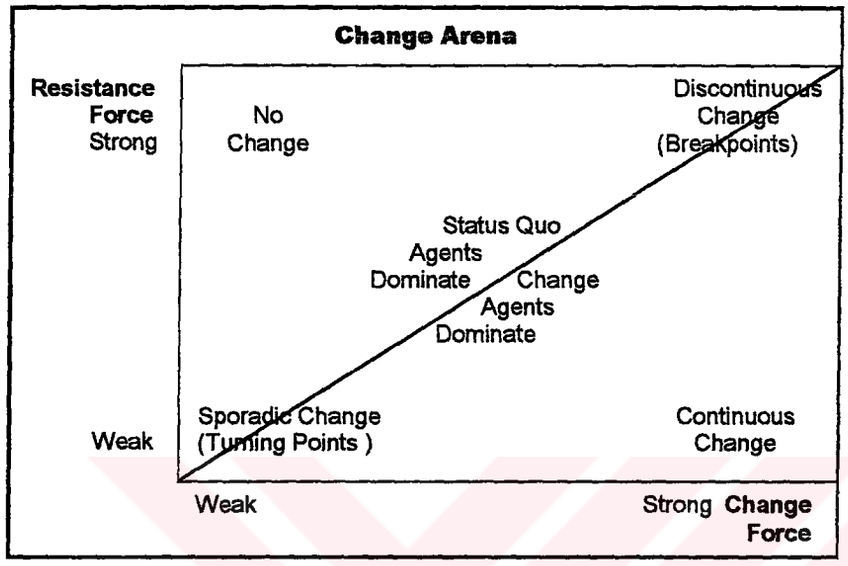

Figure 6: Affect of Change Force and Resistance on Change Process
Source: P. Strebel. (1994). Choosing the Right Change Path. *California Management Review.* Winter 29-51.

Weak change forces hardly affect an organization with strong resistance. Since the resistance threshold has not been reached, the status quo prevails and no change occurs. Where both the forces of change and resistance is weak, the boundary between old and new behavior is easily crossed. Alternating dominance of the forces of change and resistance results in sporadic change (Strebel, 1994).

When forces of change are strong and the resistance is weak, almost all the participants perceive the forces of change. Forces of change far exceed the resistance threshold, so the system adapts continuously (Strebel, 1994).

The last consequence is strong forces put pressure on systems with strong resistance; the change can be sharply discontinuous. To the left side of the boundary

(See Figure 6) below the resistance threshold no change occurs, despite the fact that the change forces are strong; the status quo agents dominate largely. These are the markets and organizations where structure and stakes in the status quo initially neutralize the forces for change. Once the change forces exceeds the resistance threshold, on the right side of the boundary (See Figure 6), the resistance breaks down. Breakpoints in rigid systems occur as revolutions, market crashes and radical corporate reorganizations (Strebel, 1994).

It is an all too common reality to try and solve a problem by reacting after it has been created. But a much more royal strategy would be to proact and prevent the issues from manifesting (Harung, 1997).

1.3.4.2. Proactive Change

Proactive change is defined as a change that occurs in the absence of recognized problems or declining performance (Mullins & Cummings, 1999).

Timing is important in change (Harung, 1997). Reactive crisis fighters, who rely heavily on their ability to react and respond quickly, typically challenge of short-term problems. Crisis situations often bring out the best in people who call on their reserves of inner strengths. However, it is time-consuming, reducing the time and space available for wider strategic thinking, and consequently real growth opportunities may well be missed (Thompson, 1998). In the case of proactive change, the change forces have yet to affect performance. Typically, there is enough time to initiate change through the identification and analysis of market opportunities (Strebel, 1994; Mullins & Cummings, 1999).

Reactive change is about surviving. But change isn't about surviving only; it's about thriving too. Organizations who want to position to thrive in the future rather than to survive in the present are required in turbulent markets (Harper, 1998). As its not

enough to gain competitive advantage but sustaining it is the problem in ever-competitive environments.

As a result there are two change strategies that can be applied by an organization. Either to wait for the forces of change to have an affect on the organizations performance and react, or scan the environment or realize the forces of change before they effect the organizational performance. Therefore the need for change can either be reactive or proactive. We can make a small modification on the change process to represent both the reactive and proactive strategies. See Figure 7.

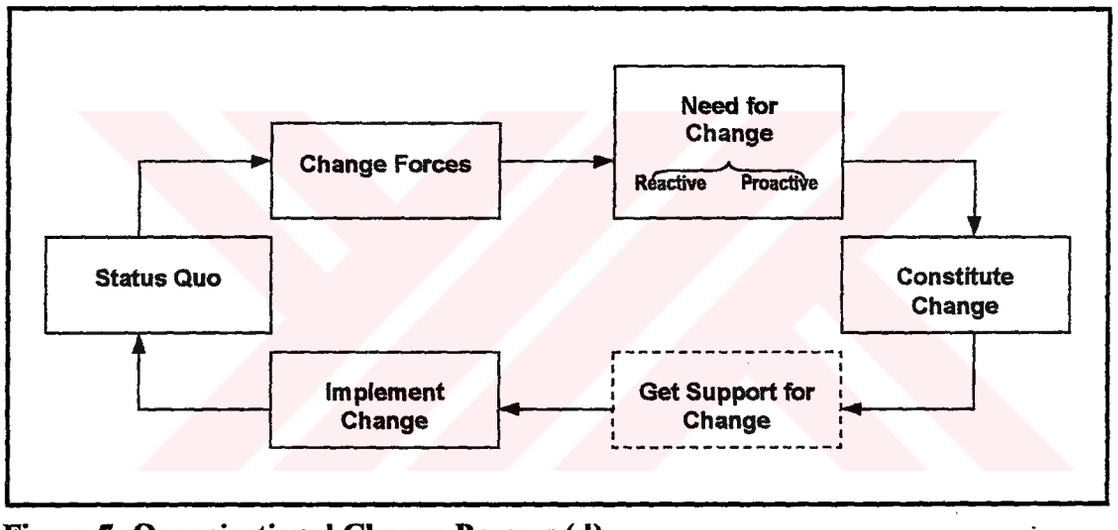

Figure 7: Organizational Change Process (d)

1.4. Organizational Change Process Management

Organizational change efforts vary in the extent to which they focus on formal organizational arrangements such as structure and systems and the extent to which they acknowledge and deal with culture (Beer & Nohria, 2000a). We can say that there are two aspects of change process management "hard and soft": managing the organizational side of change and the people side of change (Siegal etal, 1996).

There has been a long tradition of organizational development (OD) theorists who advocate the soft change. But especially starting with 1980s they were confronted with proponents of strategic management (Dunphy, 2000).

In classic OD, the basic assumption is that attitudes or ideas must change before the structure of an organization can change (Worren etal, 1999; Schneider & Brief, 1996). Using formal structure and systems to change behavior cannot yield sustained improvements in performance. Instead managers must attend to the culture of organization (Hirschhorn 2000).

The opposite view is that in many circumstances, particularly when top management faces a change in strategic direction, management must make changes in formal organization so as to reallocate power, influence, and decision rights quickly. Dramatic shifts necessitate starting with structure (Galbraith, 2000).

The idea gaining support is that effective and successful organizational change incorporates and manages both of these perspectives concurrently (Siegal etal, 1996). Changes in both structure/systems and human process are necessary (Beer etal, 1990).

Beer & Nohria combine these two opposing approaches to organizational change management in their Theory E and O model.

1.4.1. Theory E and Theory O

There are two archetypes, or theories, of change management. These archetypes are based on very different and often unconscious assumptions by senior executives – and the consultants and academics who advise them – about why and how changes should be made. Theory E is change based on economic value. Theory O is change based on organizational capability. (Beer & Nohria, 2000b).

1.4.1.1. Theory E

In this "hard "approach to change, economic value often expressed as shareholder value is the measure of corporate success. Change usually involves heavy use of economic incentives, drastic layoffs, downsizing, and restructuring (Beer & Nohria, 2000b; Beer & Nohria, 2000c).

Its focus is on formal structure and systems. It is driven from the top with extensive help from consultants and financial incentives. Change is planned and programmatic (Beer & Nohria, 2000c).

In the 1990s the Theory E perspective became the dominant model of change in the United States. It is also beginning to penetrate management practice in other parts of the world, particularly in Europe. Among the most important reasons are powerful and increasingly efficient capital markets (Beer & Nohria, 2000c).

1.4.1.2. Theory O

In this "soft" approach to change, the goal is to develop corporate culture and human capability. Managers who subscribe Theory O believe that if they were to focus exclusively on the price of their stock, they might harm their organizations. Therefore theory O managers try to avoid the radical restructuring and layoffs we see in E driven change efforts (Beer & Nohria, 2000b; Beer & Nohria, 2000c).

Its focus is on the development of a high–commitment culture. Its means consist of high involvement, and consultants and incentives are relied on far less to drive change. Change is emergent, less planned and programmatic (Beer & Nohria, 2000c).

Firms that do adopt Theory O strategies are often those that have strong long held psychological contracts with their employees (Beer & Nohria, 2000c). Asian and European businesses are more likely to adopt an O strategy to change (Beer & Nohria, 2000b).

Both perspectives have value (Dunphy, 2000). But as Pettigrew (2000) argues using bipolar modes of thinking are powerful simplifiers and attention directors, but they have a dilemma. They are often perceived as an either/or situation in which one alternative must be preferred over other. There is no universal formula. There are circumstances under which structure and systems should be the focus, and circumstances under which behavior and beliefs should be the focus (Cohen, 2000). Rather than rejecting one or the other, the challenge is to find a way of holding them together (Bower, 2000).

Where the objective is to enable an organization to adapt, survive, and prosper in the long run, theory E change must be combined with theory O. (Beer & Nohria, 2000c). In fact in their purest forms both theories have limitations and few companies use just one theory (Beer & Nohria, 2000b).

Companies that effectively combine hard and soft approaches to change can gain profitability and productivity and are more likely to achieve sustainable competitive advantage (Beer & Nohria, 2000b).

But theories E and O are so different that it's hard to manage them simultaneously as Beer & Nohria (2000b) emphasize "employees distrust leaders who alternate between nurturing and cutthroat corporate behavior". Tension between theories E and O should be resolved in a way that maximizes the benefits and minimizes the negative consequences of each theory (Beer & Nohria, 2000c).

The obvious way to combine E and O is to sequence them. However research shows that it is possible to apply theories E and O simultaneously too though it requires great skill, and wisdom. Because it is more difficult than mere sequencing, the simultaneous use of O and E strategies is more likely to be a source of sustainable competitive advantage (Beer & Nohria, 2000b).

2. CHANGE MODEL

Aim of this study is to analyze change process within an organization. Therefore we need an organizational change model and its relevant instrument. We will now introduce the change model we will use.

2.1. Forces

Every organization is confronted with forces it has to adapt in order to survive as described in section 1.3.3. Forces may be internal, external or both. The strength and varieties of forces change depending on the industry structure. Highly technological, competitive industries would be faced with more forces than low competitive industries.

The organizations differ in the way they respond to these forces. Even within the same industry organizations may perceive forces differently and take different actions to adapt. Based on their strategies some will be more alert and others will wait until the last moment to take reactions.

Therefore if we want to analyze an organizational change process we should start with analyzing the forces within the firms internal and external environment. The varieties and strengths of forces perceived will have the cues for further actions.

2.2. Strategy

Organizations develop ways of utilizing their resources that deal effectively with the constraints, demands, and opportunities of the environment. They develop plans of action that centrally define what the organization will attempt to do in relation to the environment in which it is embedded. These plans of action are called strategies (Nadler & Tushman, 1995).

As we previously stated the organization strategy would affect the way forces are perceived and responses are lead. Companies may either have a proactive or reactive change strategy.

Proactiveness describes the initiative adopted by firms to continuously search for opportunities and experimentation with potential responses to changing environmental trends (Venkatraman, 1989; Morgan & Strong, 1998). For that reason proactive strategies will have the dimensions of analysis, futurity and riskiness.

Analysis is considered to represent the overall problem-solving approach to strategic decision making resulting in attempts to secure complete understanding of issues in both organizational and environmental contexts (Morgan & Strong, 1998).

Futurity is the notion of organizational preparedness for, and positioning in, future environmental situations. This dimension reflects temporal considerations reflected in key strategic decisions, in terms of the relative emphasis of effectiveness considerations (longer–term) versus efficiency considerations (shorter–term) (Venkatraman, 1989; Morgan & Strong, 1998).

The concept of risk can be considered as the possible losses and gains that can be derived from an action. Conceptualizing risk in this manner means that riskiness can be manifested in resource allocation decision scenarios. Within models of business competitiveness, there is recognition that constructive risk taking is an important factor in opportunity-seeking behavior (Venkatraman, 1989; Morgan & Strong, 1998).

Proactive change strategy is especially important in an organizational change process analysis as proactive change occurs in the absence of recognized problems or declining performance. Therefore we will put change strategy in our model to measure the amount of proactive/reactive change strategy an organization has.

2.3. Means

While implementing a change process either reactive or proactive, different means can be applied by an organization. So we will add a means of change to our model.

These means can be improvement, imitation, benchmarking, creativity, and innovation. Means can be implemented one by one or in combinations.

Improvement is simply making better or increasing the value of what already exists; a refinement of what has been developed (Zhuang etal, 1999). With the total quality management approach continuous improvement –small incremental improvements in all areas of the organization as an ongoing basis– has become a part of organizations (Daft, 1997).

Imitation is trying to be like or act like an example. Imitation of products or services essentially leads to financial suicide if no process innovations are forthcoming. If the choice is to pursue product imitation together with process innovation leading to a relative low–cost position, then imitation is a viable strategy (Higgins & Vincze, 1993).

Benchmarking is a continuous and systematic process of comparing organization's performance with the better practices and the application of those better practices. Benchmarking can be internal where the comparisons are made within the same organization between different sections, subsidiaries, and branches or it can be external where the comparisons are made with competitors or companies from different fields with no similarities (Oğuz, 1996).

Innovation is an invention, a creation of something entirely new. To be able to innovate creativity is necessary. Innovation is the output of the creative idea generation process (Zhuang etal, 1999). Therefore we will use creativity and innovation together in our model. Since innovation is the outcome of creativity and as we aim to measure intensions rather than actual change, in our instrument we will only measure creativity within the environment. If creativity is embedded in organizations culture it will lead to innovation.

2.4. Ends

When a change process is implemented through different means there will be an end result to this process, which we call the ends of change. The change process could be applied to achieve hard or soft changes.

As we described in section 1.4.1 there are two archetypes in organizational change processes. Purpose of any change process may be economical value based or organizational capacity based or a combination of both. Therefore in parallel to this we should expect ends in economical value and/or organizational capacity dimensions.

However we should not forget the possibility of no change. Even if a change process may be applied there will always be a probability of not achieving it.

While analyzing an organization we would like to see what kind of ends would be produced therefore the last dimension in our change model is ends.

2.5. No change

Up to this point we assumed forces in the environment would lead organizations to take change as a response, but they may prefer to keep things as they are.

There are three reasons in no change: contentment, completion, or resistance. Contentment is the state where the organization members are satisfied with the present situation; status quo is good and acceptable. Therefore change is not a preferred strategy.

Completion is where the organization is just through with a change process. Organization members don't want a new change as they newly reached status quo. However as there is no permanent equilibrium this stage cannot be long lasting.

Where the organization members oppose and do not support change we call it resistance and it was discussed it in detail in section 1.3.2.

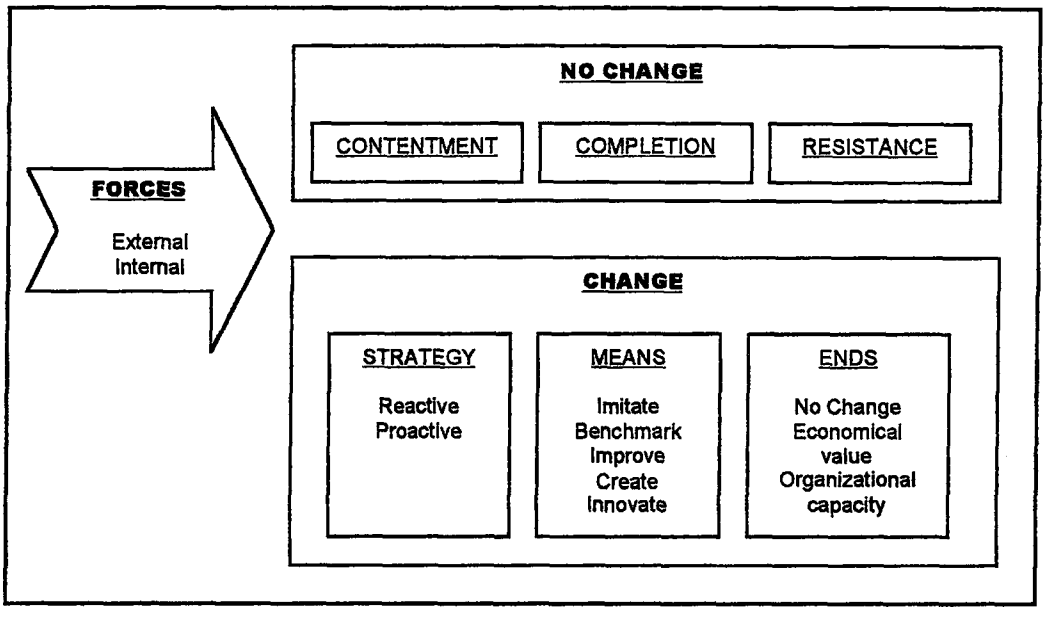

Figure 8: Organizational Change Model

When we summarize our organizational change model there are change forces in the environment, which triggers an organization to take an action: change or not change. If change is the response it has three dimensions: strategy, means and ends. Strategy may be reactive or proactive. Means can be imitation, benchmarking, improvement, creativity and innovation. And ends can be no change, economical value, and/or organizational capacity. If no change is the response there may be three reasons: contentment, completion, or resistance (See Figure 8).

3. LEADING CHANGE

It is clear that change is inherent in contemporary organizational experience, and management of change is critical to organizational success and survival (Church & Waclawski, 1996; Burke, etal, 1993).

At this point we are faced with one of the most debated issues in the field of organizational change whether change is best developed participatively with the active involvement of all organizational members or led from above by the CEO and top executive team (Dunphy, 2000).

3.1. Participative Management of Organizational Change

In particular, the organizational development (OD) approach to organizational change argues strongly for wide spread involvement and participation by all organizational members in the planning and implementation of change (Dunphy, 2000).

No change can occur without willing and committed followers' support (Bennis, 2000; Tichy & Devanna, 1986), therefore this approach seems quite logical, especially when we consider the need for collaboration in a complex world.

With the increase in complexity and technological sophistication in businesses, there are simply too many problems to be identified and solved, and too many connections to be made (Bennis, 2000). In such a world diversity and difference become resources; the coordinated contributions of many talented people working together required; the more minds devoted to problems facing the organization as it changes, the better (Dunphy, 2000). Therefore it seems not possible for top-down leadership to accomplish change however gifted the person at the top is (Bennis, 2000).

3.2. Top–Down Management of Organizational Change

Opponents of this approach the strategic management approach to organizational change gives the incentive for change, its planning, and the control of its execution firmly in the hands of the CEO and the top executive team. Employee participation is often viewed as useful in generating commitment to change and in ensuring that a strategic reorganization is actualized (Dunphy, 2000).

The increased magnitude of environmental forces requires continual reinvention in company strategies and in the organizational architectures and cultures that support them. The vast majority of these strategic changes demand multifunctional organizationwide changes (Conger, 2000). Change usually involves use of economic incentives, layoffs, downsizing, decisions on restructuring, information technology, and reengineering initiatives (Beer & Nohria, 2000b) and only senior executives can make these kinds of strategic decisions (Beer & Nohria, 2000c). The capital requirements for these initiatives are simply too big and the implications too profound even for lower–level managers (Beer & Nohria, 2000c).

This very nature of organizational change today favors a top–led approach. By top–led approach we do not mean simply a CEO–driven approach, but rather a team of senior executives is referred. Usually the company CEO is given most of the credit (or blame) for the organization's good and bad times. Yet in reality a single executive can never run a corporation alone (Conger, 2000).

In light of these defining characteristics of many of today's change efforts, it is difficult to imagine how successful change outcomes can be produced by initiatives driven by the lower levels of an organization.

Bottom–up approaches too often reflect the functional or departmental biases of the groups driving the change. Beyond these dilemmas, there are additional problems. For instance, lower–level managers may lack the courage needed to set and achieve radical goals. Also it is not easy for individuals to establish demanding stretch targets for themselves when their own careers are on the line (Conger, 2000).

Senior managers on the other hand have advantages like the perspective, the knowledge, and the power to reposition the organization strategically, and attributions about leadership itself which gives the means of using events and their own behaviors to send messages throughout the entire organization (Conger, 2000; Dunphy, 2000).

As Dunphy (2000) states there are two imperatives in the modern organization. On the one hand, the rate of change demands that those who operate closest to the action be empowered to make decisions to allow quick and effective organizational responses. It is also vital that frontline employee's current knowledge of the marketplace taken into account when new strategic directions initiated. On the other hand, the rate of change also demands swift and decisive leadership action from the top of the organization. This action may involve closing down unprofitable plants, investing in new ventures, entering into alliances, and many other such strategic redirections (Dunphy, 2000).

The conclusion we can drive from these debating approaches is that change should be lead by the top with the involvement of the lower levels. Any member of the organization can initiate change or contribute to its success, but the top executive team guides major change in an organization (Yukl, 1998).

Leading change from the top with the active involvement and commitment of lower levels is easy to say, but hard to apply. Especially the use of extensive downsizing cause employees to feel unsecured.

In the 1980s, Burns' ideas on transformational leaders had great appeal to organizational theorists struggling with issues of organizational change and employee morale and commitment. After all, these leaders were concerned about transforming the existing order of things, as well as directly addressing their followers' needs for meaning and personal development (Conger, 1999).

3.3. Transformational and Transactional Leadership

Leadership has been an important topic in the social sciences for many decades. Recently there has been a renewed interest. This interest in studying the topic of leadership appears to be accompanied by an acceptance of the distinction between transactional and transformational leadership, with an emphasis on the latter. (Hartog &Van Muijen, 1997).

Burns (1978) was one of the firsts to identify two types of leadership styles, transformational and transactional. He constructed transformational leadership based on a qualitative analysis of the biographies of various political leaders. (Lowe & Galen Kroeck, 1996; Tracey & Hinkin, 1998; Yukl, 1998).

Transformational leadership is characterized as a process that motivates followers by appealing to higher ideals and moral values (Tracey & Hinkin, 1998).

Transactional leadership whereas emphasizes the clarification of goals, work standards, and task assignments and focuses on task completion with compliance based on incentives and rewards to appeal to the self-interest of followers (Hinkin & Tracey, 1999).

While the transactional leader motivates subordinates to perform as expected, the transformational leader typically inspires followers to do more than originally expected (Hartog &Van Muijen, 1997).

