

**Effects of transformational leadership on ambidexterity: the  
mediating role of knowledge sharing and learning culture**



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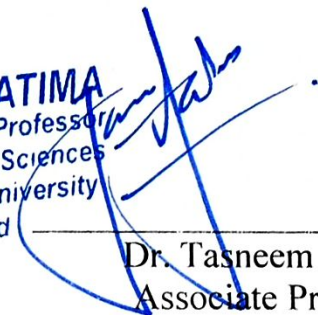
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## CERTIFICATE


This is to certify that this thesis entitled: “**Effects of Transformational Leadership on Ambidexterity: The Mediating Role of Knowledge Sharing and Learning Culture**” submitted by Ms. Ayesha Ilyas is accepted in its present form by the Department of Business Studies, Pakistan Institute of Development Economics (PIDE), Islamabad as satisfying the requirements for partial fulfillment of the degree of MBA.

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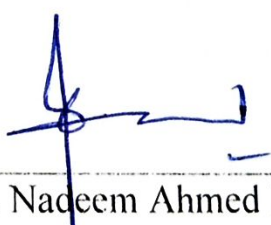
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## **Declaration**

I, Ayesha Ilyas declare and affirm on oath that I myself have authored this MBA thesis with my own work and means, and I have not used any further means except those I have mentioned in this document.

**This thesis is dedicated to my Parents  
for their unconditional love and support.**

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## List of Tables

<b>Table No. 1. Multicollinearity</b> .....	26
<b>Table No. 2. Reliability Test</b> .....	27
<b>Table No. 3. Frequency table according to gender</b> .....	28
<b>Table No. 4. Descriptive Table</b> .....	28
<b>Table No. 5. Variable Correlation</b> .....	29
<b>Table No. 6. Linear Regression TL-ET</b> .....	30
<b>Table No. 7. Linear Regression TL-ER</b> .....	30

# Table of Contents

<b>Abstract</b> .....	1
<b>Chapter 1: Introduction</b> .....	2
<b>1.1. Research Gap</b> .....	6
<b>1.2. Problem statement</b> .....	7
<b>1.3. Research questions</b> .....	7
<b>1.4. Research objectives</b> .....	8
<b>1.5. Significance</b> .....	8
<b>1.6. Structure</b> .....	9
<b>Chapter 2: Literature Review</b> .....	10
<b>2.1. Transformational Leadership and Ambidexterity</b> .....	10
<b>2.2. Mediating role of learning culture</b> .....	16
<b>2.3. Mediating role of Knowledge Sharing</b> .....	19
<b>2.4. Hypothesis</b> .....	23
<b>Chapter 3: Research Methodology</b> .....	24
<b>3.1. Research strategy</b> .....	24
<b>3.2. Population and sampling</b> .....	24
<b>3.3. Measures</b> .....	24
<b>3.4. Data collection and analysis</b> .....	25
<b>Chapter 4: Results</b> .....	26
<b>4.1. Reliability test</b> .....	27
<b>4.2. Descriptive analysis</b> .....	27
<b>4.3. Correlation analysis</b> .....	29
<b>4.4. Regression Analysis</b> .....	29
<b>Chapter 5: Discussion</b> .....	33

<b>5.1. Conclusion</b> .....	35
<b>5.2. Practical Implications</b> .....	35
<b>5.3. Limitations</b> .....	36
<b>References</b> .....	39
<b>Annexure</b> .....	50



## **Abstract**

The objective of this study is to examine the effect of organizational mechanisms like leadership style, knowledge management and learning culture on ambidexterity of employees in IT sector of Pakistan. Relationship between transformational leadership and exploration and exploitation is developed, with the help of literature. Qualitative method is used to collect data through questionnaires. Data from 174 employees was processed and analyzed in SPSS. Multiple regression analysis provided us with the result that transformational leadership positively effects exploration and exploitation. This suggests that mutual contribution of leaders and employees enhance ambidextrous abilities of employees and which proves to become a competitive advantage. Mediation of knowledge sharing and learning culture propose that exchange of knowledge can draw beneficial results through exploiting existing competencies and practice of learning behavior allows exploration of new opportunities. Our findings guide leaders to support and promote ambidextrous abilities in their employees and introduce the culture of knowledge sharing and management.