According to Burns, transformational leaders are concerned primarily with change (Church & Waclawski, 1996). Tichy & Devanna (1986) describe transformational leaders as people that take on the responsibility for revitalizing an organization. Transformational leaders define the need for change, create new visions, mobilize commitment to those visions, and ultimately transform an organization. Transformational leadership is about change, innovation, and entrepreneurship (Tichy & Devanna, 1986)

Transactional leaders, on the other hand, focus on maintaining the status quo of organizations by clarifying roles and tasks. Their relationship with followers is

fundamentally based on an exchange model (Church & Waclawski, 1996). Bass (1985) characterized the transactional leader as one who operates within the existing system or culture, has a preference for risk avoidance, pays attention to time constraints and efficiency, and generally prefers process over substance as a means for maintaining control. The transactional leaders are likely to be effective in stable, predictable environments where competition is nonexistent (Lowe & Galen Kroeck, 1996; Tichy & Devanna, 1986).

3.3.1. Transformational leadership

Transformational leadership goes beyond the attempts of leaders who seek to satisfy the current needs of followers through transactions or exchanges via contingent reward behavior. By communicating and focusing subordinates attention on new visions for the future of their organization, they facilitate change by arousing the energy for their followers. This type leadership increase confidence, and move followers gradually from concerns for existence to concerns for achievement and growth and often yields to an empowering relationship whereby followers are converted into leaders and the leaders are elevated to the status of moral agents (Church & Waclawski, 1996; Yammarino & Dubinsky, 1994).

3.3.1.1. Key Characteristics of Transformational Leaders

The original formulation of the theory (Bass, 1985) includes three types of transformational behavior: idealized influence or charisma, intellectual stimulation, and individualized consideration (See Figure 9). A revision of the theory added another transformational behavior called inspirational motivation (Yukl, 1998).

3.3.1.1.1. Idealized influence / Charisma

Idealized influence, which is also called as charisma is described as behavior that results in follower admiration, respect, and trust. Leaders with idealized influence provide vision and a sense of mission, which is effectively articulated; they excite, arouse and inspire their subordinates. Idealized influence involves risk sharing on the part of leaders, a consideration of follower needs over personal needs, and ethical and moral conduct (Bass, 1990; Hartog &Van Muijen, 1997; Lowe & Galen Kroeck, 1996; Tracey & Hinkin, 1998). There are certain behaviors associated with being viewed as charismatic, yet it is difficult to think of charisma not being attributed to some degree by raters. Therefore Bass & Avolio differentiate attributed from behavioral charismatic leadership. So in some studies idealized influence is divided into two subdimensions as attribute and behavior. (Avolio & Bass, 1999)

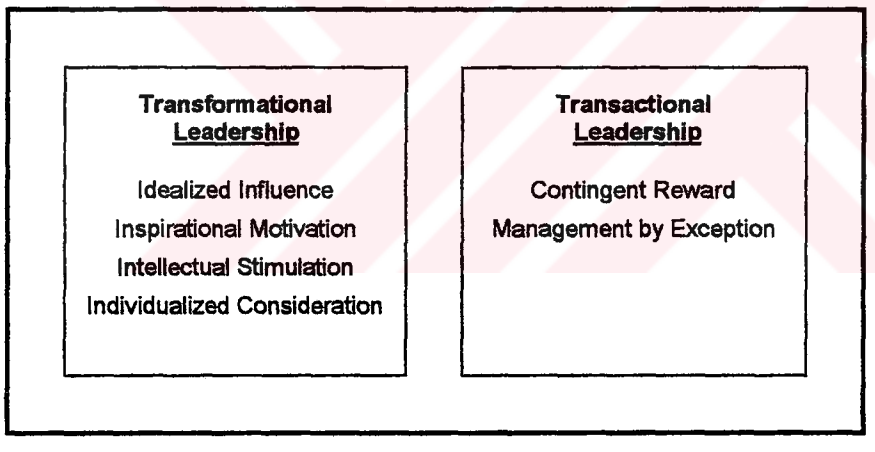

Figure 9: Key Characteristics of Transformational & Transactional Leaders

3.3.1.1.2. Inspirational Motivation

Inspirational Motivation is reflected by behaviors that provide meaning and challenge to followers' work. Leaders with inspirational motivation communicate high expectations, uses symbols to focus efforts, expresses important purposes in simple

ways and act as a model for subordinates. The leader inspires followers to enthusiastically accept and pursue challenging goals and a mission or vision of the future. In addition, team spirit is aroused through enthusiasm and optimism (Bass, 1990; Tepper & Percy, 1994; Tracey & Hinkin, 1998).

In some studies idealized influence and inspirational motivation are taken as one higher order dimension. But Charisma requires identification with the leader, inspiration does not, therefore two different behaviors are implied (Avolio & Bass, 1999; Hartog &Van Muijen, 1997).

3.3.1.1.3. Intellectual Stimulation

Leaders who demonstrate this type of transformational leadership promote their followers to think in new ways and emphasize problem solving and the use of reasoning before taking action. Leaders with intellectual stimulation prompt followers to rethink conventional practice and thinking and encourage novel and new approaches for performing work (Lowe & Galen Kroeck, 1996; Tepper & Percy, 1994; Tracey & Hinkin, 1998).

3.3.1.1.4. Individualized Consideration

Individualized consideration is reflected by leaders who listen attentively, and pay special attention to follower achievement, and growth needs. These leaders treat each employee individually, provide coaching and teaching, delegate projects to stimulate learning experiences (Bass, 1990; Lowe & Galen Kroeck, 1996; Tracey & Hinkin, 1998).

While a leader's charisma may attract subordinates to a vision or mission, the leader's use of individualized consideration also significantly contributes to individual subordinates achieving their fullest potential. Individualized consideration is similar to the Ohio State notion of consideration (Hartog &Van Muijen, 1997).

Charismatic leadership made its apperance in 1980s simultananeously with transformational leadership. Before continuing with the transactional leadership, we would like to compare these two leadership styles.

3.3.1.2. Charismatic versus Transformational Leaderships

Charisma is central to the transformational leadership process and the key component of transformational leadership, but by itself it is not sufficient to account for the transformational process (Yammarino & Dubinsky, 1994;Yukl, 1998).

Like charismatics, transformational leaders influence followers by arousing strong emotions and identification with the leader, but they may also transform followers by serving as a coach or mentor (Yukl, 1998). Bass's conceptualization of the transformational leader extends House's (1977) charismatic leader by incorporating the individualized consideration and intellectual stimulation aspect (Lowe & Galen Kroeck, 1996).

The term "transformational" is less value-laden than "charismatic leadership," and the values it does convey are positive. (Conger, 1999; Pawar & Eastman, 1997).

Transformational leaders seek to empower and elevate followers; followers demonstrate free choice behavior and develop autonomy within the leader's vision whereas many charismatic leaders seek to keep followers week and dependent and to instil personal loyalty rather than commitment to ideals (Conger, 1999; Lowe & Galen Kroeck, 1996; Yukl, 1998).

To the business world, the term "charismatic leadership" is often perceived to describe an esoteric and rarer form of leadership. Charismatic leaders could be self-obsessed, and destructive of others. (Conger, 1999; Pawar & Eastman, 1997).

Processes such as attribution or impression management are typically associated with charismatic leadership (Pawar & Eastman, 1997). The response of people to a charismatic leader is likely to be highly polarized; a charismatic leader will be loved by some people and hated by other. Reactions to transformational leaders are less extreme

(Yukl, 1998). In transformational leadership there is a positive transformation of both the organization and the organizational members (Pawar & Eastman, 1997).

According to Bass, transformational leaders can be found in any organization at any level (Yukl, 1998). Few managers and executives would see charisma as a necessary quality to be effective in contrast to transformational capability (Conger, 1999).

3.3.2. Transactional Leadership

Transactional leadership is based on bureaucratic authority and legitimacy within the organization. Transactional leaders emphasize work standards, assignments, and task-oriented goals. In addition, transactional leaders tend to focus on task completion and employee compliance, and these leaders rely quite heavily on organizational rewards and punishments to influence employee performance (Tracey & Hinkin, 1998). They mainly persuade subordinates by engaging in a transaction with their employees. They explain what is required of them and what compensation they will receive if they fulfil these requirements (Bass, 1990).

3.3.2.1. Key Characteristics of Transactional Leaders

There are two key characteristics of transactional leaders: contingent reward and management with exception (See Figure 9). These two characteristics of transactional leadership differ with respect to the leader's activity level and the nature of interaction with followers. (Howell & Avolio, 1993).

3.3.2.1.1. Contingent Reward

The first dimension of transactional leadership is contingent reward. The leader clarifies what is expected from followers and what they will receive if they perform in accordance with contracts or expend the necessary effort. Contingent reward is the exchange of rewards for effort, promises of rewards for good performance, recognition

of accomplishments (Avolio & Bass, 1999; Bass, 1990; Lowe & Galen Kroeck, 1996; Hartog &Van Muijen, 1997). Contingent reward leadership is viewed as an active and positive exchange between leaders and followers (Howell & Avolio, 1993).

Contingent reward can be divided into two subdimensions as promises and rewards. The leader promises to provide valued rewards contingent on performance and the leader provides rewards contingent on performance (Tepper & Percy, 1994).

3.3.2.1.2. Management by Exception

Leaders can also transact with followers by focusing on mistakes, delaying decisions, or avoiding intervening until something has gone wrong. Such transactions are referred to as management by exception (Howell & Avolio, 1993).

The leader avoids giving directions if the old ways are working and allows followers to continue doing their jobs as always if performance goals are met. There are two types of management-by-exception, active and passive. The ***active*** form characterizes a leader who actively seeks deviations from rules and standard procedures and takes corrective action when irregularities occur. The ***passive*** form characterizes leaders who only take action after deviations and irregularities have occurred and standards are not met. The difference between the two is that in the active form the leader searches for deviations, whereas in the passive form the leader waits for problems to materialize (Bass, 1990; Hartog &Van Muijen, 1997; Lowe & Galen Kroeck, 1996).

Transformational leadership has gained such momentum that it would be sometime before a greater appreciation would develop for the value of transactional behavior by itself. The "transactional" term has at times been applied in a somewhat derogatory way to the activity of managing. To be transformational is to be a leader (Conger, 1999).

Burns posited transformational leader as a contrast to the transactional leader; he thought the two types of leadership as being at opposite ends of a continuum. (Hartog &Van Muijen, 1997; Lowe & Galen Kroeck, 1996). But Bass views transformational and transactional leadership as distinct but not mutually exclusive processes, and he recognizes that the same leader may use both types of leadership at different times in different situations (Yukl, 1998).

In fact due to their more operational interests (improving teamwork, accomplishing tasks solving problems) transactional leaders tend to serve in complementary or supplemental positions to transformational types (Church & Waclawski, 1996).

Many transformational leaders certainly engage in transactional behaviors, but they often supplement those behaviors with some elements of transformational leadership (Howell & Avolio, 1993).

Bass argues that transformational leadership builds on transactional leadership but not vice versa (Hartog &Van Muijen, 1997). Transformational leadership thus augments transactional management to achieve higher levels of subordinate performance. The ability of the transformational leader to obtain performance beyond basic expectations of workers has been labelled the "augmentation hypothesis" (Lowe & Galen Kroeck, 1996).

3.3.3. Laissez-Faire Leadership as a Contrast to Transformational and Transactional Leadership

Both transformational and transactional leaders are active leaders. They actively intervene and try to prevent problems. When researching these two active forms of leadership, they are often contrasted with extremely passive laissez-faire leadership. The laissez-faire leader avoids decision making and supervisory responsibility. This type of leader is inactive, rather than reactive or proactive. In a sense this extremely passive type of leadership indicates the absence of leadership (Hartog &Van Muijen, 1997).

There is a negative association between laissez-faire leadership and a variety of subordinate performance, and effort indicators, which implies that laissez-faire leadership is an inappropriate way to lead. By laissez-faire it is meant that the leader is not sufficiently motivated or adequately skilled to perform supervisory duties, this observation seems correct. However, there are situations in which highly active leadership is not necessary or not even desirable. A less active role of leaders could also lead to empowerment of followers which could even make for a useful component of transformational leadership (Hartog &Van Muijen, 1997).

3.3.4. Measuring Transformational / Transactional Leadership

Descriptive studies of effective leaders like the ones conducted by Tichy and Devanna (1986) and Bennis and Nanus (1985) provide evidence useful for evaluating the transformational leadership theory (Yukl, 1998; Tichy & Devanna, 1986). But most of the research conducted on the theory of transformational/transactional leadership involves use of a questionnaire called "Multifactor Leadership Questionnaire" (MLQ).

Bass (1985), viewing the transformational and transactional leadership as complementary constructs, developed the Multifactor Leadership Questionnaire (MLQ) to assess the different leadership styles ((Hartog &Van Muijen, 1997; Lowe & Galen Kroeck, 1996).

Scales measuring separate aspects of transformational and transactional leadership are based on factor analysis of the initial questionnaire and subsequent versions of it (Yukl, 1998).

Initially, 142 questionnaire items were generated based on interviews with 70 executives. (Lowe & Galen Kroeck, 1996; Tepper & Percy, 1994). In subsequent studies, the instrument has undergone extensive refinement. The most recent version of the MLQ (Form 5X) developed by Avolio & Bass, (1999) is a 36-item questionnaire.

The dimensions vary slightly in different studies. (Hartog &Van Muijen, 1997). Bass's first conceptualization of transactional and transformational leadership included seven leadership factors, which he labelled charisma, inspirational, intellectual stimulation, individualized consideration, contingent reward, management-by-exception and laissez-faire leadership. In subsequent writings he noted that although charismatic and inspirational leadership were unique constructs, they were often not empirically distinguishable, thus reducing his original multifactor model to six factors. (Avolio & Bass, 1999).

A considerable number of survey studies used the MLQ (eg Howell & Avolio, 1993; Tepper & Percy, 1994; Tracey & Hinkin, 1998; Yammarino & Dubinsky, 1994; Yammarino & Spangler, 1998) and a meta analysis is performed by Lowe & Galen Kroeck (1996). The results of the research are consistent with the conclusion that effective leaders emphasize transformational behaviors but also use relevant transactional behaviors (Yukl, 1998).

4. LEADERSHIP AND CHANGE MODEL

We introduced the organizational change model we will use in our study. Now we will relate it with leadership, as our aim is to unfold the role of leadership in the change process.

Paralleling the ways that organizational participants initiate and manage change, transformational leadership research has emerged as a dominant approach (Tepper & Percy, 1994). As we mentioned before transformational leaders are concerned primarily with change (Church & Waclawski, 1996) they seek new ways of working, search opportunities in the face of risk, prefer effective answers to efficient answers (Lowe & Galen Kroeck, 1996). Therefore we expect to find transformational leadership more in organizations where change process is taking place.

Transactional leaders, on the other hand, focus on maintaining the status quo of organizations by clarifying roles and tasks (Church & Waclawski, 1996). Consequently we assume the transactional leadership will be more in no change situations.

Transformational leaders do not merely react to environmental circumstances, they attempt to shape and create them, and they are interested in innovation (Lowe & Galen Kroeck, 1996). As a result we presume that transformational leaders will prefer proactive change strategy and innovation as means of change. Whereas transactional leaders have a preference for risk avoidance and stable, predictable environments (Lowe & Galen Kroeck, 1996; Tichy & Devanna, 1986) therefore if they were to lead change they would wait until the last moment to change and use reactive change strategy.

Since leaders possess both leadership styles and use both types of leadership at different times in different situations we cannot expect to find pure leadership styles in organizations. Instead we expect leaders to engage in more transformational characteristics as the need for change increase and to engage in more transactional characteristics in steady states. And we expect to see more proactive change in case

leaders engage in more transformational characteristics and more reactive change in conditions leaders engage in more transactional characteristics (See Figure 10).

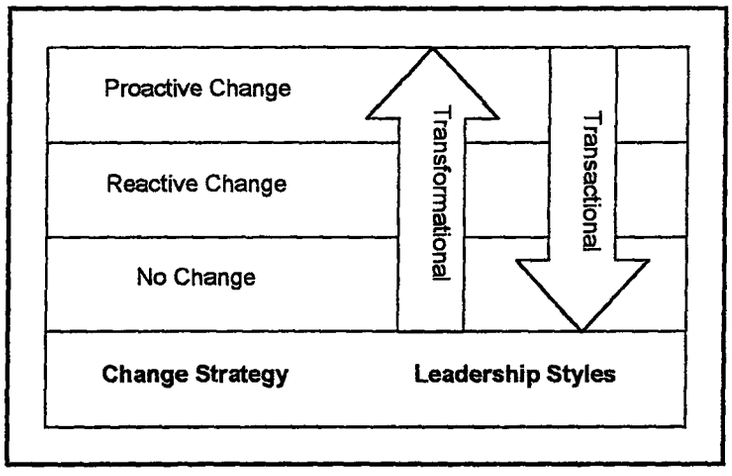

Figure 10: Relation between Change Strategies and Leadership Styles

5. METHODOLOGY

5.1. Aim of the Research

The ability to be both receptive and responsive to change has become important in recent years (Tierney, 1999). Unfortunately, many change initiatives resulted with failure at some point in their implementation (Siegal etal, 1996). Therefore to find a way to help managers and organizations to manage the process of change more effectively, we would not only enhance organization performance but also increase employee well being.

In this direction aim of this research is to develop an instrument to measure the perception of change dynamics in organizations based on our organizational change model, which we introduced in section 2.

The key role leaders play in the change process has been noted by change theorists, yet there is no conclusive research that focuses on this relationship between leadership and change; to date there has been little integration of these two bodies of literature (Eisenbach, etal, 1999).

In this parallel another aim of this research is to unfold the role of leadership in the change process. Hence we will apply both an organizational change and a leadership instrument to a sample and conduct analyses to find out significant relations.

In our research we want to find answers to following questions: Since the strength of forces and resistance affects change (Strebel, 1994) do forces of change in the environment and dimensions of no change affect the expectation of change? Leaders' interpretations of the organization's operating environments frame and direct the change in organizational actions that take place (Barr, 1998) so do change forces and leadership style affect change strategies? Or do leadership style and strategy affect means of change that will be used?

Leaders are expected to have a grasp of many different aspects of change management. This includes such concepts as an understanding of the general patterns of change and effectively utilizing participation for building commitment to change (Church & Waclawski, 1996). But we already discussed in some cases employees working in boundary spanning positions are more aware of the changing needs than their superiors. Also there are cases where the employees cannot understand the change needs and resist to it. Consequently one more purpose of this research is to compare the superiors and subordinates receptiveness and willingness to change. Which would help in planning change initiatives.

5.2. Sample

Data for this study were collected from a sample of 253 subjects from 7 private Turkish organizations operating in different industries: transportation, automotive, textile, software, and two firms from consumer goods. The sample was composed of 44 superiors and 209 subordinates. Mean of work experience was 9.849 years with a minimum of 6 months and a maximum of 40 years. Mean of job seniority was 5.389 years minimum being 6 months and maximum being 24 years. 56.7 % of the sample was males and 43.3 % was females. Age of the individuals ranged between 19 to 72 with a mean of 31.072. Frequency distribution of the sample's education level is presented in Table 1. It can be seen from the table that the majority of respondents were high school and university graduate (42.1% and 46.7 % respectively).

As the aim of this thesis is to test our change model and the effect of leadership style on it in Turkish organizations, we conducted our analyses on the sample as a whole. Our interest is not on the company differences. But while giving information about demographics of the sample, within company distributions are also presented in the below Tables 1 and 2.

Table 1 : Sample Distributions by Position, Gender, and Education

		COMPANY							
		1	2	3	4	5	6	7	TOTAL
POSITION									
Superior	%	21.1	13.0	9.1	24.0	10.0	10.5	29.8	17.4
Subordinate	%	78.9	87.0	90.9	76.0	90.0	89.5	70.2	82.6
Total	n	38	46	11	25	10	76	47	253
GENDER									
Female	%	26.5	43.5	36.4	37.5	66.7	50.0	44.7	43.3
Male	%	73.5	56.5	63.6	62.5	33.3	50.0	55.3	56.7
Total	n	34	46	11	24	9	76	47	247
EDUCATION									
Primary	%	–	–	–	–	–	1.4	–	0.4
Middle	%	–	–	–	–	–	4.1	–	1.2
High	%	17.6	51.1	9.1	4.3	12.5	64.9	46.8	42.1
University	%	61.8	42.2	81.8	78.3	50.0	28.4	44.7	46.7
Master	%	20.6	6.7	9.1	17.4	37.5	1.4	6.4	9.1
Phd	%	–	–	–	–	–	–	2.1	0.4
Total	n	34	45	11	23	8	74	47	242

Table 2: Descriptive Information on Sample Age, Work Experience, and Job Seniority

	COMPANY							
	1	2	3	4	5	6	7	TOTAL
Age								
Mean	28.941	32.511	35.200	34.850	33.875	26.460	35.630	31.072
Std. Deviation	6.897	7.344	8.217	8.145	7.279	3.932	11.062	8.263
Minimum	20	19	25	24	27	20	20	19
Maximum	55	51	55	53	45	38	72	72
n	34	45	10	20	8	74	46	237
Number of years worked								
Mean	5.591	10.956	12.864	11.900	10.125	7.780	13.533	9.849
Std. Deviation	6.366	6.925	8.000	8.039	7.882	3.789	7.681	6.878
Minimum	0.5	1	1.5	2.5	3	2	3.5	0.5
Maximum	30	28	30	30	24	20	40	40
n	33	45	11	20	8	75	46	238
Number of years worked in this co								
Mean	2.606	6.114	3.150	7.775	7.250	5.562	5.545	5.389
Std. Deviation	1.899	4.095	1.684	5.875	8.281	3.075	3.678	4.018
Minimum	0.5	0.5	1	1	0.5	0.5	0.5	0.5
Maximum	7	17	6	20	24	12	12	24
n	33	44	10	20	8	73	46	234

5.3. Instrument

Mainly two instruments were used in this study: organizational change questionnaire and leadership questionnaire. Both questionnaires have sub scales that will be explained in the following section. There was also demographic question section in our survey. Instruments can be found in Appendix I – VIII.

5.3.1. Organizational Change Questionnaire

Organizational change questionnaire is composed of five scales "Forces", "No Change", "Proactive Strategy", "Means", and "Ends" scales referring to our model in Section 2. The structure of the questionnaire is given in Figure 11.

5.3.1.1. Forces scale

Forces scale is developed to measure the degree employees perceive internal and external change forces. Forces scale has 24 items and respondents are asked to rate how much each item forces their organization to change on a 6 point scale where "not at all" = 1 and " definitely " = 6 (Appendix I).

5.3.1.2. No change scale

No change scale has three underlying dimensions: "completion", "contentment", and "resistance". The scale has 29 items altogether: 1 item measures the level of completion; 9 items measure resistance; 19 items measures contentment. Subjects rate how much they agree with items ("strongly disagree" = 1 and "strongly agree" = 6). In measuring resistance Nişel's 8 item questionnaire is used (Nişel, 1996) and one more item "there are more important subjects than change" was added. Five of the Nişel's items are reverse questions (Appendix II).

5.3.1.3. Proactive strategy scale

We adapted proactive strategy scale from Venkatraman's (1989) strategic orientation dimensions. Proactive strategy scale has 14 items, five of which are reverse. Respondents are asked to rate how frequently they face given items in their organizations ("never" = 1, "always" = 6). See Appendix III.

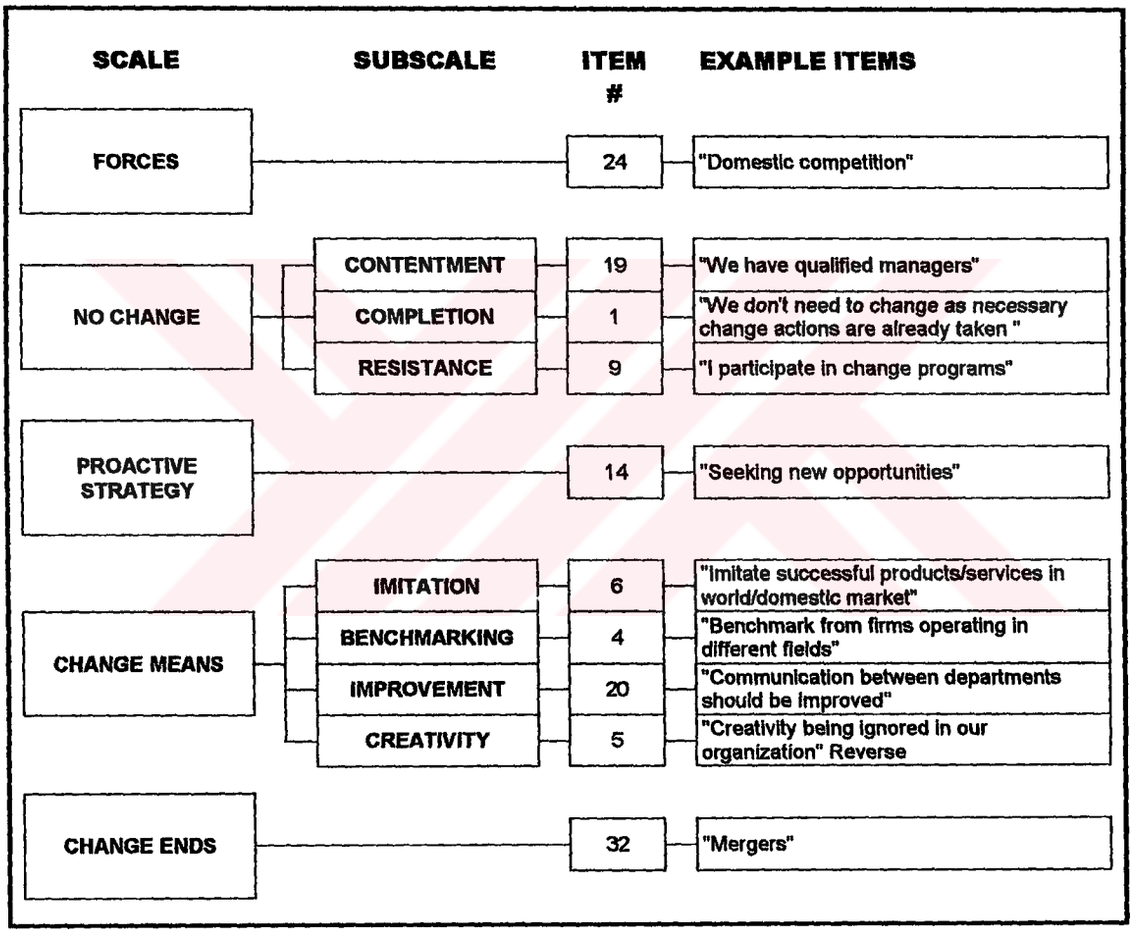

Figure 11: The Structure of Organizational Change Questionnaire

5.3.1.4. Means scale

Means scale has four dimensions: "imitation", "benchmarking", "improvement", and "creativity". Imitation has six items; benchmarking has four items; improvement has twenty items and creativity has five reverse items. All dimensions except creativity are developed by the researcher, to measure creativity Nişel's (1998) creativity questionnaire is used. Means scale altogether has 25 items, and respondents are asked to rate how much they agree with given items on 6 point scale ("strongly disagree" = 1 and "strongly agree" = 6). See Appendix IV.

5.3.1.5. Ends scale

Ends scale has 32 questions and the instruction is " if in your organization a change process is being applied or in case it would be applied to what degree do you expect below items to realize". Here again subjects are expected to rate the items in a 6 point scale with "not at all" = 1 and " definitely ". See Appendix V.

5.3.2. Leadership Style Questionnaire

In measuring leadership style Bass and Avolio's MLQ: Multifactor Leadership Questionnaire is used. MLQ is first developed in 1985 since then it had been improved several times. In this study MLQ 5X[3] is used This questionnaire has three scales and 36 items all together. MLQ also has dimensions, which can be seen in Figure 12.

5.3.2.1. Transformational leadership

Transformational leadership scale is composed of idealized influence – attribute, idealized influence – behavior, inspirational motivation, intellectual stimulation, and individualized consideration. All dimensions have four items and measured on a 5 point

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[3] http://www.cls.binghamton.edu/mlq.html

scale, 1= "not at all" to 5= "frequently, if not always". During translation one of the items of idealized influence – attribute "Instils pride in being associated with him/her" is changed as "I have pleasure in working with him" as the original item didn't have the same effect in Turkish. All other items are kept same as the original.

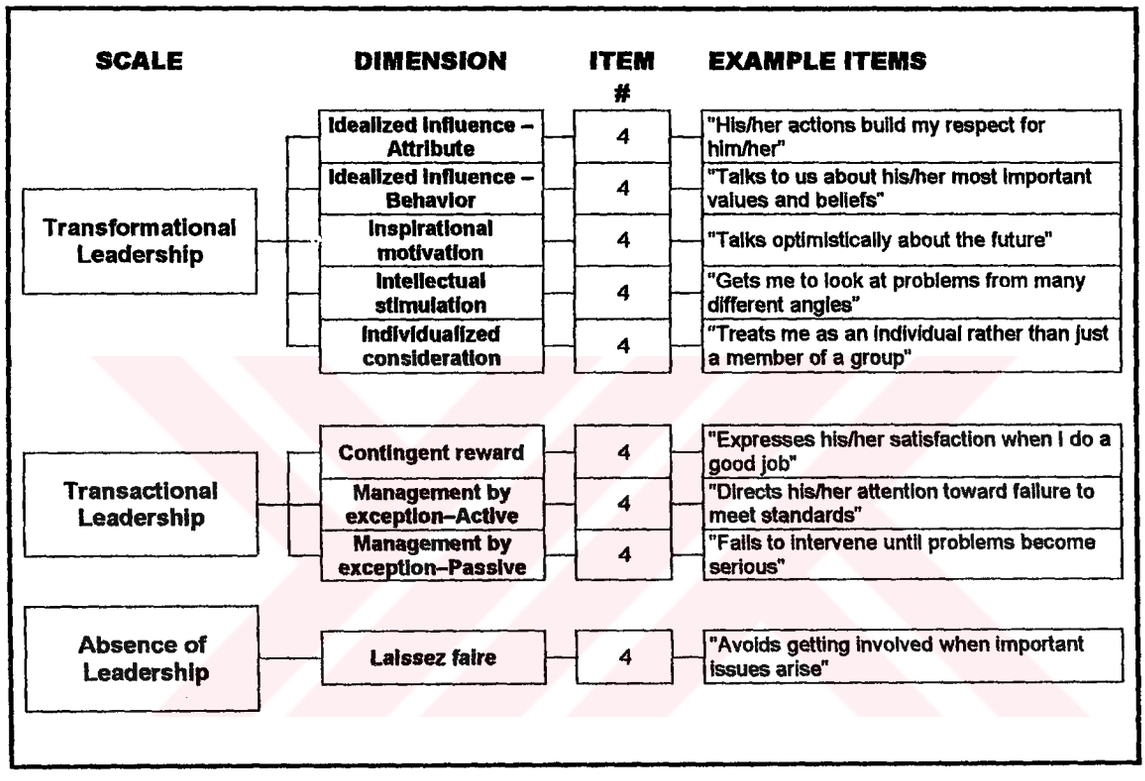

Figure 12: The Structure of MLQ–Multifactor Leadership Questionnaire

5.3.2.2. Transactional leadership

Transactional leadership has three dimensions: contingent reward, management by exception–passive and management by exception–active, all of which have four items and measured on a 5 point scale, 1= "not at all" to 5= "frequently, if not always".

5.3.2.3. Absence of leadership–Laissez faire

Laissez faire leadership style, which in fact is the absence of leadership is measured by four items and on the same 5 point scale (1= "not at all" to 5= "frequently, if not always").

Leadership questionnaire is used in two different ways; subordinates were asked to evaluate their leaders and superiors were asked to evaluate themselves (Appendix VI & VII). Items in both cases were same except in laissez faire, where items were reversed in superiors' forms. Therefore their coding was inverted before analysing to keep the continuum of the scale at the same direction, which made it possible to compare results of two groups.

5.3.3. Demographic Questions

Demographic questions used in this survey were gender, age, education, work experience, and job seniority. Department and job position were also asked to control if the superior/subordinate questionnaire forms were distributed properly, but not used in analyses. See Appendix VIII.

5.4. Statistical Analysis

We started to analyze collected data by conducting reliability and factor analysis on organizational change and multifactor leadership questionnaires. Cronbach α reliability analysis measures the internal consistency of a scale, and factor analysis is used to summarize a large number of variables with a smaller number of derived variables called factors. As a result of these analyses items decreasing reliability were eliminated and factors of scales were found. After this point new factors were used in our analyses.

First to understand the dynamics of change and leadership, correlation scores of scale factors were performed using Pearson correlation coefficient.

Then as we wanted to find answers to questions like: "Do forces of change in the environment and dimensions of no change affect the expectation of change?" "Do change forces and leadership style affect change strategies?" or "Do leadership style and strategy affect means of change that will be used?" we performed multiple regression analyses.

Since one of the purposes of this research was to compare the superiors and subordinates receptiveness and willingness to change, t-tests were conducted to find out if there were any differences between superiors and subordinates answers.

Also to find out if correlation scores of superiors and subordinates were different Fisher's z–transformation was used.

To specify which factors were favored more by respondents and/or existed more than the others in respondents' environments Friedman two-way analysis of variance by ranks was conducted.

6. RESEARCH FINDINGS

6.1. Reliability and Factor Analyses

Cronbach's α reliability analysis was used to test reliabilities of all scales in questionnaires, Organizational Change and Multifactor Leadership. Items that decreased reliability below 0.70 limit were eliminated. When reliability was sufficient, to test the appropriateness of data for conducting factor analysis, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett Test of Sphericity were conducted. If KMO was more than 0.5 and Bartlett test was significant – which was the case in all our analyses– factor analysis was conducted. In factor analyses Principle Component Method and Varimax Rotation were performed.

6.1.1. Organizational Change Questionnaire

As explained before Organizational Change Questionnaire is composed of five scales. Each scale is analyzed separately.

6.1.1.1. Forces scale

24 items reliability was 0.929 therefore we concluded we could conduct a factor analysis. KMO and Bartlett test results were 0.876 and 0.000 respectively.

When we conducted a principle component analysis with varimax rotation we obtained 6 factors. Reliability analysis for each factor was performed. The items that decreased the reliabilities were eliminated, and factor analysis was repeated (KMO=0.880; Significance of Bartlett test=0.000). The result was 5 factors with reliabilities all above 0.70(α=0.887, 0.842, 0.818, 0.760, 0.735,respectively). Total variance explained was 65.33%. We named factors as "organizational", "business

inputs", "competition", "laws & regulations", and "pressure groups". In Table 3 factors, factor loadings, explained variances and reliabilities can be found in detail.

Table 3: Forces Scale – Reliability and Factor Analyses

Item Labels	Factor loadings	Variance explained	Cronbach alpha	Number of items
Factor 1: Organizational		19.651	0.887	9
Under qualified personnel	0.734			
Company strategy	0.721			
Personnel demand	0.694			
Hierarchy	0.644			
Corporate culture	0.617			
Shareholder demand	0.612			
Goals	0.596			
Subsidiaries	0.540			
Financial position	0.511			
Factor 2: Business Inputs		14.280	0.842	5
Customer demand	0.766			
Bargaining power of customers	0.731			
Suppliers	0.703			
Information Technology	0.678			
Production technology	0.616			
Factor 3: Competititon		13.194	0.818	4
New entrants	0.808			
New entrant possibility	0.798			
Domestic competition	0.673			
Substitutes	0.616			
Factor 4: Laws & Regulations		9.131	0.760	2
Domestic laws & regulations	0.749			
International laws & regulations	0.603			
Factor 5: Pressure Groups		9.077	0.735	2
Labor unions	0.798			
Environmentalism	0.707			
Total variance explained (%)		65.334		
Scale's Cronbach alpha			0.929	22
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.880		
Bartlett's Test of Sphericity	Approx. Chi-Square	2168.138		
	df	231.000		
	Sig.	0.000		

6.1.1.2. No change scale

No change has three subscales: "completion", "contentment", and "resistance". As completion has only one item, reliability and factor analysis were not necesary.

6.1.1.2.1. Contentment

19 items reliability was 0.899 therefore we proceeded with factor analysis where KMO was 0.873 and significance of Bartlett test was 0.000. When we conducted principle component analysis with varimax rotation we obtained 4 factors. Reliability analysis for each factor was performed. Cronbach alphas were 0.885, 0.664, 0.913 and 0.545 respectively. The second factor reliability could be increased to 0.755 by eliminating an item, but the reliability of fourth factor could not be improved.We had to exclude that factor from our scale. Therefore we repeated the factor analysis after eliminating items of the forth scale. The results are given in Table 4. KMO was 0.857 and significance of Bartlett test was 0.000. Total variance explained by three factors was 61.476%. We named factors as "market position & HR qualification", " interactions between departments " ,and "technology". Their reliabilities were 0.888, 0.913, 0.755 respectively.

6.1.1.2.2. Resistance

We conducted the reliability test and excluded items that decreased the scale reliability. The result was that only two items out of 9 items was left with a Cronbach alpha value of 0.754. Therefore from this point forward we used only those two items. Item labels are given in Table 5.

Table 4: Contentment Scale – Reliability and Factor Analyses

Item Labels	Factor loadings	Variance explained	Cronbach alpha	Number of items
Factor 1: Market Position & HR qualification		30.863	0.888	11
Market share	0.743			
Qualified managers	0.719			
Customer loyalty	0.700			
Organization structure	0.669			
Qualified personnel	0.647			
Market leader	0.621			
Sales amount	0.607			
Personnel size	0.591			
Customer relations	0.591			
Quality control	0.584			
Product /service differentiation	0.532			
Factor 2: Interactions between Departments		15.751	0.913	2
Teamwork between departments	0.903			
Communication between departments	0.872			
Factor 3:Technology		14.852	0.755	2
Production technology	0.840			
Computer technology	0.834			
Total variance explained (%)		61.466		
Scale's Cronbach alpha			0.894	15
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.857		
Bartlett's Test of Sphericity	Approx. Chi-Square	1628.878		
	df	105.000		
	Sig.	0.000		

Table 5: Resistance Scale – Reliability Analysis

Item Labels	Cronbach alpha	Number of items
Resistance Scale	0.754	2
Informed of change		
Participate In change		

6.1.1.3. Proactive strategy scale

The result of the reliability analysis was 0.691 when we deleted two items we obtained 0.748 reliability level. Factor analysis was performed (KMO=0.886; Significance of Bartlett test=0.000), the result was two factors. The reliability values of factors were 0.879 and 0.663 respectively (Table 6). The second factor's reliability could not be improved. But as 0.663 is close to 0.70 we included this factor in our further analyses. The total variance explained was 55.59%. The names given to factors were "value creation" and "riskiness".

Table 6: Proactive Strategy Scale – Reliability and Factor Analyses

Item Labels	Factor loadings	Variance explained	Cronbach alpha	Number of items
Factor 1: Value Creation		37.182	0.879	9
Use outputs of MIS	0.772			
Emphasize "what if" analyses	0.732			
Seeking new opportunities	0.728			
Emphasize forecasting	0.711			
Emphasize basic research	0.706			
Planning techniques	0.704			
Through analysis	0.673			
Emphasize coordination	0.663			
First one to introduce new products	0.573			
Factor 2: Riskiness		18.504	0.663	3
Support projects where returns certain R*	0.764			
"Stage by stage" approval R	0.749			
Follow "tried and true" paths R	0.713			
Total variance explained (%)		55.686		
Scale's Cronbach alpha			0.748	12
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.886		
Bartlett's Test of Sphericity	Approx. Chi-Square	1008.452		
	df	66.000		
	Sig.	0.000		

* R represents reverse items

6.1.1.4. Means scale

Reliability and factor analysis results of the four scales of means are given below

6.1.1.4.1. Imitation

We conducted the reliability test and excluded the items that decreased the scale reliability. The result was that we had to eliminate two items. Cronbach alpha value was 0.720. When we performed factor analysis we found only one factor (Table 7).

Table 7: Imitation Scale – Reliability Analysis

Item Labels	Cronbach alpha	Number of items
Imitation Scale	0.720	4
Imitate products/services		
Imitate management techniques		
Imitate corporate strategy		
Imitate customer relations		

6.1.1.4.2. Benchmarking

Cronbach alpha value of the scale was 0.742 and there was only one factor found after principle component method (Table 8).

Table 8: Benchmarking Scale – Reliability Analysis

Item Labels	Cronbach alpha	Number of items
Benchmarking Scale	0.742	4
Benchmark firms operating in different fields		
Benchmark departments		
Benchmark subsidiaries		
Benchmark competitors		

6.1.1.4.3. Improvement

Reliability of 20 items was 0.823 therefore we continued with factor analysis (KMO=0.784; Significance of Bartlett test=0.000). We conducted principle component analysis with varimax rotation and found 7 components. Reliability analysis for each component was performed, and we found 0.755, 0752, 0.718, 0.090, 0.195, 0.300, 0.246 respectively. Fourth factors α=0.090 could be improved up to 0.579, but fifth and sixth factors reliabilities could not be improved. Therefore we repeated factor analysis after deleting these factors. And obtained three factors all with reliabilities above 0.70 (KMO=0.828; Significance of Bartlett test=0.000). Factors were named as "guidance & control", "human resource quality", and "product & services" (α=0.755; α=0.718; α=0.752 respectively; see Table 9). Total variance explained by factors was found 63.87%.

Table 9: Improvement Scale – Reliability and Factor Analyses

Item Labels	Factor loadings	Variance explained	Cronbach alpha	Number of items
Factor 1: Guidance & Control		24.033	0.755	5
Quality control	0.766			
Reward system	0.721			
Communication between departments	0.680			
Internal control	0.561			
Organization structure	0.547			
Factor 2: Human Resource Quality		19.988	0.718	2
Managers need for improvement	0.832			
Training need	0.754			
Factor 3: Product & Services		19.846	0.752	3
After sales	0.832			
Product quality	0.769			
Customer relations	0.714			
Total variance explained (%)		63.866		
Scale's Cronbach alpha			0.835	10
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.828		
Bartlett's Test of Sphericity	Approx. Chi-Square	689.968		
	df	45.000		
	Sig.	0.000		

6.1.1.4.4. Creativity

The reliability analysis result was 0.650, but this value could be improved by deleting one item (α= 0.703). The result of factor analysis was one component. See Table 10.

Table 10: Creativity Scale – Reliability Analysis

Item Labels	Cronbach alpha	Number of items
Creativity Scale	0.703	4
Creativity being ignored R*		
Creativity not encouraged R		
On time and accurate work prefered R		
Routine work R		
* R represents reverse items		

6.1.1.5. Ends scale

Reliability test was performed and the value was more than 0.70. Yet when we analysed corrected item – total correlation scores, which represent the Pearson correlation coefficient between the score on the individual item and the sum of the scores on the remaining items (Norusis; 1993), we realized that one item was negatively correlated with the scale and two others had almost no relation at all (corrected item–total correlation values -0.119; 0.138; 0.028). Therefore three items were deleted and the new Cronbach α was 0.920. KMO was 0.892 and significance of Bartlett test was 0.000 so we performed factor analysis and found 6 factors. Reliability scores for components were 0.915, 0.912, 0.760, 0.689, 0.620, and 0.609 (Table 11). The α's for the 5^{th} and 6^{th} factor were below 0.70 showing a low reliability but still we kept those two factors as the items they contained were important in change literature. The total variance explained by six factors was found 65.93%.

Table 11: Ends Scale – Reliability and Factor Analyses

Item Labels	Factor loadings	Variance explained	Cronbach alpha	Number of items
Factor 1: Employee Development		18.951	0.915	7
Employee self development	0.810			
Individual learning	0.778			
Employee suggestions	0.759			
Commitment to organization	0.733			
Trust to organization	0.731			
Higher education level	0.707			
Employee participation	0.699			
Factor 2: Efficiency		18.301	0.912	10
Sales capacity	0.754			
New product / service	0.738			
Productivity	0.727			
Profitability	0.704			
Team work	0.703			
Production capacity	0.663			
Customer relations	0.658			
Technology transfer	0.640			
Communication	0.575			
R&D	0.523			
Factor 3: Organization Structure		8.642	0.760	4
Organization structure	0.777			
Rigid and planned change process	0.764			
System	0.704			
Organization culture	0.643			
Factor 4: Acquisition & Divestiture		8.324	0.698	3
Buy subsidiaries	0.840			
Acquisition	0.813			
Divestiture	0.493			
Factor 5: Alliances		6.136	0.620	3
Alliances	0.761			
Alliances with competitors	0.676			
Mergers	0.523		0.609	2
Factor 6: Restructuring		5.574		
Restructuring	0.597			
Increase share value	0.472			
Total variance explained (%)		65.929		
Scale's Cronbach alpha			0.920	29

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.892
Bartlett's Test of Sphericity	Approx. Chi-Square	3014.866
	df	406.000
	Sig.	0.000

6.1.2. Multifactor Leadership Questionnaire

Considering previous research on MLQ where there is an argument on components as several authors were not able to replicate the MLQ model proposed and confirmed by Bass (Avolio & Bass, 1999; Yukl, 1994) we planned to perform the factor analysis using all items of the questionnaire together as one scale. We started with performing a reliability analysis using 36 items of the questionnaire. The reliability was high above 0.70 limit therefore it seemed we could directly continue with factor analysis. Yet when we analysed corrected item– total correlation scores, we realized that some items were negatively correlated with the scale and some of them had almost no relation at all (See Appendix IX)

These problem items were laissez faire and transactional leadership questions mainly. For that reason we concluded actually there existed more than one scale. So we performed analysis separately for each scale.

6.1.2.1. Transformational Leadership Scale

Transformational leadership scale has 20 items and its Cronbach α value was 0.937. Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.932 and Bartlett's Test of Sphericity was significant by 0.000. As a result of the Principle component analysis we found three factors instead of five as Bass and Avolio's (Table 12). In our analysis there were no two types of "inspirational motivation" but only one and "intellectual stimulation" was not a separate dimension instead its items were scattered between three factors. We used same labels used by Bass & Avolio, as we believe they represent items well. In Table 12 original labels of the items are also given in parentheses so readers can compare our result with the original. Reliabilities of factors and the total scale were high (α=0.886; α=0.873; α=0.792; α=0.937 respectively). Variance explained by factors was 61.58 %.