## Chapter 1: Introduction

Organizational learning comprises of both exploiting its current competencies and exploring new prospects, such ability forms the core value of learning in the organization. (March, 1991) states that opposing nature of these exploitative and explorative abilities makes it difficult for organizations to pursue a balanced approach to these behaviors. Behavioral theory of firm (Simon, 1985, Cyert & March, 1963) studied by (Felin, Foss, Heimeriks, & Madsen, 2012; Foss, 2011) propose that while debating firms' capabilities at micro-level shows that in order to build developing capabilities of an organizations, focus should be given to employee capabilities as they are the precursors which stimulate organizational success. Employee ambidexterity was then defined by (Mom *et al.*, 2007; Caniëls and Veld, 2016) as behaviors displayed by employees in merging tasks that require explorative intentions and tasks that require exploitative purposes. (Raisch & Birkinshaw, 2008; Raisch, Birkinshaw, Probst, & Tushman, 2009) studied ambidexterity at multiple levels in organization but very few studies focused on individual level ambidexterity. These studies not only related them to characteristics of an individual but also their approach to explorative and exploitative abilities. Kang and Snell (2009) suggests that organizations need to focus on finding out the right balance between exploration and exploitation that which tasks should become more efficient and which need changes to increase profit. (Minbaeva *et al.*, 2012) suggests that employees are responsible for generating and handling knowledge and engage in exploration and exploitative activities according to the tasks at hand. Balancing these two approaches can result in the creation and execution of processes leading to innovation (Tushman and Euchner, 2015).

(Zacher *et al.*, 2016) suggests that organization's performance is highest with regards to its innovation when it follows both exploration and exploitation. When management begins to

practice ambidexterity in organization, exploitation and explorative assist in arriving at efficient decision making and bringing innovation to organizational processes (Bledow et al., 2009; Good and Michel, 2013). For organizations to practice exploration and exploitation at the same time has always been a challenge (Laureiro-Martínez et al., 2015). This asks for such a management that knows how well explorative and exploitative activities can manifest successful learning and innovative methods.

Leaders have crucial part in forming an organization's culture through their leadership behavior which is considered a critical contributing factor in generating an innovative work environment (Dess and Picken, 2001). In IT industry, employees are the center of growth and improvement to promote innovation (Griffeth et al., 2000), so there is a need for leaders to work on employees' motivational levels and developing creative abilities in them or polishing the existing ones, this need arises due to the fact that IT industry has to work flexibly and perform as efficient as the time changes in technical innovations. This makes it essential for organizations to create an atmosphere of creativity in order to deliver outputs that presents itself as a competitive advantage for them over others in the same industry (George and Zhou, 2002). Tierney and Farmer (2004) suggests that in order to attain success and develop growing output, organizations have to focus on the level of employee creativity.

Relationship between employees and organization can be supported by Social Exchange Theory by Blau (1964), which indicates that this relationship is mutually shared and benefitted. This theory supports the idea that leaders who inspire and motivate employees promote such organizational culture which focuses on improving organizational processes and routines and creating innovative ideas. This suggests that ambidexterity is promoted and nourished in a culture where employee empowerment is practiced at individual level. Moreover, knowledge sharing

culture among employees encourage them to share and exchange knowledge regarding the daily processes. These communications may result in finding and resolving new problems in routines by coming up with creative ideas to solve them. This suggests that knowledge sharing culture also enables employee ambidexterity. Not many researches have been done on how knowledge sharing and ambidexterity are related and how other factors play a role. What role is actually shared by knowledge sharing in promoting ambidextrous behavior among employees?