Table 12:Transformational Scale – Reliability and Factor Analyses

Items	Factor loadings	Variance explained	Cronbach alpha	Number of items
Factor 1: Inspirational motivation		23.203	0.886	7
Talks enthusiastically about what needs to be accomplished (IM)	0.827			
Specifies the importance of having a strong sense of purpose (IIB)	0.736			
Emphasizes the importance of having a collective sense of mission (IIB)	0.718			
Expresses his/her confidence that we will achieve our goals (IM)	0.641			
Suggests new ways of looking at how we do our jobs (IS)	0.564			
Focuses me on developing my strengths (IC)	0.501			
Talks optimistically about the future (IM)	0.500			
Factor 2: Idealized influence		22.554	0.873	7
I have pleasure in working with him[4] (IIA)	0.822			
His/her actions build my respect for him/her (IIA)	0.756			
Considers the moral and ethical consequences of his/her decisions (IIB)	0.699			
Re-examines critical assumptions to question whether they are appropriate (IS)	0.661			
Displays a sense of power and confidence (IIA)	0.638			
Goes beyond his/her own self-interest for the good of our group (IIA)	0.561			
Seeks differing perspectives when solving problems (IS)	0.466			
Factor 3: Individualized consideration		15.821	0.792	6
Articulates a compelling vision of the future (IM)	0.703			
Treats me as an individual rather than just a member of a group (IC)	0.588			
Gets me to look at problems from many different angles (IS)	0.569			
Treats each of us as individuals with different needs, abilities, and aspirations (IC)	0.568			
Spends time teaching and coaching (IC)	0.535			
Talks to us about his/her most important values and beliefs (IIB)	0.517			
Total variance explained (%)		61.578		
Scale's Cronbach alpha			0.937	20
Kaiser-Meyer-Olkin Measure of Sampling Adequacy			0.932	
Bartlett's Test of Sphericity	Approx. Chi-Square		2613.068	
	df		190.000	
	Sig.		0.000	

The abbreviations in parentheses refer to the original MLQ scale: IIA (Idealized Influence–attitude), : IIB (Idealized Influence–behavior), IM (Inspirational Motivation), IS (Intellectual Stimulation), IC (Individualized Consideration)

[4] In original questionnaire "Instils pride in being associated with him" see p. 51 for explanation.

6.1.2.2. Transactional leadership scale

Transactional leadership scale has 12 items and it's reliability was very low (α=0.495) and items were inconsistent with each other yet we performed factor analysis and found four factors ((KMO=0.816; Significance of Bartlett test=0.000). 4th factor included only one item, which means actually that was not a component. When we removed that item, which was " Spends his/her time looking to put out fires" we were left with three factors same with Bass & Avolio's (Table 13). Consequently we performed reliability analysis. The score of the second factor (management by exception passive active) was less than 0.70. Therefore we did not include that dimension in our further analyses. The low reliability score of the total scale, which didn't improve even when we deleted items of the second factor (α=0.443) can be explained by looking at the factors. Those two dimensions represent two opposite behaviors. In one dimension leader praises his employees when they perform well, but in the other leader does not intervene unless employee makes a mistake. As a result in our further analyses we did not use the total score of transactional leadership as one higher order component, but use the factors separately.

6.1.2.3. Laissez–faire scale

Laissez–faire scale has four items and when we performed factor analysis we found only one component. It had a reliability of 0.817 (Table 14).

Table 13 :Transactional Scale – Reliability and Factor Analyses

Items	Factor loadings	Variance explained	Cronbach alpha	Number of items
Factor 1:Contingent reward		27.889	0.829	4
Provides his/her assistance in exchange for my effort (CR)	0.823			
Makes sure that we receive appropriate rewards, for achieving performance targets (CR)	0.809			
Makes clear what I can expect to receive, if my performance meets designated standards (CR)	0.777			
Expresses his/her satisfaction when I do a good job (CR)	0.755			
Factor 2:Management by exception (P)		20.529	0.748	4
Shows he/she is a firm believer in "If it ain't broke, don't fix it" (MEP)	0.797			
Problems must become chronic before he/she will take action (MEP)	0.788			
Fails to intervene until problems become serious (MEP)	0.716			
Things have to go wrong for him/her to take action (MEP)	0.598			
Factor 3:Management by exception (A)		13.893	0.450	3
Keeps track of my mistakes (MEA)	0.742			
Directs his/her attention toward failure to meet standards (MEA)	0.729			
Focuses attention on irregularities, mistakes, exceptions, and deviations from standards (MEA)	0.549			
Total variance explained (%)		62.311		
Scale's Cronbach alpha			0.495	12
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.816		
Bartlett's Test of Sphericity	Approx. Chi-Square	770.675		
	df	55.000		
	Sig.	0.000		

The abbreviations in parentheses refer to the original MLQ scale: CR (Contingent Reward), MEA (Management by Exception–Active), MEP (Management by Exception–Passive)

Table 14: Laissez-faire – Reliability Analysis

Items	Cronbach alpha	Number of items
Laissez-faire		
Avoids getting involved when important issues arise		
Is absent when needed		
Avoids making decisions		
Delays responding to urgent questions		
Scale's Cronbach alpha	0.817	4

6.1.3. Summary of Reliability and Factor Analyses

We eliminated items that decreased reliability of scales by the help of Cronbach's α and grouped our large number of variables into new variables called factors by Principle Component Method of Factor Analysis. From this point forward these new variables will be used in our analyses. There is a summary of new factors and the number of items they consisted of in Figures 13 &1 4.

SCALE	FACTORS	# of ITEMS
Transformational Leadership	F1 Inspirational motivation	7
	F2 Idealized influence	7
	F3 Individualized consideration	6
Transactional Leadership	F1 Contingent reward	4
	F2 Management by exception–Passive	4
Laissez faire		4

Figure 13: Factors of Multifactor Leadership Questionnaire

SCALE	SUBSCALE	FACTOR	# of ITEMS
FORCES		F1 Organizational	9
		F2 Business Inputs	5
		F3 Competition	4
		F4 Laws & Regulations	2
		F5 Pressure Groups	2
NO CHANGE	CONTENTMENT	F1 Market Position & HR Qualification	11
		F2 Interaction between Departments	2
		F3 Technology	2
	COMPLETION		1
	RESISTANCE		2
PROACTIVE STRATEGY		F1 Value Added	9
		F2 Riskiness	3
MEANS	IMITATION		4
	BENCHMARKING		4
	IMPROVEMENT	F1 Guidance & Control	5
		F2 Human Resource Quality	2
		F3 Product & Services	3
	CREATIVITY		4
ENDS		F1 Employee Development	7
		F2 Efficiency	10
		F3 Organization Structure	4
		F4 Acquisition & Divestiture	3
		F5 Alliances	3
		F6 Restructuring	2

Figure 14: Factors of Organizational Change Questionnaire

6.2. Correlation Analyses

In order to determine if there were any correlations between scales Pearson Correlation Coefficient analyses were conducted.

6.2.1. Correlation between Scales of Change Questionnaire

When we determined the relation between scales of change we found a positive weak correlation between forces and means scales ($r=0.182$, $p=0.022$, $\alpha=0.05$); positive moderate correlation between no change and proactive strategy ($r=0.613$, $p=0.000$, $\alpha=0.01$), and positive weak correlation between no change and means ($r=0.365$, $p=0.000$,$\alpha=0.01$). There was also a weak positive correlation between strategy and means($r=0.436$, $p=0.000$, $\alpha=0.01$), and weak positive correlation between means and ends ($r=0.378$, $p=0.000$, $\alpha=0.01$). See Table 15.

6.2.2. Correlation between Scales of MLQ

Laissez faire had moderate positive correlation with management by exception and moderate negative correlation with idealized influence ($r=0.665$, $p=0.000$, $\alpha=0.01$; $r= -0.501$, $p=0.000$, $\alpha=0.01$). Laissez faire leadership style also had negative low correlations with contingent reward, inspirational motivation and idealized influence ($r= -0.390$, $p=0.000$, $\alpha=0.01$; $r= -0.433$, $p=0.000$. $\alpha=0.01$; $r= -0.271$, $p=0.000$, $\alpha=0.01$). Contingent reward had negative low correlation with management by exception and positive high correlations with inspirational motivation, idealized influence and individualized consideration ($r= -0.335$, $p= 0.000$, $\alpha=0.01$; $r= -0.830$, $p=0.000$, $\alpha=0.01$; $r= -0.0751$, $p=0.000$, $\alpha=0.01$; $r= -0.719$, $p=0.000$ $\alpha=0.01$ respectively). These results supported our decision to use dimensions instead of scales transformational and transactional leadership in our analyses. Contingent reward being a part of transactional leadership would be expected to have positive relation with management by exception whereas our findings are just in the opposite direction. Management by exception had

low negative correlations with inspirational motivation, idealized influence and individualized consideration just as it had with contingent reward (r= –0.339, p= 0.000, α=0.01; r= –0.329, p=0.000, α=0.01; r= –0.216, p=0.001, α=0.01 respectively). Inspirational motivation had positive high relations with idealized influence and individualized consideration (r=0.770, p=0.000, α=0.01; r=0.737, p=0.000, α=0.01) and idealized influence and individualized consideration had moderate positive correlation (r=0.673, p=0.000, α=0.01). See Table 16.

Table 15: Correlation between Scales of Change Questionnaire

	Forces	No Change	Proactive Strategy	Means	Ends
Forces	1.000				
No Change	-0.088	1.000			
Proactive Strategy	-0.007	0.613**	1.000		
Means	0.182*	0.365**	0.436**	1.000	
Ends	0.119	0.092	0.132	0.378**	1.000

* p < 0.05
** p < 0.01

Table 16: Correlation between Scales of MLQ

	laissez faire	contingent reward	management by exception	inspirational motivation	idealized influence	individualized consideration
laissez faire	1.000					
contingent reward	-0.390**	1.000				
management by exception	0.665**	-0.335**	1.000			
inspirational motivation	-0.433**	0.830**	-0.339**	1.000		
idealized influence	-0.501**	0.751**	-0.329**	0.770**	1.000	
individualized consideration	-0.271**	0.719**	-0.216**	0.737**	0.673**	1.000

* p < 0.05
** p < 0.01

Table 17: Correlation between Scales of Change Questionnaire and MLQ

	laissez faire	contingent reward	management by exception	inspirational motivation	idealized influence	individualized consideration
Forces	0.175*	-0.016	0.087	-0.031	-0.053	0.078
No Change	-0.173*	0.271**	-0.064	0.376**	0.402**	0.206**
***Proactive* Strategy**	-0.270**	0.353**	-0.170*	0.517**	0.413**	0.301**
Means	-0.109	0.293**	-0.015	0.429**	0.298**	0.248**
Ends	-0.148	0.056	-0.127	0.120	0.112	-0.011

* $p < 0.05$
** $p < 0.01$

6.2.3. Correlation between Scales of Change Questionnaire and MLQ

When we examined relation between change and leadership scales we found that laissez faire leadership style had weak positive correlation with forces and weak negative correlation with no change and proactive strategy ($r=0.175$, $p=0.019$, $\alpha=0.05$; $r= -0.173$, $p=0.015$, $\alpha=0.05$; $r= -0.270$, $p=0.000$, $\alpha=0.01$ respectively). Contingent reward had positive weak correlations with no change, proactive strategy, and means ($r=0.271$, $p=0.000$, $\alpha=0.01$; $r= 0.353$, $p=0.000$, $\alpha=0.01$; $r= 0.293$, $p=0.000$, $\alpha=0.01$ respectively). Management by exception had negative low correlation with proactive strategy at 95 % confidence interval with correlation coefficient $r= -0.170$. Inspirational motivation had moderate positive correlation with proactive strategy and low positive correlations with no change and means ($r=0.517$, $p=0.000$, $\alpha=0.01$; $r=0.376$, $p=0.000$, $\alpha=0.01$; $r=0.429$, $p=0.000$, $\alpha=0.01$ respectively). Both idealized influence and individualized consideration had low positive correlations with no change, proactive strategy, and means ($r=0.402$, $p=0.000$, $\alpha=0.01$; $r=0.413$, $p=0.000$, $\alpha=0.01$; $r=0.298$, $p=0.000$, $\alpha=0.01$ ($r=0.206$, $p=0.004$, $\alpha=0.01$; $r=0.301$, $p=0.000$, $\alpha=0.01$; $r=0.248$, $p=0.001$, $\alpha=0.01$ respectively). See Table 17.

6.2.4. Correlation between Factors

As a further analysis Pearson Correlations between all factors were performed. A table of all significant results can be found in Appendix X. In the following section we took into consideration at least moderately correlated ($r \leq 0.50$) significant results (Tables 18-21).

6.2.4.1. Correlation between proactive strategy and no change

As previously stated the highest correlation between scales was between proactive strategy and no change($r=0.613$). This correlation coefficient was actually a result of the correlation between value creation factor of proactive strategy and contentment factor of no change ($r=0.696$, $p=0.000$, $\alpha=0.01$). A deeper analysis with sub factors of contentment shows that there was a moderate positive relation between contentment's market position & HR qualifications factor and value creation ($r=0.652$, $p=0.000$) and interaction between departments and value creation ($r=0.539$, $p=0.000$).

Table 18: Correlation Between No Change And Other Factors

No Change Factors	Pearson Correlation Coefficient	Other Factors
Contentment	0.696**	Value Creation PS
Market position & HR qualification	0.652**	Value Creation PS
No Change §	0.651**	Value Creation PS
Contentment	0.650**	Proactive Strategy
Contentment	0.640**	Imitation M
Market position & HR qualification	0.630*	Imitation M
No Change	0.613**	Proactive Strategy §
No Change	0.611**	Imitation M
Market position & HR qualification	0.588**	Proactive Strategy
Interaction between departments	0.539**	Value Creation PS
Interaction between departments	0.524**	Proactive Strategy
Market position & HR qualification	0.504**	Idealized influence L
Contentment	0.490**	Benchmarking M

§ scale total
* p < 0.05
** p < 0.01

PS: Proactive Strategy
M: Means
L: Leadership

6.2.4.2. Correlation between no change and means

Contentment also had moderate positive correlation with imitation and just on the limit to have moderate positive correlation with benchmarking (r=0.640, p=0.000; r=0.490, p=0.000 respectively). Contentment with market position & HR qualification had again positive moderate correlation with imitation. (r=0.630, p=0.000). Actually imitation and benchmarking had a moderate positive correlation at 0.01 significance level (r=0.662, p= 0.000).

Table 19: Correlation Between Proactive Strategy And Other Factors

Proactive Strategy Factors	Pearson Correlation Coefficient	Other Factors
Value Creation	0.696**	Contentment NC
Value Creation	0.652**	Content with Market position & HR qualification NC
Value Creation	0.651**	No Change §
Proactive Strategy §	0.650**	Contentment NC
Proactive Strategy	0.613**	No Change
Value Creation	0.590**	Imitation M
Proactive Strategy	0.588**	Content with Market position & HR qualification NC
Value Creation	0.553**	Inspirational motivation L
Value Creation	0.539**	Content with Interaction between departments NC
Proactive Strategy	0.525**	Benchmarking M
Proactive Strategy	0.524**	Content with Interaction between departments NC
Value Creation	0.522**	Benchmarking M
Proactive Strategy	0.521**	Imitation M
Proactive Strategy	0.517**	Inspirational motivation L
Value Creation	0.492**	Idealized influence L

§ scale total
* p < 0.05
** p < 0.01

NC: No Change
M: Means
L: Leadership

6.2.4.3. Correlation between proactive strategy and means

Proactive strategy and two means of change, imitation and benchmarking had significant positive correlation (r=0.521, p=0.000, α=0.01; r=0.525, p=0.000, α=0.01). These moderate relations were mainly a result of the value creation factor as value creation had moderate correlations with imitation and benchmarking (r=0.590, p=0.000, α=0.01; r=0.521, p=0.000, α=0.01 respectively).

Table 20: Correlation Between Means And Other Factors

Means Factors	Pearson Correlation Coefficient	Other Factors
Imitation	0.640**	Contentment NC
Imitation	0.630**	Content with Market position & HR qualification NC
Imitation	0.611**	No Change §
Imitation	0.590**	Value Creation PS
Benchmarking	0.525**	Proactive Strategy
Benchmarking	0.522**	Value Creation PS
Imitation	0.521**	Proactive Strategy
Benchmarking	0.490**	Contentment NC

§ scale total
NC: No Change
* p < 0.05
PS: Proactive Strategy
** p < 0.01

6.2.4.4. Correlation between Leadership and Change (Strategy and Means)

Inspirational motivation and idealized influence leadership styles were too moderately correlated with value creation factor of proactive strategy (r=0.533, p=0.000, α=0.01; r=0.492, p=0.000, α=0.001). Idealized influence also had positive moderate correlation with contentment's market position & HR qualification at 99 % confidence interval with a correlation coefficient of r=0.504.

Table 21: Correlation Between Leadership And Other Factors

Leadership Factors	Pearson Correlation Coefficient	Other Factors
Inspirational motivation L	0.553**	Value Creation
Inspirational motivation L	0.517**	Proactive Strategy §
Idealized influence L	0.504**	Content with Market position & HR qualification
Idealized influence L	0.492**	Value Creation

§ scale total
* p < 0.05
** p < 0.01

6.3. Multiple Regression

Depending on our change model we constructed three hypotheses.

First hypothesis is that forces of change can explain changes in the ends scale. If there were no or few change forces, then expected change/ends would also be none or less

A second factor that would affect ends is no change. Even if there may be forces to change if resistance exists, change may not occur in the expected amount or if completion or contentment exists change may not be perceived or found to be necessary (Figure 15).

Second hypothesis is proactive strategy will be influenced by forces and leadership styles. In an environment where there is a lot of change forces change applied by an organization would be more of a reactive kind therefore proactive strategy would be applied less by organizations facing high change forces. If leaders' style were more transformational they would implement more proactive strategy as these kinds of leader favor change and they would be more alert to environment to take their positions before change forces strengthen (Figure 16).

Third hypothesis is that if a change is going to be implemented, leaders' style and strategy of the organization will effect means of change that will be used. Where there is

proactive strategy and/or transformational leadership is more creativity will be used more. Where there is adaptive strategy and/or transactional leadership is more imitation, benchmarking and improvement will be used more (Figure 17).

To test our hypotheses we used multiple regression analysis. Analyses are performed in two stages. First dependent variables ends, proactive strategy and means are taken as total scores then analyses are repeated for each of their dimensions.

Assumptions of multiple regression states there should be linearity between dependent and independent variables; no multicollinearity and no autocorrelation and multiple correlation coefficient and independent variables should have significant contributions (regression coefficients).

Linearity assumption in other words correlation coefficient between dependent and independent variable should be at least 0.70 is the only assumption that was tolerated in this research.

There was no risk of multicollinearity as none of the independent variables had significant high correlations with each other. To test autocorrelation Durbin–Watson test was used.

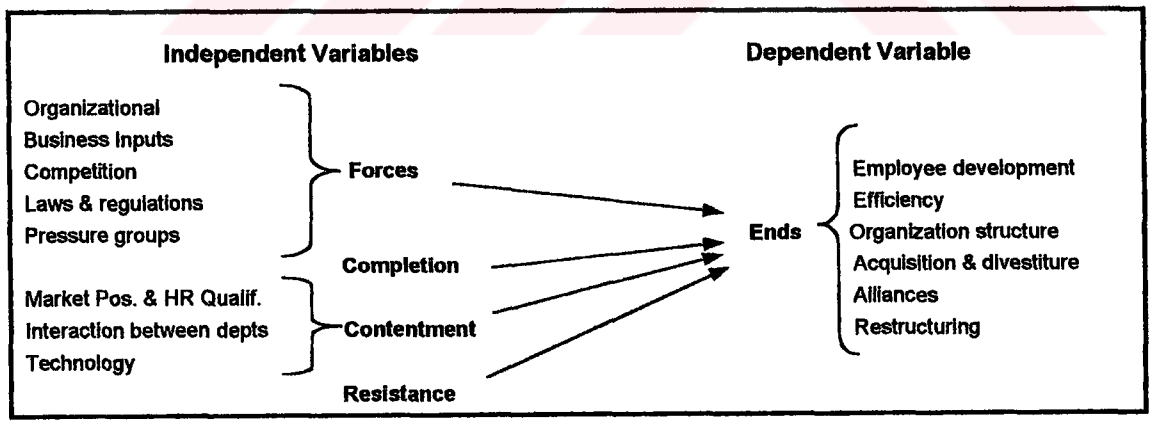

Figure 15: Multiple Regression model for ends scale

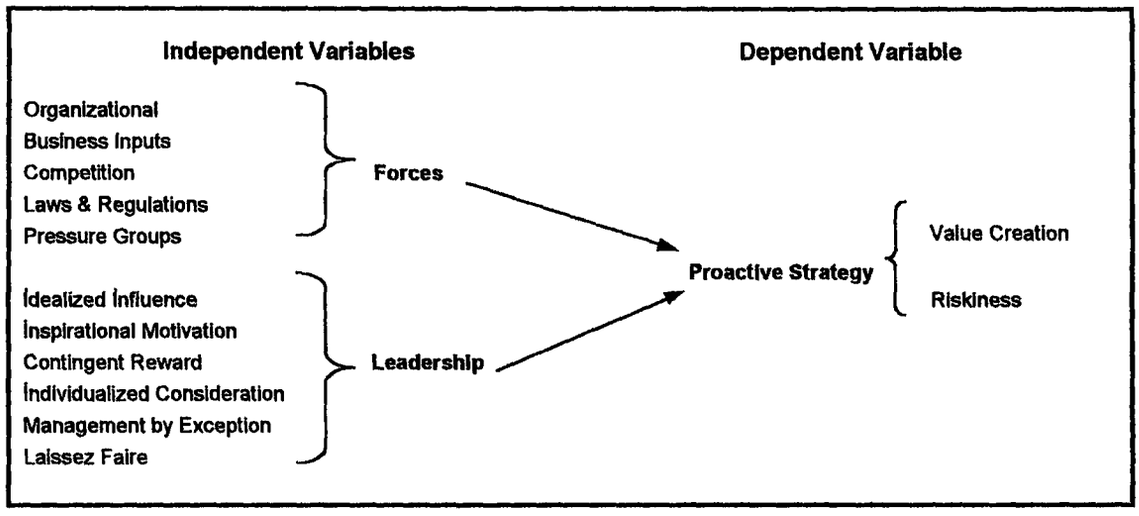

Figure 16: Multiple Regression Model for Strategy Scale

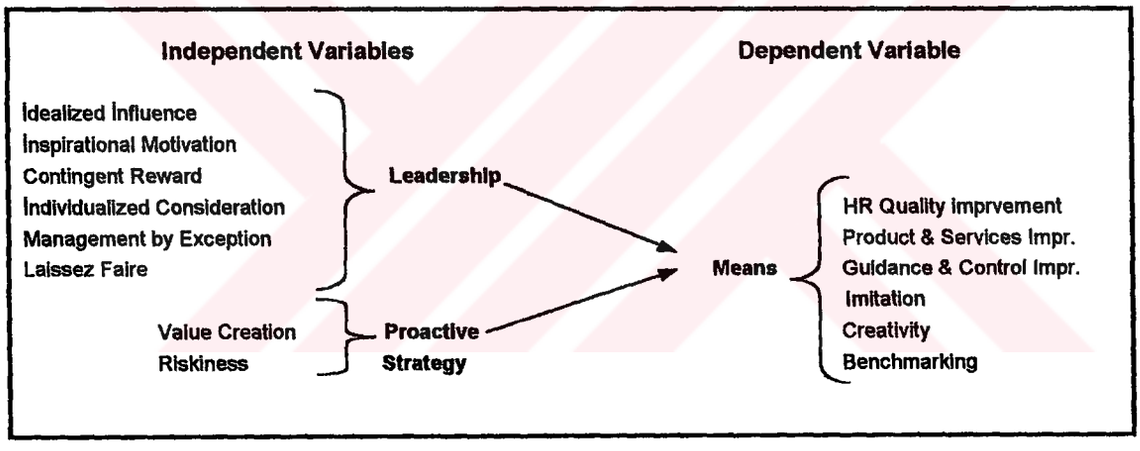

Figure 17: Multiple Regression model for means scale

6.3.1. Multiple Regression model for ends scale

When we conducted analyses for our ends model (Figure 15) we obtained only three significant results that supported multiple regression assumptions (Table 22).

Organizational structure dimension of ends had moderate positive correlation with organizational forces, business inputs, and laws and regulations (r=0.501, F=19.649,

p=0.000, DW=1.997) where organizational forces had the highest contribution (β=0.399). Business inputs had a negative contribution (β= –0.275) meaning decrease in the degree of business inputs forces will result in increase in the organizational structure change. Laws & regulations had positive correlation with β=0.273.

Acquisitions & divestiture dimension of ends had weak positive correlation with competition and laws & regulations (r=0.345, F=13.795, p=0.000, DW=1.923). Competition's contribution was negative and lower than laws and regulations' (β= – 0.163, β=0.382 respectively).

Table 22: Multiple Regression significant results for ends scale

Independent Variables		Dependent Variables	
	β coefficients		
Organizational Forces Business Inputs Laws & Regulations	0.399 – 0.275 0.273	Organization structure	r=0.501 F=19.649 p= 0.000 Durbin-Watson: 1.997
Competition Laws & Regulations	– 0.163 0.382	Acquisition & divestiture	r=0.345 F=13.795 p= 0.000 Durbin-Watson: 1.923
Laws & Regulations	0.268	Restructuring	r=0.268 F=15.195 p= 0.000 Durbin-Watson: 1.851

Restructuring dimension of ends had weak positive correlation with laws & regulations (r=0.268, F=15.195, p=0.000, DW=1.851, β=0.268).

Ends as total score was not explained significantly by independent variables as assumed so as the other three dimensions of ends scale.

6.3.2. Multiple Regression model for proactive strategy scale

When multiple regression analyses were conducted for our proactive strategy model (Figure 16) only one significant result was found (Table 23).

Idealized influence and organizational forces explained riskiness at 99 % confidence interval (r=0.422, F=20.095, p=0.000, DW=1.897) β coefficients for idealized influence and organizational forces were –0.358 and 0.178.

Table 23: Multiple Regression significant results for strategy scale

Independent Variables		Dependent Variables	
	β coefficients		r=0.422 F=20.095 p= 0.000
Idealized influence	– 0.358	Riskiness	
Organizational forces	0.178		Durbin-Watson: 1.897

6.3.3. Multiple Regression model for means scale

When we conducted analyses for our means model (Figure 17) we obtained only two significant results that supported multiple regression assumptions (Table 24).

Inspirational motivation, management by exception, value creation and riskiness had strong positive correlation with benchmarking (r=0.600, F=25.388, p=0.000, DW=1.885) where value creation had the highest contribution (β=0.407). Inspirational motivation, management by exception, riskiness had contributions of 0.352, 0.192, 0.149 respectively.

Riskiness and value creation explain creativity at 99 % confidence interval (r=0.323, F=11.899, p=0.000, DW=1.805) β coefficients for riskiness and value creation were 0.147 and 0.342.

Table 24: Multiple Regression significant results for means scale

Independent Variables		Dependent Variables	
	β coefficients		
Insp. motivation	0.352	benchmarking	r=0.600 F=25.388 p= 0.000
mgt by exception	0.192		
Value creation	0.407		Durbin-Watson: 1.885
Riskiness	0.149		
Riskiness	0.147	creativity	r=0.323 F=11.899 p= 0.000
Value creation	0.342		Durbin-Watson: 1.805

6.4. Independent sample t–test

Up to this point all of our analyses consisted of our sample as a whole. But there may be some differences between superiors and subordinates perceptions of their organizations. Therefore independent sample t-tests are performed to see if any difference existed.

6.4.1. Independent sample t–test for Change Questionnaire

There is no significant difference between the way subordinates and superiors perceive forces, proactive strategy, means and ends at 95% confidence interval (Table 25). But there is a difference in the way they perceive no change scale (t= – 4.421, p=0.000). Superiors wanted to change more than their subordinates whose no change scores were higher ($mean_{sup}$=64.732, $mean_{sub}$=72.241 respectively).

When we further analyzed dimensions of change scales we found a significant difference in resistance, completion, and contentment of no change scale (t= – 2.905, p=0.004; t= –2.913, p=0.004; t= –3.419, p=0.001 respectively). Subordinates resist

Table 25: Independent sample t–test for Change Questionnaire

		N	Mean	Std. Dev.		t	p
Forces	superior	36	74.222	17.178	Equal variances assumed	0.666	0.506
	subordinate	147	71.844	19.650	Equal variances not assumed	0.723	0.472
	Levene's Test for Equality of Variances				**F** 1.133	**p** 0.288	
		N	**Mean**	**Std. Dev.**		**t**	**p**
No Change	superior	41	64.732	9.116	Equal variances assumed	-3.731	0.000
	subordinate	170	72.241	12.075	Equal variances not assumed	-4.421	0.000
	Levene's Test for Equality of Variances				**F** 4.913	**p** 0.028	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Proactive Strategy	superior	39	45.821	8.344	Equal variances assumed	-0.531	0.596
	subordinate	176	46.551	7.640	Equal variances not assumed	-0.502	0.618
	Levene's Test for Equality of Variances				**F** 1.064	**p** 0.304	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Means	superior	37	92.027	12.805	Equal variances assumed	0.283	0.777
	subordinate	158	91.418	11.517	Equal variances not assumed	0.265	0.792
	Levene's Test for Equality of Variances				**F** 0.466	**p** 0.495	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Ends	superior	33	124.697	18.609	Equal variances assumed	-0.274	0.785
	subordinate	142	125.754	20.270	Equal variances not assumed	-0.289	0.774
	Levene's Test for Equality of Variances				**F** 1.029	**p** 0.312	

Table 26: Independent sample t–test significant results for dimensions of change

		N	Mean	Std. Dev.		t	p
Resistance	superior	44	4.841	2.022	Equal variances assumed	-2.905	0.004
	subordinate	205	5.976	2.414	Equal variances not assumed	-3.257	0.002
	Levene's Test for Equality of Variances				**F** 1.118	**p** 0.291	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Completion	superior	44	2.091	1.411	Equal variances assumed	-2.913	0.004
	subordinate	206	2.791	1.455	Equal variances not assumed	-2.972	0.004
	Levene's Test for Equality of Variances				**F** 0.036	**p** 0.849	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Content-ment	superior	41	57.878	9.155	Equal variances assumed	-2.835	0.005
	subordinate	174	63.736	12.450	Equal variances not assumed	-3.419	0.001
	Levene's Test for Equality of Variances				**F** 6.704	**p** 0.010	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Content w/ Mrkt posi. & HR qual.	superior	43	42.233	6.593	Equal variances assumed	-3.578	0.000
	subordinate	178	47.826	9.717	Equal variances not assumed	-4.505	0.000
	Levene's Test for Equality of Variances				**F** 10.776	**p** 0.001	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Creativity	superior	43	17.023	3.851	Equal variances assumed	3.221	0.001
	subordinate	190	14.658	4.451	Equal variances not assumed	3.529	0.001
	Levene's Test for Equality of Variances				**F** 0.635	**p** 0.426	

more than their superiors; think more that their organizations completed change than their superiors; and feel more content than their superiors. See Table 26.

Difference in the contentment was a result of difference found in contentment with market position & HR quality (t= – 4.505, p=0.000) where again subordinates are more content ($mean_{sup}$=42.233, $mean_{sub}$=47.856)

Although there was no significant difference in the way superiors and subordinates perceive means of change, there was a significant difference in the way they perceive creativity dimension at 99% confidence interval (t=3.221, p=0.001). Superiors' creativity scores were higher than subordinates' ($mean_{sup}$=17.023, $mean_{sub}$ =14.658 respectively).

6.4.2. Independent sample t–test for MLQ

In leadership scale we conducted t–tests to see whether subordinates perceive their superiors' leadership styles as superiors perceive their own leadership styles. We found significant differences in all dimensions except idealized influence (Table 27). Superiors see themselves as having less laissez faire style and less management by exception style than their subordinates (t= –2.772, p=0.006, $mean_{sup}$=5.976, $mean_{sub}$=6.974; t= –2.607, p=0.010, $mean_{sup}$=7.500, $mean_{sub}$=9.073).

Thus superiors see themselves as having more contingent reward, inspirational motivation and idealized consideration styles than their subordinates (t= 6.073, p=0.000, $mean_{sup}$=17.244, $mean_{sub}$=14.854; t=4.789, p=0.000, $mean_{sup}$=30.350, $mean_{sub}$=27.503; t= 7.582, p=0.000, $mean_{sup}$=25.390, $mean_{sub}$=21.208).

Table 27: Independent sample t–test for MLQ

		N	Mean	Std. Dev.		t	p
Laissez Faire	superior	42	5.976	1.718	Equal variances assumed	-1.849	0.066
	subordinate	195	6.974	3.403	Equal variances not assumed	-2.772	0.006
	Levene's Test for Equality of Variances				**F** 16.422	**p** 0.000	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Contingent Reward	superior	41	17.244	1.700	Equal variances assumed	3.727	0.000
	subordinate	192	14.854	4.025	Equal variances not assumed	6.073	0.000
	Levene's Test for Equality of Variances				**F** 32.926	**p** 0.000	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Manage-ment by exception	superior	42	7.500	3.078	Equal variances assumed	-2.607	0.010
	subordinate	191	9.073	3.632	Equal variances not assumed	-2.898	0.005
	Levene's Test for Equality of Variances				**F** 1.366	**p** 0.244	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Inspira-tional motivation	superior	40	30.350	2.713	Equal variances assumed	3.134	0.002
	subordinate	185	27.503	5.598	Equal variances not assumed	4.789	0.000
	Levene's Test for Equality of Variances				**F** 16.551	**p** 0.000	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Idealized influence	superior	38	28.868	2.016	Equal variances assumed	0.840	0.402
	subordinate	186	28.134	5.299	Equal variances not assumed	1.445	0.150
	Levene's Test for Equality of Variances				**F** 22.372	**p** 0.000	
		N	**Mean**	**Std. Dev.**		**t**	**p**
Individual-ized considera-tion	superior	41	25.390	2.691	Equal variances assumed	5.242	0.000
	subordinate	192	21.208	4.949	Equal variances not assumed	7.582	0.000
	Levene's Test for Equality of Variances				**F** 10.950	**p** 0.001	

6.5. Fisher's z-transformation

Previously in section 7.2 correlation coefficients between scales and dimensions were calculated. As we have two groups of respondents in our sample it is necessary to test if there were any differences between correlation coefficients of superiors and subordinates.

Difference between two population correlation coefficients is tested by Fisher's Z transformation. Information on Fisher's Z transformation can be found in appendix XI.

6.5.1. Fisher's Z Transformation for Change Questionnaire

The Z transformation results for the scales of change questionnaire are given in Table 28.

There was a significant difference between superiors and subordinates way of looking at the relation between forces and establishing alliances as an end of change process. Superiors are found to have higher correlation scores between forces and alliances than their subordinates (r_{sup}=0.543, r_{sub}=0.110, z=2.523, α=0.05). When we further analyzed we found out correlation between alliances with organizational force, competition, laws & regulations and pressure groups were all significantly higher for superiors (r_{sup}=0.480, r_{sub}=0.136, z=2.044, α=0.05; r_{sup}=0.418, r_{sub}=0.043, z=2.215, α=0.05; r_{sup}=0.555, r_{sub}=0.145, z=2.637, α=0.01; r_{sup}=0.490, r_{sub}=0.164, z=2.037, α=0.05).

Correlation coefficients of organizational force and proactive strategy and organizational force and value creation of proactive strategy were positive for the superiors and contrary to that, negative for the subordinates (r_{sup}=0.313, r_{sub}= –0.158, z=2.515, α=0.05; r_{sup}=0.229, r_{sub}= –0.198, z=2.254, α=0.05).

Relation between business inputs and imitation was also higher for the superiors than subordinates (r_{sup}=0.426, r_{sub}=0.065, z=2.115, α=0.05).

In subordinates scores there were higher correlations between no change and means, and no change and benchmarking (r_{sup}= –0.041, r_{sub}=0.502, z=2.667, α=0.01; r_{sup}=0.142, r_{sub}=0.502, z=2.204, α=0.05).

Table 28: Fisher's Z Transformation significant results for Change Questionnaire

Correlation between		r	n	Z	Test statistic
Forces § & Alliances E	superior	0.543	35	0.608	2.535*
	subordinate	0.110	142	0.111	
Organizational Force F & Proactive Strategy §	superior	0.313	36	0.324	2.515*
	subordinate	-0.158	154	-0.159	
Organizational Force F & Value Creation PS	superior	0.229	36	0.233	2.254*
	subordinate	-0.198	155	-0.200	
Organizational Force F & Alliances E	superior	0.480	37	0.523	2.044*
	subordinate	0.136	159	0.136	
Business Inputs F & Imitation M	superior	0.426	39	0.455	2.115*
	subordinate	0.065	161	0.065	
Competition F & Alliances E	superior	0.418	40	0.445	2.215*
	subordinate	0.043	173	0.043	
Laws & regulations F & Alliances E	superior	0.555	40	0.625	2.637**
	subordinate	0.145	168	0.146	
Pressure groups F & Alliances E	superior	0.490	40	0.536	2.037*
	subordinate	0.164	166	0.165	
No Change § & Means §	superior	-0.041	34	-0.041	2.667**
	subordinate	0.455	138	0.490	
No Change § & Benchmarking M	superior	0.142	39	0.143	2.204*
	subordinate	0.502	154	0.552	
No Change § & Alliances E	superior	0.214	39	0.217	2.155*
	subordinate	-0.182	149	-0.184	
Resistance NC & Value Creation PS	superior	-0.148	40	-0.149	2.052*
	subordinate	-0.478	174	-0.521	
Resistance NC & Imitation M	superior	0.067	42	0.067	2.982**
	subordinate	-0.430	183	-0.460	
Contentment NC & Means §	superior	0.021	34	0.021	2.636**
	subordinate	0.497	140	0.545	
Contentment NC & Benchmarking M	superior	0.208	39	0.211	2.071*
	subordinate	0.533	158	0.594	
Contentment NC & Alliances E	superior	0.193	39	0.196	2.133*
	subordinate	-0.198	152	-0.200	

* α=0.05
** α=0.01

E: Ends
F: Forces
PS: Proactive Strategy

M: Means
NC: No Change
§: scale total

Also when means and benchmarking increased in the environment subordinates contentment increased too (r_{sup}=0.021, r_{sub}=0.497, z=2.636, α=0.01; r_{sup}=0.208, r_{sub}=0.533, z=2.071, α=0.05).

Table 28: Fisher's Z Transformation significant results for Change Questionnaire - Continued

Correlation between		r	n	Z	Test statistic
Proactive Strategy § & Employee development E	superior	0.441	36	0.473	1.992*
	subordinate	0.091	159	0.092	
Proactive Strategy § & Organization structure E	superior	0.471	36	0.511	3.620**
	subordinate	-0.181	157	-0.183	
Proactive Strategy § & Alliances E	superior	0.411	37	0.437	2.881**
	subordinate	-0.108	158	-0.109	
Proactive Strategy § & Restructuring E	superior	0.420	34	0.448	2.214*
	subordinate	0.012	155	0.012	
Value Creation PS & Employee development E	superior	0.452	37	0.488	1.962*
	subordinate	0.116	160	0.117	
Value Creation PS & Organization structure E	superior	0.420	37	0.447	3.367**
	subordinate	-0.188	158	-0.190	
Value Creation PS & Alliances E	superior	0.368	38	0.386	2.625**
	subordinate	-0.105	159	-0.105	
Value Creation PS & Restructuring E	superior	0.410	35	0.436	2.167*
	subordinate	0.014	156	0.014	
Means § & Acquisition & divestiture E	superior	-0.217	35	-0.221	2.183*
	subordinate	0.202	149	0.205	
Imitation M & Alliances E	superior	0.365	40	0.383	1.987*
	subordinate	0.021	168	0.021	
Benchmarking M & Organization structure E	superior	0.289	40	0.297	2.121*
	subordinate	-0.089	165	-0.089	
Benchmarking M & Restructuring E	superior	0.492	39	0.539	2.387*
	subordinate	0.098	163	0.098	
Proactive Strategy § & Riskiness PS	superior	0.404	39	0.429	2.998**
	subordinate	-0.120	176	-0.120	
Value Creation PS & Riskiness PS	superior	0.117	39	0.117	3.152**
	subordinate	-0.430	176	-0.460	

* α=0.05
** α=0.01

E: Ends
F: Forces
PS: Proactive Strategy

M: Means
NC: No Change
§: scale total

As the no change score increased alliance expectation decreased for subordinates whereas the relation was positive for the superiors (r_{sup}=0.214, r_{sub}= –0.182, z=2.155, α=0.05). Likewise as the contentment score increased alliance expectation decreased for subordinates (r_{sup}=0.193, r_{sub}= –0.198, z=2.133, α=0.05).

Resistance and value creation had negative correlation for both groups but the correlation coefficient was higher for the subordinates (r_{sup}= –0.148, r_{sub}= –0.478, z=2.052, α=0.05).

As imitation in the environment increased resistance decreased for subordinates whereas the relation was positive for the superiors (r_{sup}=0.067, r_{sub}= –0.430, z=2.982, α=0.01).

Superiors have higher correlations of proactive strategy and dimensions of ends scale, employee development, organization structure, alliances, and restructuring than subordinates (r_{sup}=0.441, r_{sub}=0.091, z=1.992, α=0.05; r_{sup}=0.471, r_{sub}= –0.181, z=3.620, α=0.01; r_{sup}=0.411, r_{sub}= –0.108, z=2.881, α=0.01; r_{sup}=0.420, r_{sub}=0.012, z=2.214, α=0.05). Same relation was true for value creation too. There again superiors had higher correlations coefficients of value creation with employee development, organization structure, alliances, and restructuring than subordinates (r_{sup}=0.452, r_{sub}=0.116, z=1.962, α=0.05; r_{sup}=0.420, r_{sub}= –0.188, z=3.367, α=0.01; r_{sup}=0.368, r_{sub}= –0.105, z=2.625, α=0.01; r_{sup}=0.410, r_{sub}=0.014, z=2.167, α=0.05)

There was a significant difference between superiors and subordinates correlation coefficients for means and acquisitions and divestiture where superiors was negative and subordinates was positive (r_{sup}= –0.217, r_{sub}=0.202, z=2.183, α=0.05).

Correlation between imitation and alliances was higher for superiors than subordinates (r_{sup}=0.365, r_{sub}=0.021, z=1.987, α=0.05).

Relation between benchmarking and organization structure and benchmarking and restructuring were higher for the superiors than subordinates (r_{sup}=0.289, r_{sub}= –0.089, z=2.212, α=0.05; r_{sup}=0.492, r_{sub}=0.098, z=2.387, α=0.05).

Superiors had higher correlations between proactive strategy and its dimension riskiness and the correlation coefficient was positive, but subordinates coefficient was negative (r_{sup}= 0.404, r_{sub}= –0.120, z=2.98, α=0.01). The correlation between two dimensions of proactive strategy, riskiness and value creation is again negative for the subordinates whereas superiors coefficient was positive and low (r_{sup}=0.117, r_{sub}= –0.430, z=3.152, α=0.01).

6.5.2. Fisher's Z Transformation for MLQ

Fisher's Z transformations were also conducted to test the differences between superiors and subordinates perception to correlations between leadership scale dimensions. (See Table 29).

Correlation between laissez faire and management by exception styles were significantly different at 95% confidence interval and subordinates' correlation was more than superiors' (r_{sup}=0.381, r_{sub}=0.693, z=2.533, α=0.05).

There were significant differences in correlations between contingent reward and inspirational motivation, idealized influence, and individualized consideration. In all cases subordinates' correlations were higher than superiors' (r_{sup}=0.471, r_{sub}=0.838, z=3.838, α=0.01; r_{sup}=0.175, r_{sub}=0.780, z=4.631, α=0.01; r_{sup}=0.280, r_{sub}=0.720, z=3.428, α=0.01).

Correlations between inspirational motivation and idealized influence and inspirational motivation and individualized consideration styles were also significantly different and again subordinates' correlation were more than superiors' (r_{sup}=0.323, r_{sub}=0.791, z=3.937, α=0.01; r_{sup}=0.501, r_{sub}=0.736, z=2.162, α=0.05).

Table 29: Fisher's Z Transformation significant results for MLQ

Correlation between		r	n	Z	Test statistic
Laissez faire & Management by exception	superior	0.381	41	0.401	2.533*
	subordinate	0.693	185	0.853	
Contingent reward & Inspirational motivation	superior	0.471	39	0.512	3.838**
	subordinate	0.838	175	1.215	
Contingent reward & Idealized influence	superior	0.175	37	0.177	4.631**
	subordinate	0.780	177	1.045	
Contingent reward & Individualized consideration	superior	0.280	40	0.288	3.428**
	subordinate	0.720	182	0.907	
Inspirational motivation & Idealized influence	superior	0.323	37	0.335	3.937**
	subordinate	0.791	176	1.074	
Inspirational motivation & Individualized consideration	superior	0.501	40	0.551	2.162*
	subordinate	0.736	180	0.942	

* α=0.05

** α=0.01

6.5.3. Fisher's Z Transformation for Change Questionnaire vs MLQ

We also performed Fisher's Z transformations to test the differences between superiors and subordinates perception to correlations between change and leadership scale dimensions (See Table 30).

According to Z transformation results increase in the Laissez faire leadership style decreases creativity and acquisition and divestiture expectation in the subordinates, whereas correlations are positive for superiors (r_{sup}=0.169, r_{sub}= –0.269, z=2.501, α=0.05; r_{sup}=0.348, r_{sub}= –0.025, z=2.116, α=0.05).

Correlation between contingent reward and completion and contingent reward and improvement were significantly different for superiors and subordinates. Relation between contingent reward and completion was negative, and relation between contingent reward and improvement was positive for superiors and vice versa for subordinates (r_{sup}= –0.096, r_{sub}=0.259, z=2.029, α=0.05; r_{sup}=0.269, r_{sub}= –0.097, z=2.004, α=0.05).

Inspirational motivation and resistance had negative correlation for both groups but the correlation coefficient was higher for the subordinates (r_{sup}= –0.068, r_{sub}= –0.432, z=2.183, α=0.05). Inspirational motivation and riskiness and organizational structure had both negative correlations for subordinates and positive correlations for superiors (r_{sup}=0.189, r_{sub}= –0.327, z=2.866, α=0.01; r_{sup}=0.231, r_{sub}= –0.134, z=1.987, α=0.05).

Idealized influence's correlations with proactive strategy, value creation and riskiness all resulted with higher correlation coefficients for subordinates than superiors and correlation with riskiness was also negative (r_{sup}=0.079, r_{sub}=0.470, z=2.198, α=0.05; r_{sup}=0.076, r_{sub}=0.542, z=2.741, α=0.01; (r_{sup}=0.012, r_{sub}= –0.423, z=2.446, α=0.05).