Knowledge sharing is done on both individual and organizational levels, it can either be done by employee interactions to do tasks more efficiently and effectively or by taking, establishing, reprocessing and moving this knowledge within the organization to share experience and making it available to other employees in the organization. Argote *et al.*, 2003 focuses on the point that sharing of knowledge on individual and team level can become a competitive advantage for an organization if it is done to promote efficiency and is supported by employee learning behavior. (Li *et al.*, 2015) also supports the idea of encouraging mutual learning between employees in organizations. So learning culture promotion at workplace and knowledge sharing is intrinsic and essential to become organization's competitive gain (Seng *et al.*, 2002). Authors that have been studying different kinds of cultures refers learning culture as an organizational culture that focuses on elevating and assisting employees learning process, exchange of knowledge, sharing and distributing employee learning to facilitate organization in its development and progression (Rebelo and Gomes, 2009). This description of learning culture focuses on the idea that an organization that practices learning through its culture elevates its individual to observe learning culture at workplace, turning individual learning into group learning and then into organizational learning.

Learning culture is recognized by Santa (2015) as being open to new thoughts, performing experiments and accepting faults and errors, and enabling employees to take part in making decisions. Gil and Mataveli (2016) identifies learning culture as grabbing opportunities to learn and intervene on actions that help promote learning behavior in organizations. The dynamic and indeterminate environment in organizations that focuses on creating culture that promotes productive learning and innovation through knowledge sharing is able to come up with creative solutions. This approach increases their chance of becoming a successful organization.

Havermans et al. (2015) indicates that there is a need to contextualize leadership practices and changing forces of leadership that should be studied and practices to achieve ambidexterity. Researches also point out the need to study impact of leadership practices and role of knowledge sharing in organization. Accordingly, this study focuses on how a certain type of leadership style influences ambidextrous behavior in organizations. Previous research present few links between transformational leadership and ambidexterity, culture related to it and dynamics at organizational level (Berson, Nemanich, Waldman, Galvin, & Keller, 2006). Leadership style effects how group dynamics shift and employee interact with each other. Formerly, organizations used Transactional leadership in organizations that examines individual and organizational goals and how their employees can act to achieve them. These goals are then classified with the aim to help employees fulfill them by inculcating confidence to do so. On the other hand, Transformational leadership inspires and motivates employees to act more than they are expected to perform which incorporates a sense of value and importance, encouraging them to prioritize organizations' interests over their personal and individual interests.

In this research, first we will examine the effect transformational leadership has on ambidextrous individuals in Information Technology sector of Pakistan, as this industry requires

a simultaneous opposing approach in task completion. This approach includes exploring and exploiting at the same time, in the presence of a transformational leader. As Vera and Crossan (2014) suggest that there is a need to study the role of other possible variables affected by leadership style and (Jansen et al., 2006) suggest that research is required to examine what mechanisms affect ambidexterity, we will observe the effect of mediation on knowledge sharing on exploitative activities in the organizations and mediation of learning culture on explorative activities. Impact of organizational culture will tell us the impact these mediation will have at workplace where transformational leaders are the influencers.

### **1.1. Research Gap**

(Mom, Van Den Bosch, & Volberda, 2009) have studied ambidexterity on managerial level, O'Reilly and Tushman 2013 compared past and present implementations of ambidexterity on organizational level. Studies like these marked the operationalization of ambidexterity on firm and individual level and as Jansen et al. (2009) suggests exploration to be encouraged by transformational leadership and exploitation to be promoted by transactional leadership, there is a need to understand that which type of leadership behavior can manage and productively handle the contradicting nature of ambidexterity. Burton (2012) found that the wrong kind of placement of leadership style with ambidexterity can be damaging for the organization. Masa'deh et al. (2015) reasoned that all organizations should make knowledge sharing a necessary part of their management process as it has proved to improve organizational performance. Researchers have observed a relationship between transformational leadership and ambidexterity, it is also observed that knowledge sharing promotes ambidextrous behavior. There is a need to study how this ambidextrous behavior can be enhanced by the practice of knowledge sharing culture and learning culture in IT companies as it is an industry where ambidexterity can play a vital role in determining

its success. Effect of organizational culture including knowledge sharing and learning behavior on explorative and exploitative abilities of employees are to be established by leaders who incorporate inspirational urges them. This asks for the need to study leadership style encouraging such practices. We intend to study how a certain type of leadership style can effect ambidextrous abilities of an organization

## **1.2. Problem statement**

Turner et al. (2016) emphasized that it is important to understand how management and social interactions encourage the role of individual ambidexterity in organizations. (Mom et al., 2015) suggested that organizational settings and conditions along with leadership style determines ambidexterity. To address this gap, in this research we will study the effect of transformational leadership on ambidexterity and the mediation of knowledge sharing on exploitation and learning culture on exploration.