Individualized consideration's correlations with riskiness, improvement were all positive for superiors and negative for subordinates and also superior correlations were higher (r_{sup}=0.226, r_{sub}= –0.184, z=2.281, α=0.05; r_{sup}=0.262, r_{sub}= –0.100, z=1.984, α=0.05).

6.6. Friedman two-way analysis of variance by ranks

We had performed Factor Analyses at the beginning of our study to all our scales and found out their factors. Yet finding out underlying factors is not enough to specify which factors are favored more by respondents and/or existed more than the others in respondents' environments. To search the difference between ratings given to factors Friedman two–way analysis of variance by ranks tests are conducted.

To perform the test first variables are reorganized and each variable is divided by the number of items it contained.

This step was necessary because variables with higher item numbers would get higher values not because they are rated high but simply because they have more items.

Table 30: Fisher's Z Transformation significant results for Change Questionnaire vs MLQ

Correlation between		r	n	Z	Test statistic
Laissez faire L & Creativity M	superior	0.169	41	0.171	2.501*
	subordinate	-0.269	182	-0.276	
Laissez faire L & Acquisition & divestiture E	superior	0.348	39	0.363	2.116*
	subordinate	-0.025	176	-0.025	
Contingent reward L & Completion NC	superior	-0.096	41	-0.096	2.029*
	subordinate	0.259	190	0.265	
Contingent reward L & Improvement M	superior	0.269	38	0.275	2.004*
	subordinate	-0.097	169	-0.097	
Inspirational motivation L & Resistance NC	superior	-0.068	40	-0.068	2.183*
	subordinate	-0.432	181	-0.462	
Inspirational motivation L & Riskiness PS	superior	0.189	38	0.191	2.866**
	subordinate	-0.327	179	-0.339	
Inspirational motivation L & Organization structure E	superior	0.231	38	0.235	1.987*
	subordinate	-0.134	165	-0.135	
Idealized influence L & Proactive Strategy §	superior	0.079	34	0.079	2.198*
	subordinate	0.470	163	0.510	
Idealized influence L & Value Creation PS	superior	0.076	35	0.076	2.741**
	subordinate	0.542	164	0.606	
Idealized influence L & Riskiness PS	superior	0.012	36	0.012	2.446*
	subordinate	-0.423	180	-0.452	
Individualized consideration L & Riskiness PS	superior	0.226	39	0.230	2.281*
	subordinate	-0.184	187	-0.186	
Individualized consideration L & Improvement M	superior	0.262	38	0.268	1.984*
	subordinate	-0.100	169	-0.101	
* α=0.05	L: Leadership			NC: No Change	
** α=0.01	M: Means			PS: Proactive Strategy	
	E: Ends			§: scale total	

For example, a factor with two items may be rated as "strongly agree" in both of its items and a factor with five items may be rated as "slightly disagree" in all of its items. When we convert these results to numeric values first factor gets 12(6 x 2) and second factor gets 15(3 x 5).

So after the conversion all of our variables get values between 1 to 6 except the leadership questionnaire which has a 5-point scale and gets values between 1 to 5.

Since we could not use the total scores of the factors with a range changing between 1 to 5 or 6 we preferred a nonparametric statistical test which do not require

normality assumption as its parametric version two-way ANOVA. That is to say the observations must be drawn from normally distributed populations. Two-way ANOVA also has further assumptions as populations having equal variances and sample of experimental units being independent (Bowerman & O'Connel, 1997; Siegel & Castellan, 1988). In our case as same employees have evaluated factors we are faced with matched instead of independent groups, and populations didn't have equal variances.Therefore nonparametric test was relevant in our situation.

The Friedman two–way analysis of variance by ranks tests the null hypothesis that the k repeated measures or matched groups come from the same population or populations with the same median (Siegel & Castellan, 1988).

When we obtain value of F_r is significant, it indicates that at least one of the conditions differs from at least one other condition. It does not tell the researcher, which one is different, nor it tells the researcher how many of the groups are different from each other. There is a simple procedure for determining which condition (conditions) differ (Siegel & Castellan, 1988). That is:

$$\left|\overline{R}_u - \overline{R}_v\right| \geq z_{\alpha / k(k-1)}\sqrt{k(k+1)/6N}$$

Where $\overline{R}$ = average ranks

k = number of variables or conditions

N = number of cases or subjects

Therefore we first conducted the Friedman two–way ANOVA and if the result was significant, which was the case in all analyses, we performed the above multiple comparison test.

6.6.1. Friedman two-way analysis of variance by ranks for forces scale

We tested if there were any difference between the magnitudes of five factors of forces scale to find out which factors forced respondents' organizations to change more.

At 99 % confidence interval we found a significant difference between five factors with χ^2= 269.234 and p=0.000 (See Table 31).

Table 31:Friedman two-way analysis of variance by ranks - multiple comparison for forces scale

Friedman Test	
N	183
Chi-Square	269.234
df	4
Asymp. Sig.	0.000

Multiple Comparison Test

	Means	Mean ranks	Competition 3.89	Business Inputs 3.72	Laws & Regulations 2.94	Organizational 2.94	Pressure Groups 1.51
Competition	3.768	3.89	–				
Business Inputs	3.679	3.72	0.17				
Laws & Regulations	3.248	2.94	0.95*	0.78*			
Organizational	3.128	2.94	0.95*	0.78*	0.00		
Pressure Groups	2.135	1.51	2.38*	2.21*	1.43*	1.43*	–

N=183
critical difference is 0.464 where alpha is 0.05
* difference is more than or equal to the critical difference which means difference is significant

When we performed multiple comparison tests we found there was no difference between competition and task forces. Yet both competition and task forces were perceived more than other three forces at 5% significance level and pressure groups found to be the least perceived force (mean ranks were 3.89, 3.72, 2.94, 2.94, 1.51 respectively, α=0.05).

6.6.2. Friedman two-way analysis of variance by ranks for no change scale

We used Friedman two–way ANOVA to test if there were any differences between values given to dimensions of no change scale and at 99 % confidence interval we found a significant difference between five factors with χ^2= 246.366 and p=0.000 (See Table 32).

When we performed multiple comparison tests we found contentment dimensions content with market position and human resource qualification, content with technology and content with interaction between departments were all perceived more than resistance and completion (mean ranks were 3.87, 3.68, 3.16, 2.32, 1.97 respectively, α=0.05). Content with interaction between departments was significantly less perceived than the other two contentment dimensions. There was no significant difference between content with market position and HR qualification and content with technology and resistance and completion.

Table 32:Friedman two-way analysis of variance by ranks - multiple comparison for no change scale

Friedman Test							
N		211					
Chi-Square		246.366					
df		4					
Asymp. Sig.		0.000					
Multiple Comparison Test							
			content w/ mrkt position & HR qualifi.	**content w/ techno-logy**	**content w/ interaction between depts.**	**resistence**	**comple-tion**
	Means	Mean ranks	3.87	3.68	3.16	2.32	1.97
content w/ mrkt position & HR	4.247	3.87	–				
content w/ technology	4.081	3.68	0.19				
content w/ inter action b/ depart.	3.780	3.16	0.71*	0.52*			
resistance	2.855	2.32	1.55*	1.36*	0.84*		
completion	2.630	1.97	1.90*	1.71*	1.19*	0.35	–

N=211
critical difference is 0.432 where alpha is 0.05
* difference is more than or equal to the critical difference which means difference is significant

6.6.3. Friedman two-way analysis of variance by ranks for means scale

At 99 % confidence interval we found a significant difference between means scale factors with χ^2= 138.612 and p=0.000 (See Table 33).

When we performed multiple comparison tests we found improvement dimensions human resource quality, product & services, and guidance & control were preferred more than imitation, creativity, and benchmarking (mean ranks were 4.24, 40.5, 3.99, 3.28, 2.84, 2.59 respectively, α=0.05). There was no significant difference between creativity and imitation, but imitation was preferred more than benchmarking at 5 % significance level.

Table 33:Friedman two-way analysis of variance by ranks - multiple comparison for means scale

Friedman Test								
N		195						
Chi-Square		138.612						
df		5						
Asymp. Sig.		0.000						
Multiple Comparison Test								
			HR quality	**Product & Services**	**Guidan-ce & Control**	**Imita-tion**	**Creati-vity**	**Bench-marking**
	Means	Mean ranks	4.24	4.05	3.99	3.28	2.84	2.59
HR Quality improvement	4.608	4.24	–					
Product&services improvement	4.496	4.05	0.19					
Guidance&Control improvement	4.523	3.99	0.25	0.06				
Imitation	4.095	3.28	0.96*	0.77*	0.71*			
creativity	3.749	2.84	1.40*	1.21*	1.15*	0.44		
benchmarking	3.710	2.59	1.65*	1.46*	1.40*	0.69*	0.25	–

N=195
critical difference is 0.556 where alpha is 0.05
* difference is more than or equal to the critical difference which means difference is significant

6.6.4. Friedman two-way analysis of variance by ranks for ends scale

We used Friedman two–way ANOVA to test if there was any difference between values given to dimensions of ends scale and at 99 % confidence interval we found a significant difference between five factors with χ^2= 339.366 and p=0.000 (See Table 34).

When we performed multiple comparison tests we found efficiency was the most expected end of change process (mean rank= 5.18, α=0.05). There was no difference between employee development and restructuring, but employee development and restructuring were expected more than alliances, organization structure, and acquisition & divestiture (mean ranks were 4.27, 3.96, 2.73,2.58, 2.30 respectively, α=0.05). There were no significant differences between alliances, organization structure, and acquisition & divestiture.

Table 34:Friedman two-way analysis of variance by ranks - multiple comparison for ends scale

Friedman Test								
N	175							
Chi-Square	339.366							
df	5							
Asymp. Sig.	0.000							
Multiple Comparison Test								
			Efficien-cy	**Emp-loyee develop-ment**	**Restruc-turing**	**Allian-ces**	**Organi-zation struc-ture**	**Acqui-sition & divestl-ture**
	Means	Mean ranks	5.18	4.27	3.96	2.72	2.58	2.30
efficiency	4.955	5.18	–					
employee development	4.551	4.27	0.91*					
restructuring	4.297	3.96	1.22*	0.31				
alliances	3.716	2.72	2.46*	1.55*	1.24*			
organization structure	3.597	2.58	2.60*	1.69*	1.38*	0.14		
acquisition & divestiture	3.339	2.30	2.88*	1.97*	1.66*	0.42	0.28	–
N=175 critical difference is 0.587 where alpha is 0.05 * difference is more than or equal to the critical difference which means difference is significant								

6.6.5. Friedman two-way analysis of variance by ranks for leadership scale

At 99 % confidence interval we found a significant difference between leadership scale factors with χ^2= 459.824 and p=0.000 (See Table 35).

Result of the multiple comparison tests showed that laissez faire was the least existing leadership style and management by exception was the second (mean ranks were 1.61 and 2.30 respectively, α=0.05).

There were no significant differences between contingent reward and inspirational motivation and contingent reward and individualized consideration. Idealized influence was more than contingent reward and individualized consideration (mean ranks were 4.65, 4.08, 3.75 respectively, α=0.05). Inspirational motivation was more than individualized consideration (mean ranks were 4.61 and 3.75 respectively, α=0.05).

Table 35:Friedman two-way analysis of variance by ranks - multiple comparison for leadership scale

Friedman Test	
N	194
Chi-Square	459.824
df	5
Asymp. Sig.	0.000

Multiple Comparison Test

	Means	Mean ranks	Ideal-ized influen-ce	Inspira-tional motiva-tion	Contin-gent reward	Individu alized consi-deration	Manage-ment by excep-tion	Laissez-faire
			4.65	4.61	4.08	3.75	2.30	1.61
Idealized influence	4.009	4.65	–					
Inspirational motivation	3.982	4.61	0.04					
contingent reward	3.787	4.08	0.57*	0.53				
Individualized consideration	3.664	3.75	0.90*	0.86*	0.33			
Management by exception	2.218	2.30	2.35*	2.31*	1.78*	1.45*		
laissez faire	1.704	1.61	3.04*	3.00*	2.47*	2.14*	0.69*	–

N=194
critical difference is 0.558 where alpha is 0.05
* difference is more than or equal to the critical difference which means difference is significant

7. DISCUSSION AND CONCLUSION

Our first aim was to develop an instrument to measure the change perception in organizations that we achieved by a five-scale questionnaire. Our change questionnaire is composed of 24 components and a total of 139 items, which we obtained after factor analyses. Reliability results of our scales, all high above acceptable limit, indicate that our instrument is adequate to use in further studies.

However when the reliabilities of the twenty-four components were examined we found two components with Cronbach α values of 0.62 and 0.61 which is although close to 0.70 still lower than the generally accepted limit. These components were alliances and restructuring of ends scale. These two factors as implied in the literature require more strategic approach to change and managed by senior executives (Beer & Nohria, 2000c & Dunphy, 2000). Since our respondents were composed of both subordinates and superiors and not all of our superiors were senior executives this may have affected the results.

Although there was no significant difference in the way superiors and subordinates expected ends of a change process, expectation of alliance formation increased with the increase of forces in the environment for superiors. Also correlation between alliance and contentment scales were different for both groups. Superiors expected alliances even if they were content with their organizations whereas as the contentment increase expectation of alliances decrease for subordinates.

When we analyzed the correlations between the change scales we found as the organizations proactive strategy increased so did no change scale. This seems contradictory to change literature. Proactive change strategy causes an organization to be alert to change and even when there are no strong change forces organizations with proactive strategies initiate change to prepare themselves for future (Strebel, 1994; Mullins & Cummings, 1999). Further analysis confirmed this correlation was the result

of contentment subscale. When the firms applied more proactive strategy people were more content with their organizations. This can be explained by proactive companies foreseeing the needs and taking corrective actions before problems arouse, hence employees feel content. A moderate correlation between no change and imitation is also found. Here again the relation was the result of contentment subscale of no change. We can conclude people like to compare their situations with environment and if they find similar steps are taken by their organizations as other firms they are satisfied. Imitation had moderate relation with proactive strategy too. When the proactive strategy increased so did the imitation and benchmarking. This is an interesting finding as proactive strategies are core constituent of innovation (Morgan & Strong, 1998). Employees perceiving benchmarking and especially imitation as a proactive change means drives us to conclude either these people are not really aware of the meaning of proactive change or proactiveness is an espoused value as stated by Schein (1992) and inconsistencies exist between what is claimed and what really is observed. This is supported with correlation between two dimensions of proactiveness. Proactiveness requires constructive risk taking (Morgan & Strong, 1998) but according to our finding a negative correlation between value creation and riskiness existed.

When we examined the z transformation results we saw major differences between superiors and subordinates. Correlation between value creation and riskiness was positive for superiors whereas negative for subordinates. Hence subordinates having low tolerance to risk unlike their superiors effected the overall results. This is in agreement with the idea that employees usually fear and resist change and a general willingness to take risks is a precondition of change (Daft, 1997; Tierney, 1999).

When we continued to review z transformation results, the affect of proactive strategy to change ends was too different for superiors and subordinates. Superiors expected alliances, restructuring, employee development, and changes in organizational structure with the increase in proactive strategy more than their subordinates did. Subordinates even expected a decrease in alliance formation and structural changes with

the increase in the proactive strategy. The same was true with value creation dimension of proactive strategy. Therefore we can assume superiors perceive change more than their subordinates do. This assumption is also supported with the results of t tests where subordinates were more content with the present situation, resisted more to changes and thought more often that change is already completed than their superiors. These results also support the approach that change should be lead by the top executives and to get subordinate participation they should be trained first.

Our second purpose was to measure transformational and transactional leadership in the organizational environments using Multifactor Leadership Questionnaire. Yet we didn't have previous research that used MLQ in Turkey therefore we had to perform reliability and factor analysis.

One of the most debated subjects in transformational/transactional leadership is the factor composition of MLQ. Although there is an agreement that transformational and transactional items form two factors, the subfactors found in different studies have different compositions. Since different versions of MLQ are used in different studies it is not right to compare them, but it gives an overall idea. We will mainly compare our results with the findings of Avolio and Bass (1999) where they revised the MLQ 5X-form into 36-item scale, which is the form used in this study.

First of all in our analyses we too found transformational and transactional leaderships as two separate dimensions, and we also found laissez faire leadership. In summary we found three higher-order factors and six lower-order factors. In their re-examination of the components of MLQ 5X Avolio & Bass (1999) too had concluded six lower-order factors and three higher-order factors best represented the factor structure for the MLQ survey. But although the numbers of factors we found matched with Avolio and Bass's there were differences in their compositions.

Three sub factors of transformational leadership are found in our research: inspirational motivation, idealized influence and individualized consideration.

Contradictory to literature our respondents did not recognize a separate intellectual stimulation factor. Items of intellectual stimulation were distributed between other components. Items "Re-examines critical assumptions to question whether they are appropriate" and "Seeks differing perspectives when solving problems" are found under the idealized influence component so we assume they were perceived as behavior that results in follower respect and trust. Item "Suggests new ways of looking at how we do our jobs" is found in the inspirational motivation component, hence we believe it was perceived as behavior that provides meaning. Item "Gets me to look at problems from many different angles" was under the individualized consideration component so we assume it was perceived as behavior where the leader pays attention to follower achievement, and growth needs.

With a few exceptions other factor compositions replicated the inspirational motivation idealized influence and individualized consideration factors. Only idealized influence factor is mainly composed of attitude items. Idealized influence behavior items were scattered between inspirational motivation and idealized influence. Since in some studies idealized influence and inspirational motivation are taken as one dimension (Avolio & Bass, 1999; Hartog &Van Muijen, 1997) it's parallel to the transformational leadership literature.

We found two subdimensions of transactional leadership: contingent reward and active management by exception, which is similar to Avolio and Bass's findings (1999).

In some studies (Hartog, & Van Muijen, 1997; Geyer, & Steyrer, 2000) laissez faire leadership and passive management by exception scale of transactional leadership is found to be undistinguishable. Avolio and Bass in their article (1999) took these dimensions together and called it passive avoidant. In our study we eliminated passive management by exception, as its internal consistency was low. Hence we too only have one passive leadership scale: laissez faire leadership.

When we analyzed the correlations between the MLQ scales we found high positive correlations between transformational leadership scales which is not a surprise as in previous research too they were found to be highly intercorrelated (Yukl, 1998).

Contingent reward found to have positive correlations with transformational leadership dimensions and negative correlation with management by exception. This is a consistent problem raised by many authors using the MLQ survey whether the components of transformational leadership should be considered independent of contingent reward leadership, and/or whether contingent reward leadership should be viewed as a separate factor (Avolio & Bass, 1999). Contrary to contingent reward other component of transactional leadership, management by exception had positive relation with laissez faire but negative correlations with all other dimensions.

Since contingent reward is the exchange or promises of rewards for effort and recognition of accomplishments it would be favored more than transacting with followers by focusing on mistakes. Studies up to now shows management by exception has negative effect on performance; negative feedbacks although necessary in some cases are used with great care ((Howell & Avolio, 1993; Yurtkoru, 1995). Therefore it is natural to find leaders using more contingent reward to use less management by exception.

When we analyzed the differences between the way superiors perceive their leadership styles with how they are perceived by their subordinates except the idealized influence we found significant differences. Superiors found their styles carry more individualized consideration, inspirational motivation, and more contingent reward than their subordinates do. And superiors found their styles less laissez faire and less management by exception. As the impression management and social desirability literatures implies people prefer to show more positive values and less negative values (Leary & Kowalski, 1990; Robbins, 1993) therefore these findings are natural.

When we consider the z transformation results this time we saw subordinates thought there were high correlations within dimensions of transformational leadership

and between transformational leadership and contingent reward than their superiors. Also they perceived high correlation between laissez faire and management by exception dimensions. These findings should be questioned in further studies, as subordinates may be less sensitive to differences between dimensions than assumed of leadership than assumed.

When we proceeded with analyses to find the relation between leadership and change scales, which was one of our main purposes, we found the following outcomes.

Forces and laissez faire leadership had positive correlation although this relation is a weak one it is interesting. It may be because in the environments where the transactional leadership is high employees are left alone and this may result in increased awareness to environment. Laissez faire leadership also had negative correlations with no change and proactive strategy. The correlation with no change occurred because as the laissez faire leadership style increased in the environment contentment decreased. As proactive strategy implies change, it looks in an environment where the proactiveness is high laissez faire leadership is not a preferred style. Likewise proactive strategy had negative correlations with management with exception. In these relations there are no significant differences between superiors and subordinates according to the Z transformation results.

We found positive correlation between proactive strategy and contingent reward and all transformational leadership dimensions. The highest correlation coefficient was with inspirational motivation. There were no differences in the way these correlations perceived by superiors and subordinates except idealized influence had a significant positive effect on proactive strategy for the subordinates.

Pearson correlations implied as the transformational leadership components and contingent reward increased the means of change used were also increased. Here again there were no differences between superiors and subordinates correlation scores.

The increase in the use of change means and proactive change strategy with the increase in the transformational leadership style and decrease in proactive change strategy with the increase in laissez faire leadership and management with exception supports the theory that transformational leadership is concerned with change (Church & Waclawski, 1996; Tichy & Devanna, 1986). But contingent reward seems to be as necessary as the transformational dimensions. Since contingent reward is the exchange and/or promises of rewards for good performance (Avolio & Bass, 1999; Lowe & Galen Kroeck, 1996; Hartog &Van Muijen, 1997) leaders clarify what is expected from followers with the use of contingent rewards. If the superiors were planning to lead change they will need contingent reward as much as the other transformational behaviors that explains the above correlations.

Transformational leadership and contingent reward also increased the contentment of the employees and decreased the resistance (Appendix X). Therefore positive correlations between transformational leadership and contingent reward and no change are found.

Depending on our change model we had constructed three hypotheses that we tested with multiple regression analyses. First hypothesis was that forces of change and no change could explain changes in the ends scale. We obtained only three significant results that supported multiple regression assumptions.

We found organizational forces, business inputs, and laws and regulations explained 25 % of changes in organizational structure dimension of ends. Here organizational forces had the highest contribution, business inputs had a negative relation meaning decrease in the degree of business inputs like customer demand, bargaining power of customers and suppliers resulted in increase in the organizational structure change and laws & regulations had positive contribution.

We also found competition and laws and regulations explained 12 % of changes in acquisitions & divestiture, and laws & regulations explained 7% percent of changes in restructuring. Where negative relation between competition and acquisitions &

divestiture has no meaningful explanation, laws & regulations seemed to have major affect on areas where change is expected.

Second hypothesis was proactive strategy would be influenced by forces and leadership styles. Here we found idealized influence and organizational forces explained riskiness by 18 %. Interestingly idealized influence had negative contribution meaning as the idealized influence style increased proactive strategy decreased. Further analysis of z transformation showed idealized influence and riskiness had negative correlation for subordinates and positive for superiors. Employees having leaders with idealized influence perceived less riskiness.

Our third hypothesis was leaders' style and strategy of the organization will effect means of change that will be used in a change process. Riskiness and value creation explained 10 % of the use of creativity and inspirational motivation, management by exception, value creation and riskiness explained 36 % of the use of benchmarking. We discussed the relation between proactive strategies and innovation earlier, here what is interesting is inspirational motivation explains the use of benchmarking but not the creativity. Also even if its contribution is minor, use of management by exception is found to be necessary in applying benchmarking. One more addition here would be that the creativity scores of superiors were found to be higher for superiors than subordinates scores. Hence we should consider the differences between the superiors and subordinates while driving conclusions.

Since we didn't measure an actual change process but expectations of change these may have influenced the outcomes of regression analyses. And as we mentioned previously there were major differences between superiors and subordinates' approaches to change. These may explain why we couldn't find significant relations with other factors. Actually when the correlation results are explored, although they were weak relations, we found significant correlations between almost all dimensions as we expected. One more reason why we couldn't get the assumed relations may be because in some cases it's not easy to find the cause and effect pattern. Like the strategy and

leadership. Leaders influence strategy used in an organization yet the corporate strategy too effects the leaders that are employed. Leaders behavior affects the overall contentment within an organization, which would result as a desire to continue the status quo, but at the same time a leader that inspires his/her subordinates to improvement would increase their perception of change needs too.

One more question that must be answered is how strong are the forces of change? It is important to distinguish between situations, in which forces of change are already having a strong impact on the performance of an organization, and situations in which the company is doing well and the forces of change have yet to affect performance. The first case are situations calling for reactive change and the latter are those situations calling for proactive change (Strebel, 1994).

To answer the above question Friedman two–way ANOVA were performed. The results showed that for our respondents' competition and business inputs were the major change forces. Laws & regulations and organizational forces followed these. Pressure groups had the least change effect. But even the highest force had a mean of 3.8 in a six-point interval, which we conclude as moderate strength.

Similar analyses showed in no change scale contentment with market position and human resources and contentment with technology were high and these were followed by contentment with interaction between departments. Here we can conclude our samples were quite content with their organizations (means 4.2, 4.1, 3.8 respectively) Resistance and completion were found less than other dimensions.

When we analyzed the means used, improvements were the most used means of change. Followed by imitation and than creativity. Benchmarking was the least used means.

The most expected type of change was efficiency followed by employee development and restructuring respectively. Least expected changes were alliances, organizational, structure, and acquisitions and divesture. These last three dimensions had no significant differences.

The results of the Friedman two-way ANOVA analysis of leadership scale showed that the most frequently use leadership styles were idealized influence and inspirational motivation. Then came contingent reward and individualized consideration. Least used styles were management by exception and laissez faire where management by exception was used more than laissez faire style.

In summary we tried to combine the literature of organizational change and transformational leadership in this study.

Our findings showed that transformational leadership increased the use change means and decreased resistance where as management by exception and laissez faire leadership had negative impact on change. We also found contingent reward although by definition a dimension of transactional leadership is a necessary requirement for change processes. The findings presented here can be taken to suggest the specific developmental needs of managers with different leadership styles.

The difference between the perceptions of superiors and subordinates emphasises the importance of human resource management in the success of change processes. Subordinates in our sample were not ready to take risk as much as their superiors. Or they were less creative and they perceived proactive change strategy differently.

8. LIMITATIONS AND RECOMMENDATIONS

We developed a five-scale questionnaire to measure the change perception in organizations and we re-examined the factor structure of MLQ after translating it to Turkish. Reliability results of our change scales indicate that our instrument is adequate to use in further studies. Yet we still recommend that reliability and factor analysis should be performed again to see if the same results could be obtained in different studies. The same recommendation is valid for MLQ since we found a different factor composition then literature.

One limitation of this research was we measured the expectation of change rather than a change process itself. There may be differences between what is claimed and what really is applied. Respondents may claim they are willing to change, but when it comes to implementing change they may resist. Therefore one recommendation would be to use our change questionnaire in an organization where change is implemented. This way the relations between components too can be measured once again and compared with our results.

Respondents being quite content with their organizations may be seen as another limitation of this research. But we believe no change and change cannot be separated from one another. Since the first precondition to change is a general willingness to take risks and break from the status quo (Tierney, 1999) we believe we have captured a part of change dynamics that is usually ignored (Martin, 2000).

Our change questionnaire can be used to assess organizational environments and measure perceptions of different groups, departments or SBUs within an organization to find out their readiness to change. For example in our study we found major differences between superiors and subordinates. This kind of information could be helpful for managers in change program initiations to take necessary precautions. Again change needs of different industries could be compared.

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APPENDIX I: Forces Scale

Aşağıdaki unsurlar örgütünüzü ne derece değişime zorluyor? Lütfen ilgili kutuyu işaretleyiniz.	Hiç zorlamıyor	Çok az zorluyor	Az zorluyor	Oldukça fazla zorluyor	Çok fazla zorluyor	Tamamen zorluyor
1. Yurtiçi rekabet						
2. Uluslarası rekabet						
3. Sektöre yeni firmaların girme olasılığının çokluğu						
4. Sektöre yeni giren firmalar						
5. Piyasada bizim ürünlerimizi ikame edebilecek ürünlerin olması						
6. Ülkemizdeki hukuki düzenlemeler						
7. Uluslarası hukuki düzenlemeler						
8. Çevreci eğilimler						
9. İşçi sendikaları						
10. Üretim teknolojilerindeki değişim						
11. Bilgi teknolojisindeki ilerlemeler (internet, intranet, e-posta, telekonferans, karar destek modelleri, vs)						
12. Değişen müşteri istekleri						
13. Müşterilerin pazarlık gücü						
14. Tedarikçiler						
15. Ürünlerimizin kısa sürede modasının geçmesi						
16. Çalışanların becerilerinin yetersizliği						
17. Çalışanların istekleri						
18. Şirket stratejisi						
19. Ulaşmamız gereken hedefler						
20. Şirketin finansal durumu						
21. Örgüt içindeki hiyerarşik yapı						
22. Örgüt kültürümüz: ortak değerlerimiz, örgüt içinde kabul gören davranışlar vs.						
23. Hissedarların / şirket sahiplerinin beklentisi						
24. Yan kuruluşlar ve/veya grup içi diğer şirketler						

APPENDIX II: No Chance Scale

Lütfen aşağıdaki cümlelere ne derece katıldığınızı ilgili kutuya işaretleyiniz.	Hiç katılmıyorum	Çok az katılıyorum	Az katılıyorum	Oldukça fazla katılıyorum	Çok fazla katılıyorum	Tamamen katılıyorum
1. Satışımız çok iyi						
2. Rakiplerimizden çok farklı ürünlerimiz (hizmetlerimiz) var						
3. Rakiplerimiz bize yetişemez						
4. Yeterli pazar payımız var						
5. En uygun üretim teknolojisini kullanıyoruz						
6. Bilgisayar teknolojisinden yeterince faydalanıyoruz						
7. Yeterli kalifiye personele sahibiz						
8. Yöneticilerimiz görevlerini bilir ve yaparlar						
9. Çalışanlar görevlerini bilir ve yaparlar						
10. Şirketimizin örgüt yapısı, faaliyetlerimiz çerçevesinde yeterlidir						
11. Departmanlar arasında takım anlayışı vardır						
12. Departmanlar arasında etkin bir iletişim var						
13. Çalışanlar istedikleri bilgiye ulaşmada zorluk çekmezler						
14. Karlı bir şirketiz						
15. Maliyetlerin yüksek olduğu söylenemez						
16. Şirketimizin iyi bir adı var						
17. Kalite kontrol sistemimiz etkin işler						
18. Müşteri ilişkilerimiz çok iyidir						
19. Şirketimize müşteri bağlılığı çok yüksektir						
20. Yapılan değişiklik ve yeniliklerden haberdar olurum						
21. Yapılan değişiklik ve yenilik faaliyetlerine katkı ve katılımım olur						
22. Yapılan değişiklik ve yeniliklerin insanların başarılarını (en azından bir süre için) azaltabileceğine inanıyorum						
23. Eğitim amaçlı programlar faydalıdır						
24. İşteki arkadaşlıklar mesleki rekabet açısından ikinci planda kalır						
25. Ben ve takım arkadaşlarım yeni görevler verilmesi nedeniyle rotasyona tabi olmamız durumunda memnun oluruz						
26. Herhangi bir iş arkadaşımın işle ilgili olarak olumsuz söz söylemesini kesinlikle ciddiye alırım						
27. Yapılan değişiklik ve yeniliklerin sunuluşu ve zamanlaması kesinlikle önemlidir						
28. Değişimden bahsetmek yerine daha önemli konuların tartışılması gerekir						
29. Gerekli değişiklikler zaten yapıldığından örgütümüzün değişime ihtiyacı yok.						

APPENDIX III: Proactive Strategy Scale

Aşağıdaki durumlarla örgütünüzde hangi sıklıkla karşılaştığınızı lütfen ilgili kutuyu işaretleyiniz.	Hiçbir zaman	Nadiren	Bazen	Oldukça fazla	Çoğu zaman	Her zaman
1. Kaynak dağıtımında kısa vadeli işlerin önceliği olur						
2. Gelecekte bize rekabette üstünlük sağlaması için araştırmaya						
3. İşimizi etkileyebilecek önemli göstergelerle ilgili tahminler						
4. Kritik konularda senaryo analizleri(eğer böyle olursa, sonuç ne olur…) yapılır						
5. Mevcut işlerimizle ilgili, sürekli yeni fırsatlar kollanır/aranır						
6. Genelde piyasaya yeni ürünleri / markaları süren ilk biz oluruz.						
7. Önemli kararlar alınacağı zaman muhafazakar bir tutum izlenir						
8. Yeni bir proje onaylanacağı zaman birdenbire değil, adım adım						
9. Ancak sonucundan emin olunduğu zaman bir projeyi destekleme eğilimi vardır.						
10. İşimizde genelde denenmiş ve doğru yol takip edilir						
11. Farklı birimler arasında etkin iletişime önem verilir						
12. Önemli bir karar verilmesi gerektiğinde baştan sona analiz yapılır						
13. Örgüttümüzde çeşitli planlama teknikleri kullanılır						
14. Karar verme sürecinde kontrol, veri sistemlerinin çıktıları						

APPENDIX IV: Means Scale

Lütfen aşağıdaki cümlelere ne derece katıldığınızı ilgili kutuya işaretleyiniz.	Hiç katılmıyorum	Çok az katılıyorum	Az katılıyorum	Oldukça fazla katılıyorum	Çok fazla katılıyorum	Tamamen katılıyorum
1. Ürünümüzü (hizmetlerimizi) pazardan aldığımız tepkilere göre sürekli geliştiririz						
2. Farklı sektörden firmaların başarılı uygulamalarınından kıyaslama (benchmarking) yapıp kendi örgütümüze uyarlarız.						
3. Dünyada / piyasada yeni bir ürün (hizmet) çıktığında benzerlerini çok çabuk yapabiliyoruz.						
4. Değişikliğe gitmektense önce elimizdeki sistemi geliştirmeyi tercih ederiz						
5. En son yönetim tekniklerini takip edip bizde uygularız.						
6. Çalışanların eğitime ihtiyacı var						
7. Yöneticilerimizin kendini geliştirmeye ihtiyacı var						
8. Yaptığım işte ortaya koyduğum yenilikler ve yaratıcılığım dikkate alınmamaktadır.						
9. Şirketimizin başarılı departmanlarıyla kıyaslama (benchmarking) yaparak diğer departmanların zayıf yönlerini geliştiririz						
10. Şirketimiz E-ticaret konusunda kendini geliştirmeli						
11. Gerekli bilgilere ulaşmada zorluk çekiyoruz.						
12. Satışımız canlandırılmalı						
13. Dünyadaki / piyasadaki başarılı üretim modellerini taklit ederiz						
14. Bence insanlar yeni birşey yapacağım diye vakit kaybedeceğine verilen işleri zamanında ve doğru yapmalıdır.						
15. Örgütsel yapımızın geliştirilmeye ihtiyacı var						
16. Şirket stratejisini dünyadaki başarılı stratejilere benzer şekile getirmeye çalışırız						
17. Üretim teknolojimiz yenilenmeli						
18. Rakiplerimizden farklı ürünler (hizmetler) geliştirmeliyiz						
19. Departmanlar arası iletişimin geliştirilmesi gerekli						
20. Başarılı yan kuruluşlarımızla/grup içi diğer şirketlerle kıyaslama (benchmarking) yaparak örgütümüzün zayıf yönleri geliştiririz						
21. Kalite kontrol sistemimizi geliştirmeliyiz						
22. Yaptığım işte yaratıcılık yeterince teşvik edilmemektedir.						
23. Ödüllendirme sistemi geliştirilmeli						
24. İç denetim sistemimizi geliştirmeliyiz						
25. Başarılı rakiplerimiz ile kıyaslama (benchmarking) yaparak uygulamalarını kendi örgütümüze uyarlarız						
26. Müşteri ilişkilerimizi dünyadakilere benzer düzeyde tutmaya çalışırız						
27. Başkaları çalışanlarına ne eğitim veriyorsa bizde de verilir.						
28. Yöneticimiz açısından yaratıcılığımızın önemi ikinci plandadır, önemli olan işlerin zamanında ve doğru yapılmasıdır.						
29. Departmanlar arasında çekişme ve rakabet var						
30. Ürün kalitesi daha iyiye götürülebilir						
31. Satış sonrasında daha iyi hizmet verebiliriz						
32. Herkes her istediği bilgiye ulaşamaz						
33. Müşteri ilişkileri geliştirilebilir						
34. Yaptığım iş son derece rutindir, yaratıcılık ve yeniliğe yer yoktur.						
35. Çalışma ortamının iyileştirilmesi gerekli						

APPENDIX V: Ends Scale

Organizasyonunuzda bir değişim süreci yaşanıyorsa veya yaşanacak olsa aşağıdaki durumların gerçekleşmesini ne derece beklersiniz. Lütfen ilgili kutuyu işaretleyiniz.	Hiç	Çok az	Az	Oldukça	Çok fazla	Tamamen
1. Yerel ve/veya uluslarası şirketlerle şirket evliliği						
2. Şirket bünyesinde yapılmakta olan bazı faaliyetlerin dış tedarikçilerce yapılmaya başlanması						
3. Sektördeki yan kuruluşların fimamızca satın alınması						
4. Yeni şirket satın alınması						
5. Kar getirmeyen bölümlerin elden çıkarılması						
6. Yeniden yapılandırma						
7. Personel sayısının azaltılması						
8. Şirket hisselerinin değerini arttıracak tedbirler alınması						
9. Yerel ve / veya uluslarası şirketlerle işbirliği yapmak						
10. Rakiplerle işbirliği yapmak						
11. Bütçenin kısılması						
12. Örgütteki sistemlerin değişmesi						
13. Katı ve planlı bir değişim sürecine girilmesi						
14. Çalışanların kararlara katılımının artması						
15. Çalışanlara kendini geliştirme olanağının artması						
16. Çalışanlarda daha yüksek eğitim seviyesinin hedeflenmesi						
17. Örgüt yapısının değişmesi						
18. Örgüt kültürünün değişmesi						
19. Çalışanların önerilerinin önemsenmesi						
20. Bireysel öğrenmenin desteklenmesi						
21. Çalışanların örgüte bağımlılığını arttıracak yollar aranması						
22. Çalışanların örgüte güvenini arttıracak yollar aranması						
23. Karlılığın artması						
24. Verimliliğin artması						
25. Takım çalışmasının arttırılması						
26. Örgüt içi iletişimin etkinleştirilmesi						
27. Müşteri ilişkilerini geliştirecek çalışmalara ağırlık verilmesi						
28. Yeni ürünlerin / yeni hizmetlerin devreye girmesi						
29. Teknoloji transferi (ithalinin) yapılması						
30. Üretim kapasitesine ağırlık verilmesi						
31. Satış kapasitesine ağırlık verilmesi						
32. Araştırma Geliştirme'ye ağırlık verilmesi						

APPENDIX VI: Multifactor Leadership Questionnaire – Superior

Lütfen aşağıdaki soruları bir yönetici olarak kendinizi düşünerek yanıtlayınız ve ilgili kutuyu işaretleyiniz	Hiçbir zaman	Nadiren	Bazen	Çoğu zaman	Hemen her zaman
1. Geleceğe olumlu bakarım					
2. Önem verdiğim değerleri inançları yanımda astlarımla paylaşırım					
3. Benimle çalışmak zevklidir.					
4. Kritik varsayımların, planlanana uygun olup olmadığını sürekli					
5. Astlarıma onlar için konulan performans standartlarını tutturduklarında ne beklemeleri gerektiğini açıkça söylerim					
6. Hataları konusunda astlarımı daima uyarırım					
7. Sorunlar ciddiyet kazanıncaya kadar karışmam					
8. Grubun iyiliği için kendi önceliklerimden vaz geçerim					
9. Yanımda çalışanlara grubun herhangi bir üyesi olarak değilde bir birey olarak davranırım					
10. Güçlü bir amaca sahip olmanın önemini astlarıma belirtirim					
11. Astlarımın hedeflerine ulaşabileceklerine güvendiğimi belli					
12. İçlerindeki çabayı ve hevesi gördüğümde astlarıma destek olurum					
13. Zamanımı "söndürülecek yangınlar" arayarak geçiririm					
14. Harekete geçmem için işlerin kötüye gitmiş olması gerekir					
15. Ne zaman bana ihtiyaç duysalar yanlarında olurum					
16. Harekete geçmem için problemlerin kronikleşmesi gereklidir					
17. Problemler karşısında farklı bakış açıları ortaya koyabilirim					
18. Yanımda çalışanları kendilerini geliştirmeye yönlendiririm					
19. Davranışlarım astlarımın bana saygı duymalarına neden olur					
20. Kararlarımımın ahlaki, etik sonuçlarını dikkate alırım					
21. Performans hedeflerine ulaştıklarında uygun şekilde ödüllendirilmelerini sağlarım					
22. Yanımda çalışanların yaptıkları hataları asla unutmam					
23. Mecbur kalmadıkça tedbir almanın gereksizliğine inanırım					
24. Astlarımın ulaşmaları gereken hedefleri büyük bir şevkle					
25. Karar vermekten kaçınmam					
26. Astlarıma işlerini nasıl yaptıklarına farklı yönlerden bakmalarını					
27. Başkalarını yetiştirmek, onlara yeni birşeyler öğretmek benim için önemlidir					
28. Tavırlarım güç ve güven hissi verir					
29. Yapılan iyi işi daima taktir ederim					
30. Hedefe ulaşmadaki başarısızlıklar asla gözümden kaçmaz					
31. Ortak bir misyona sahip olmanın önemini vurgularım					
32. Acil sorulara cevap vermeyi geciktirmem					
33. Gelecekle ilgili düşlerimle astlarımı peşimden sürüklerim					
34. Astlarımın sorunlara çok farklı açılardan bakmalarını sağlarım					
35. Yanımda çalışanların herbirine farklı ihtiyaçları, yetenekleri, olan bireyler olarak yaklaşırım					
36. Önemli bir konu karşısında karışmaktan çekinmem					

APPENDIX VII: Multifactor Leadership Questionnaire – Subordinate

Lütfen aşağıdaki soruları bir üst yöneticinizi düşünerek yanıtlayınız ve ilgili kutuyu işaretleyiniz	Hiçbir zaman	Nadiren	Bazen	Çoğu zaman	Hemen her zaman
1. Onunla çalışmak zevklidir.					
2. Önem verdiği değerleri inançları bizimle paylaşır					
3. Geleceğe olumlu bakar					
4. Kritik varsayımların, planlanana uygun olup olmadığını sürekli					
5. Benim için konulan performans standartlarını tutturduğumda ne beklemem gerektiğini açıkça söyler					
6. Hatalarımız konusunda bizi daima uyarır					
7. Sorunlar ciddiyet kazanıncaya kadar karışmaz					
8. Önemli bir konu karşısında karışmaktan çekinir					
9. Bana grubun herhangi bir üyesi olarak değilde bir birey olarak davranır.					
10. Grubun iyiliği için kendi önceliklerinden vaz geçer					
11. Güçlü bir amaca sahip olmanın önemini belirtir					
12. Hedeflerimize ulaşabileceğimize güvendiğini belli eder					
13. İçimdeki çabayı ve hevesi gördüğünde bana destek olur					
14. Zamanını "söndürülecek yangınlar" arayarak geçirir					
15. Harekete geçmesi için işlerin kötüye gitmiş olması gerekir					
16. Gerektiğinde ortada yoktur					
17. Problemler karşısında farklı bakış açıları ortaya koyabilir					
18. Kendimi geliştirmeye beni yönlendirir					
19. Davranışları ona saygı duymama neden olur					
20. Kararlarının ahlaki, etik sonuçlarını dikkate alır					
21. Performans hedeflerimize ulaştığımızda uygun şekilde ödüllendirilmemizi sağlar					
22. Yaptığım hataları asla unutmaz					
23. Mecbur kalmadıkça tedbir almanın gereksizliğine inanır					
24. Ulaşmamız gereken hedefleri büyük bir şevkle anlatır					
25. Karar vermekten kaçınır					
26. İşimizi nasıl yaptığımıza farklı yönlerden bakmamızı önerir					
27. Başkalarını yetiştirmek, onlara yeni birşeyler öğretmek onun için önemlidir					
28. Tavırları güç ve güven hissi verir					
29. Yapılan iyi işi daima taktir eder					
30. Hedefe ulaşmadaki başarısızlıklar asla gözünden kaçmaz					
31. Ortak bir misyona sahip olmanın önemini vurgular					
32. Harekete geçmesi için problemlerin kronikleşmesi gereklidir					
33. Acil sorulara cevap vermeyi geciktirir					
34. Gelecekle ilgili düşleriyle bizi peşinden sürükler					
35. Sorunlara çok farklı açılardan bakmamı sağlar					
36. Herbirimize farklı ihtiyaçları, yetenekleri, olan bireyler olarak yaklaşır					

APPENDIX VIII: Demographic Questions

Cinsiyetiniz: K ☐ E ☐

Yaşınız: _____

Eğitim Durumunuz:

İlk ☐ Orta ☐ Lise ☐ Üniversite ☐ Y. Lisans ☐ Doktora ☐

Departmanınız: _____

Pozisyonunuz: _____

Kaç yıldır çalışıyorsunuz: _____

Kaç yıldır bu firmada çalışıyorsunuz: _____

APPENDIX IX: MLQ Cronbach' α Reliability Analysis – SPSS Output

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
TRANSF1	118.1774	272.6224	.5776	.8673
TRANSF2	118.3387	266.7009	.6556	.8650
TRANSF3	118.0484	276.5976	.4685	.8693
TRANSF4	118.0269	277.3885	.4621	.8696
TRANSC1	118.5699	265.4681	.5587	.8662
TRANSC2	117.9785	276.4320	.3965	.8702
TRANSC3	119.2419	281.8276	.1555	.8757
LAISSEZ1	120.4409	290.5613	-.0452	.8784
TRANSF5	118.6720	272.6000	.3507	.8713
TRANSF6	118.4839	264.1105	.6845	.8639
TRANSF7	118.1559	267.1161	.6516	.8651
TRANSF8	118.1075	265.2208	.7350	.8637
TRANSC4	118.0968	263.9906	.7215	.8635
TRANSC5	119.6667	283.8018	.0421	.8839
TRANSC6	120.1882	300.7914	-.3108	.8841
LAISSEZ2	120.4785	297.1914	-.2403	.8814
TRANSF9	118.2581	278.9060	.3849	.8706
TRANSF10	118.2957	263.1067	.6999	.8635
TRANSF11	118.0484	269.4301	.6135	.8661
TRANSF12	118.0968	270.6933	.5678	.8670
TRANSC7	118.7419	261.8141	.6251	.8644
TRANSC8	119.1344	282.0089	.1533	.8757
TRANSC9	120.0806	287.5881	.0235	.8783
TRANSF13	118.2903	267.9909	.6134	.8658
LAISSEZ3	120.5215	294.0671	-.1534	.8795
TRANSF14	118.3333	271.2396	.5604	.8672
TRANSF15	118.1237	267.4603	.6176	.8656
TRANSF16	118.1882	266.1428	.7101	.8642
TRANSC10	118.1774	263.5738	.7050	.8635
TRANSC11	118.2097	278.1990	.3688	.8707
TRANSF17	118.2688	266.9436	.6857	.8647
TRANSC12	120.1667	293.6856	-.1250	.8811
LAISSEZ4	120.3817	298.3886	-.2529	.8828
TRANSF18	119.3226	270.5116	.4010	.8700
TRANSF19	118.4301	265.2410	.6685	.8644
TRANSF20	118.2796	265.4674	.6453	.8648

Reliability Coefficients

N of Cases = 186.0 N of Items = 36

Alpha = .8736

APPENDIX X: Correlation Between Factors – All Significant Results

Force Factors	Pearson Correlation Coefficient	Other Factors
organizational force	0.406**	organization structure E
laws & regulations force	0.387**	organization structure E
laws & regulations force	0.354**	product & services improvement M
Forces §	0.320**	organization structure E
laws & regulations force	0.303**	Improvement M
laws & regulations force	0.300**	acquisition & divestiture E
pressure groups force	0.290**	laissez faire L
Forces	0.286**	product & services improvement M
laws & regulations force	0.268**	restructuring E
business inputs force	0.258**	product & services improvement M
laws & regulations force	0.255**	Means §
organizational force	0.245**	product & services improvement M
laws & regulations force	0.244**	Ends §
Forces	0.242**	Improvement M
Forces	0.237**	restructuring E
pressure groups force	0.232**	management by exception L
laws & regulations force	0.227**	HR quality improvement M
organizational force	0.221**	Improvement M
business inputs force	0.219**	Improvement M
business inputs force	0.219**	restructuring E
organizational force	0.218**	laissez faire L
organizational force	0.215**	Riskiness PS
laws & regulations force	0.213**	alliances E
pressure groups force	0.213**	alliances E
organizational force	0.197**	restructuring E
business inputs force	0.197*	Means
Forces	0.196**	Riskiness PS
Competition force	0.196**	organization structure E
organizational force	0.191**	alliances E
Competition force	0.189**	restructuring E
pressure groups force	0.183**	organization structure E
Forces	0.182*	Means
Forces	0.181*	alliances E
pressure groups force	0.178**	content with technology NC
Forces	0.175*	laissez faire L
organizational force	0.171*	HR quality improvement M
Forces	0.165*	HR quality improvement M
organizational force	0.162*	acquisition & divestiture E
organizational force	-0.160*	Content with Market position & HR qualification NC
business inputs force	0.158*	efficiency E
organizational force	0.157*	Ends
laws & regulations force	0.155*	guidance & control improvement M
organizational force	0.151*	guidance & control improvement M
organizational force	0.144*	resistance NC
laws & regulations force	0.142*	employee development E
laws & regulations force	0.137*	laissez faire L

§ scale total	E: Ends	M: Means
* $p \leq 0.05$	F: Forces	NC: No Change
** $p \leq 0.01$	L: Leadership	PS: Proactive Strategy

No Change Factors	Pearson Correlation Coefficient	Other Factors
Contentment	0.696**	Value creation PS
Content with Market position & HR qualification	0.652**	Value creation PS
No Change §	0.651**	Value creation PS
Contentment	0.650**	Proactive Strategy §
Contentment	0.640**	Imitation M
Content with Market position & HR qualification	0.630*	Imitation M
No Change	0.613**	Proactive Strategy
No Change	0.611**	Imitation M
Content with Market position & HR qualification	0.588**	Proactive Strategy
content with Interaction between departments	0.539**	Value creation PS
Content with Interaction between departments	0.524**	Proactive Strategy
Content with Market position & HR qualification	0.504**	Idealized influence L
Contentment	0.490**	Benchmarking M
Content with Market position & HR qualification	0.462**	Benchmarking M
Contentment	0.460**	Idealized influence L
No Change	0.452**	Benchmarking M
Content with Market position & HR qualification	0.451**	Inspirational motivation L
Contentment	0.443**	Inspirational motivation L
content with technology	0.431**	Proactive Strategy
resistance	-0.421**	Inspirational motivation L
Contentment	0.418**	Means
resistance	-0.415**	Value creation PS
Content with Market position & HR qualification	0.411**	Means
content with Interaction between departments	0.411**	Imitation M
No Change	0.402**	Idealized influence L
resistance	-0.377**	Means
content with technology	0.377**	Value creation PS
No Change	0.376**	Inspirational motivation L
No Change	0.365**	Means
resistance	-0.363**	Proactive Strategy
resistance	-0.355**	Idealized influence L
Content with Market position & HR qualification	0.346**	contingent reward L
resistance	-0.340**	contingent reward L
resistance	-0.329**	Imitation M
Contentment	0.327**	contingent reward L
content with Interaction between departments	0.320**	Benchmarking M
resistance	-0.314**	creativity M
content with Interaction between departments	0.312**	Inspirational motivation L
content with technology	0.303**	Imitation M
resistance	-0.296**	Benchmarking M

§ scale total
* $p \leq 0.05$
** $p \leq 0.01$

E: Ends
F: Forces
L: Leadership

M: Means
NC: No Change
PS: Proactive Strategy

No Change Factors Continues	Pearson Correlation Coefficient	Other Factors
Content with Market position & HR qualification	-0.296**	Riskiness PS
content with technology	0.284**	Benchmarking M
resistance	-0.281**	individualized consideration L
No Change	0.271**	contingent reward L
content with Interaction between departments	0.270**	Means
Contentment	0.256**	individualized consideration L
content with Interaction between departments	0.256**	Individualized consideration L
Content with Market position & HR qualification	0.255**	employee development E
Contentment	-0.247**	Riskiness PS
content with Interaction between departments	0.242**	contingent reward L
content with Interaction between departments	0.232**	Idealized influence L
No Change	-0.224**	Riskiness PS
Content with Market position & HR qualification	0.222**	individualized consideration L
Content with Market position & HR qualification	-0.218**	laissez faire L
completion	0.213**	Value creation PS
Contentment	0.210**	employee development E
No Change	0.206**	individualized consideration L
completion	0.198**	Imitation M
Contentment	-0.195**	laissez faire L
No Change	0.191**	employee development E
completion	0.183**	Benchmarking M
completion	0.182**	Idealized influence L
content with Interaction between departments	-0.181**	guidance & control improvement M
completion	0.180**	Inspirational motivation L
Content with Market position & HR qualification	0.178*	efficiency E
content with technology	0.178*	pressure groups forceF
No Change	-0.173*	laissez faire L
completion	0.172*	contingent reward L
Completion	0.165*	Proactive Strategy
content with technology	0.165*	Means
completion	-0.162*	Riskiness PS
Content with Market position & HR qualification	-0.160*	organizational force F
content with Interaction between departments	-0.160*	laissez faire L
resistance	0.158*	Riskiness PS
resistance	-0.157*	efficiency E
content with Interaction between departments	0.148*	creativity M
Contentment	-0.145*	alliances E
resistance	0.144*	organizational force F
completion	0.144*	individualized consideration L
Contentment	0.141*	creativity M
completion	0.134*	management by exception L

§ scale total	E: Ends	M: Means
* $p \leq 0.05$	F: Forces	NC: No Change
** $p \leq 0.01$	L: Leadership	PS: Proactive Strategy

Proactive Strategy Factors	Pearson Correlation Coefficient	Other Factors
Value creation	0.696**	Contentment NC
Value creation	0.652**	Content with Market position & HR qualification NC
Value creation	0.651**	No Change §
Proactive Strategy §	0.650**	Contentment NC
Proactive Strategy	0.613**	No Change
Value creation	0.590**	Imitation M
Proactive Strategy	0.588**	Content with Market position & HR qualification NC
Value creation	0.553**	Inspirational motivation L
Value creation	0.539**	Content with Interaction between departments NC
Proactive Strategy	0.525**	Benchmarking M
Proactive Strategy	0.524**	Content with Interaction between departments NC
Value creation	0.522**	Benchmarking M
Proactive Strategy	0.521**	Imitation M
Proactive Strategy	0.517**	Inspirational motivation L
Value creation	0.492**	Idealized influence L
Value creation	0.473**	Means
Proactive Strategy	0.436**	Means
Proactive Strategy	0.431**	content with technology NC
Value creation	-0.415**	Resistance NC
Proactive Strategy	0.413**	Idealized influence L
Value creation	0.387**	Contingent reward L
Value creation	0.377**	Content with technology NC
Riskiness	-0.375**	Idealized influence L
Proactive Strategy	-0.363**	resistance NC
Proactive Strategy	0.353**	contingent reward L
Proactive Strategy	0.320**	creativity M
Value creation	0.319**	İndividualized consideration L
Value creation	-0.314**	Laissez faire L
Proactive Strategy	0.301**	individualized consideration L
Riskiness	-0.296**	Content with Market position & HR qualification NC
Riskiness	-0.293**	Imitation M
Value creation	0.288**	Creativity M
Proactive Strategy	-0.270**	laissez faire L
Value creation	0.256**	Efficiency E
Riskiness	-0.251**	Inspirational motivation L
Riskiness	-0.247**	Contentment NC
Riskiness	0.230**	Laissez faire L
Riskiness	-0.224**	No Change
Proactive Strategy	0.222**	efficiency E
Riskiness	0.215**	organizational force F
Value creation	0.213**	Completion NC
Riskiness	-0.212**	Contingent reward L
Riskiness	-0.201**	Means
Riskiness	0.196**	Forces §
Value creation	-0.183**	Management by exception L
Value creation	0.176*	Employee development E
Riskiness	-0.173*	Efficiency E
Proactive Strategy	-0.170*	management by exception L
Proactive Strategy	0.165*	completion NC
Riskiness	-0.162*	Completion NC
Proactive Strategy	0.162*	employee development E
Riskiness	0.158*	Resistance NC

§ scale total	E: Ends	M: Means
* p ≤ 0.05	F: Forces	NC: No Change
** p ≤ 0.01	L: Leadership	PS: Proactive Strategy

Means Factors	Pearson Correlation Coefficient	Other Factors
Imitation	0.640**	Contentment NC
Imitation	0.630**	Content with Market position & HR qualification NC
Imitation	0.611**	No Change
Imitation	0.590**	Value creation PS
Benchmarking	0.525**	Proactive Strategy
Benchmarking	0.522**	Value creation PS
Imitation	0.521**	Proactive Strategy
Benchmarking	0.490**	Contentment NC
Imitation	0.488**	Inspirational motivation L
Means §	0.473**	Value creation PS
Benchmarking	0.462**	Content with Market position & HR qualification NC
Benchmarking	0.460**	Inspirational motivation L
Means	0.459**	efficiency E
Benchmarking	0.452**	No Change
Means	0.436**	Proactive Strategy §
Means	0.429**	Inspirational motivation L
Means	0.418**	Contentment NC
Means	0.411**	Content with Market position & HR qualification NC
Imitation	0.411**	Content with Interaction between departments NC
Improvement	0.395**	efficiency E
Means	0.378**	Ends
Imitation	0.376**	Idealized influence L
guidance & control improvement	0.366**	efficiency E
Means	0.365**	No Change
Means	0.360**	employee development E
product & services improvement	0.354**	laws & regulations forceF
Improvement	0.345**	Ends
Creativity	0.342**	contingent reward L
Means	-0.337**	resistance NC
Creativity	0.336**	Inspirational motivation L
Imitation	-0.329**	resistance NC
Benchmarking	0.320**	Content with Interaction between departments NC
Creativity	0.320**	Proactive Strategy
product & services improvement	0.320**	efficiency E
Imitation	0.316**	contingent reward L
Creativity	-0.314**	resistance NC
guidance & control improvement	0.314**	Ends
Creativity	-0.312**	management by exception L
Improvement	0.310**	employee development E
Imitation	0.303**	content with technology NC
Benchmarking	0.303**	contingent reward L
Improvement	0.303**	laws & regulations forceF
Benchmarking	0.299**	Idealized influence L
Means	0.298**	Idealized influence L
Benchmarking	0.298**	efficiency E
Benchmarking	-0.296**	resistance NC
Imitation	-0.293**	Riskiness PS
Means	0.293**	contingent reward L

§ scale total
* $p \leq 0.05$
** $p \leq 0.01$

E: Ends
F: Forces
L: Leadership

M: Means
NC: No Change
PS: Proactive Strategy

Means Factors Continued	Pearson Correlation Coefficient	Other Factors
HR quality improvement	0.293**	Ends
Creativity	0.290**	Idealized influence L
guidance & control improvement	0.290**	employee development E
Creativity	0.288**	Value creation PS
product & services improvement	0.286**	Forces
Benchmarking	0.284**	content with technology NC
Benchmarking	0.274**	individualized consideration L
Means	0.270**	Content with Interaction between departments NC
product & services improvement	0.269**	Ends
Creativity	0.267**	individualized consideration L
product & services improvement	0.258**	business inputs forceF
Means	0.255**	laws & regulations forceF
HR quality improvement	0.250**	employee development E
Creativity	-0.248**	laissez faire L
Means	0.248**	individualized consideration L
Benchmarking	0.247**	Ends
product & services improvement	0.245**	organizational force F
Improvement	0.242**	Forces
HR quality improvement	0.227**	laws & regulations forceF
Imitation	0.224**	individualized consideration L
product & services improvement	0.223**	employee development E
Improvement	0.221**	organizational force F
Improvement	0.219**	business inputs forceF
HR quality improvement	0.217**	efficiency E
Imitation	0.210**	efficiency E
product & services improvement	0.207**	restructuring E
Means	0.204**	restructuring E
Means	-0.201**	Riskiness PS
Imitation	0.198**	completion NC
Means	0.197**	business inputs forceF
HR quality improvement	0.197**	organization structure E
Imitation	-0.192**	laissez faire L
Benchmarking	0.185**	employee development E
Benchmarking	0.183**	completion NC
Means	0.182*	Forces
guidance & control improvement	-0.181**	Content with Interaction between departments NC
HR quality improvement	0.171*	organizational force F
Imitation	0.169*	employee development E
Imitation	0.167*	Ends
product & services improvement	0.167*	acquisition & divestiture E
Means	0.165*	content with technology NC
HR quality improvement	0.165*	Forces
Creativity	-0.161*	organization structure E
Benchmarking	0.161*	acquisition & divestiture E
Improvement	0.160*	restructuring E
guidance & control improvement	0.155*	laws & regulations forceF
Benchmarking	0.152*	restructuring E
guidance & control improvement	0.151*	organizational force F
Imitation	0.149*	acquisition & divestiture E
Creativity	0.148*	Content with Interaction between departments NC
Creativity	0.141*	Contentment NC

§ scale total
* $p \leq 0.05$
** $p \leq 0.01$

E: Ends
F: Forces
L: Leadership

M: Means
NC: No Change
PS: Proactive Strategy

Ends Factors	Pearson Correlation Coefficient	Other Factors
Efficiency	0.459**	Means
organization structure	0.406**	organizational force F
Efficiency	0.395**	Improvement M
organization structure	0.387**	laws & regulations forceF
Ends §	0.378**	Means
Efficiency	0.366**	guidance & control improvement M
employee development	0.360**	Means
Ends	0.345**	Improvement M
Efficiency	0.320**	product & services improvement M
organization structure	0.320**	Forces
Ends	0.314**	guidance & control improvement M
employee development	0.310**	Improvement M
acquisition & divestiture	0.300**	laws & regulations forceF
Efficiency	0.298**	Benchmarking M
Ends	0.293**	HR quality improvement M
employee development	0.290**	guidance & control improvement M
Ends	0.269**	product & services improvement M
Restructuring	0.268**	laws & regulations forceF
Efficiency	0.256**	Value creation PS
employee development	0.255**	Content with Market position & HR qualification NC
employee development	0.250**	HR quality improvement M
Ends	0.247**	Benchmarking M
Ends	0.244**	laws & regulations forceF
Restructuring	0.237**	Forces
employee development	0.223**	product & services improvement M
Efficiency	0.223**	Idealized influence L
Efficiency	0.222**	Proactive Strategy
Restructuring	0.219**	Business inputs forceF
Efficiency	0.217**	HR quality improvement M
Alliances	0.213**	laws & regulations forceF
Alliances	0.213**	pressure groups forceF
employee development	0.210**	Contentment NC
Efficiency	0.210**	Imitation M
Restructuring	0.207**	product & services improvement M
Restructuring	-0.206**	laissez faire L
Efficiency	0.205**	Inspirational motivation L
Restructuring	0.204*	Means
organization structure	0.197**	HR quality improvement M
Restructuring	0.197**	organizational force F
organization structure	0.196**	Competition force F
employee development	0.191**	No Change
Alliances	0.191**	organizational force F
Restructuring	0.189**	Competition force F
employee development	0.185**	Benchmarking M
Efficiency	-0.183**	laissez faire L
organization structure	0.183**	pressure groups forceF
alliances	0.181*	Forces
Efficiency	0.178*	Content with Market position & HR
employee development	0.176*	Value creation PS
Efficiency	-0.173*	Riskiness PS
employee development	0.169*	Imitation M
Ends	0.167*	Imitation M
acquisition & divestiture	0.167*	product & services improvement M
Restructuring	-0.165*	management by exception L

§ scale total	E: Ends	M: Means
* $p \leq 0.05$	F: Forces	NC: No Change
** $p \leq 0.01$	L: Leadership	PS: Proactive Strategy

Ends Factors Continued	Pearson Correlation Coefficient	Other Factors
employee development	0.162**	Proactive Strategy
acquisition & divestiture	0.162*	organizational force F
organization structure	-0.161*	creativity M
acquisition & divestiture	0.161*	Benchmarking M
Restructuring	0.160*	Improvement M
efficiency	0.158*	business inputs forceF
Efficiency	-0.157*	resistance NC
Ends	0.157*	organizational force F
Restructuring	0.152*	Benchmarking M
employee development	0.150*	Inspirational motivation L
acquisition & divestiture	0.149*	Imitation M
Alliances	-0.145*	Contentment NC
employee development	0.142*	laws & regulations forceF

§ scale total	E: Ends	M: Means
* p ≤ 0.05	F: Forces	NC: No Change
** p ≤ 0.01	L: Leadership	PS: Proactive Strategy

Leadership Factors	Pearson Correlation Coefficient	Other Factors
Inspirational motivation	0.553**	Value creation
Inspirational motivation	0.517**	Proactive Strategy
Idealized influence	0.504**	Content with Market position & HR qualification
Idealized influence	0.492**	Value creation
Inspirational motivation	0.488**	Imitation
Idealized influence	0.460**	Contentment
Inspirational motivation	0.460**	Benchmarking
Inspirational motivation	0.451**	Content with Market position & HR qualification
Inspirational motivation	0.443**	Contentment
Inspirational motivation	0.429**	Means
Inspirational motivation	-0.421**	resistance
Idealized influence	0.413**	Proactive Strategy
Idealized influence	0.402**	No Change
Inspirational motivation	0.376**	No Change
Idealized influence	0.376**	Imitation
Idealized influence	-0.375**	Riskiness
Idealized influence	-0.355**	resistance
contingent reward	0.346**	Content with Market position & HR qualification
contingent reward	0.342**	Creativity
contingent reward	-0.340**	resistance
Inspirational motivation	0.336**	Creativity
contingent reward	0.327**	Contentment
Individualized consideration	0.319**	Value creation
contingent reward	0.316**	Imitation
Laissez faire	-0.314**	Value creation
Inspirational motivation	0.312**	content with Interaction between departments

§ scale total	E: Ends	M: Means
* p ≤ 0.05	F: Forces	NC: No Change
** p ≤ 0.01	L: Leadership	PS: Proactive Strategy

Leadership Factors Continued	Pearson Correlation Coefficient	Other Factors
contingent reward	0.303**	Benchmarking
individualized consideration	0.301**	Proactive Strategy
Idealized influence	0.299**	Benchmarking
Idealized influence	0.298**	Means
contingent reward	0.293**	Means
laissez faire	0.290**	pressure groups force
Idealized influence	0.290**	Creativity
individualized consideration	-0.281**	resistance
individualized consideration	0.274**	Benchmarking
contingent reward	0.271**	No Change
laissez faire	-0.270**	Proactive Strategy
individualized consideration	0.267**	Creativity
individualized consideration	0.256**	Contentment
Individualized consideration	0.256**	content with Interaction between departments
Inspirational motivation	-0.251**	Riskiness
laissez faire	-0.248**	Creativity
individualized consideration	0.248**	Means
contingent reward	0.242**	content with Interaction between departments
management by exception	0.232**	pressure groups force
Idealized influence	0.232**	content with Interaction between departments
Laissez faire	0.230**	Riskiness
individualized consideration	0.224**	Imitation
Idealized influence	0.223**	Efficiency
individualized consideration	0.222**	Content with Market position & HR qualification
laissez faire	-0.218**	Content with Market position & HR qualification
laissez faire	0.218**	organizational force
laissez faire	-0.206**	Restructuring
individualized consideration	0.206**	No Change
Inspirational motivation	0.205**	Efficiency
laissez faire	-0.195**	Contentment
laissez faire	-0.192**	Imitation
Management by exception	-0.183**	Value creation
laissez faire	-0.183**	Efficiency
Idealized influence	0.182**	completion
Inspirational motivation	0.180**	completion
laissez faire	0.175*	Forces
laissez faire	-0.173*	No Change
contingent reward	0.172*	completion
management by exception	-0.170*	Proactive Strategy
management by exception	-0.165*	Restructuring
laissez faire	-0.160*	content with Interaction between departments
Inspirational motivation	0.150*	employee development
individualized consideration	0.144*	completion
laissez faire	0.137*	laws & regulations force
management by exception	0.134*	completion

§ scale total	E: Ends	M: Means
* $p \leq 0.05$	F: Forces	NC: No Change
** $p \leq 0.01$	L: Leadership	PS: Proactive Strategy

APPENDIX XI: Fisher's z-transformation

The test of the null hypothesis $H_O: \rho_1 = \rho_2$, hypothesis of "no difference between two population correlation coefficients" is analogous to the test of the difference between two means from independent samples. Unlike the sampling distribution of the mean, which retains its symmetrical shape regardless of the value of the population mean, the sampling distribution of the correlation coefficient becomes increasingly skewed as the absolute value of the population correlation coefficient increases. Thus the normal distribution cannot be used as the sampling distribution for this test statistic. In order to overcome this problem R.A.Fisher developed a statistic called the Fisher's z transformation, where sampling distribution is nearly normal for any value of the statistic (Hinkle etal., 1998). The transformation is

$$Z_r = \left(\frac{1}{2}\right)\log_e \frac{1+r}{1-r}$$

And the standard error of Z_r is

$$s_{Z_r} = \sqrt{\frac{1}{n-3}}$$

Where r is the correlation coefficient and n is sample size

We reject H_O when

$$\left| \frac{(Z_{r_1} - Z_{r_2}) - 0}{\sqrt{\frac{1}{n_1 - 3} + \frac{1}{n_2 - 3}}} \right| \geq z_{\alpha/2}$$

otherwise we accept.