## **1.3. Research questions**

- Which type of leadership style can enhance ambidextrous behavior in its employees?
- What effects does transformational leadership has on ambidexterity of employees?
- Does knowledge sharing behavior mediate the relationship between transformational leadership and exploitation?
- Does learning culture mediate the relationship between transformational leadership and exploration?

#### **1.4. Research objectives**

- To figure out which leadership style affects both exploration and exploitation abilities of employees
- To find out the effects of transformational leadership of exploration
- To find out the effects of transformational leadership on exploitation
- To find out how well knowledge sharing mediates the effect of transformational leadership on exploration
- To find out how well learning culture mediates the effect of transformational leadership on exploitation

#### **1.5. Significance**

Ambidexterity allows individual to simultaneously use their explorative and exploitative skills to carry out their tasks, this increases efficiency in both long term and short term plans as exploitative tasks improve the proficiency of existing processes making them successful in the short run, whereas, explorative tasks open new avenues of innovation and creativeness, allowing the organization to succeed in the long run. Ambidextrous individuals are able to shift to and fro between exploration and exploitation making tasks handing and flow of data flexible and accessible to others. Employee behavior and empowerment depends on how their leader motivates and encourages to engage in activities that lead them to practice ambidextrous tasks and engage in knowledge sharing culture, this can be supported by their intent to learn these behaviors and practice them at workplace. Transformational leaders have the capability to inspire motivational behavior in their followers, as they can bring about the change required in the organization to practice ambidexterity and sharing of information. Previous studies have shown that



transformational leadership positively influence employees' attitudes in work related matters and has been supported by management studies. Transformational leadership has been positively related to employee satisfaction and achievement thus, making it a key component on how employees respond to their managers at workplace under their influence of transformational leadership

## **1.6. Structure**

Review of literature will provide us with the insights of how different researchers analyzed and operationalized ambidexterity on various levels. Then we combined leadership style with ambidexterity to determine which leadership theory best fits in effect with exploration and exploitation. Following other research work we assumed the mediation of learning culture on exploration and knowledge sharing on exploitation in relation to transformational leadership. Methodology includes how data was collected and analysis was performed. Findings mentioned what we infer from the analysis and how these findings are supported is discussed. Conclusion include how are findings can be further implied and in what other paths can this study be forwarded.

## Chapter 2: Literature Review

### 2.1. Transformational Leadership and Ambidexterity

Rosing and Zacher (2016) comprehend exploration as learning behavior at individual level related to finding alternatives, experimenting and testing. While, exploitation at individual level involves doing tasks as they have always been done, following existing processes and rules. Exploring requires individuals to change routine, deviate from the existing pattern or process and to not depend on conventional knowledge. On the other hand, exploitation covers sticking to the routine and relying on past experience, and making gradual but subtle improvements in the already learned actions. (Mom et al., 2009) attempted to operationalize the concept of individual ambidexterity and studied it on managerial level. Good and Michel (2013) proposed *Individual Ambidexterity* (IA), as cognitive ability to switch between exploration and exploitation flexibly and appropriately at the individual level.

On organizational level it is observed that being ambidextrous leads to higher performance as inclination towards either side decrease efficiency of organizations. If focus is centered on exploitation then it might be beneficial for better performance over a short time period but when it comes to developing competitive advantages, the organization will fail to respond rapidly to the dynamic environment (Ahuja & Lampert, 2001; Leonard-Barton, 1992). Similarly, if an organization focuses too much on exploration then it may result in the ability of the firm to revamp its flexible knowledge cycle but consequently will get trapped in the same cycle without generating any rewarding search or change (Volberda & Lewin, 2003).

Studies show that there are two approaches to study organizational ambidexterity. The first one, structural ambidexterity suggests that exploration and exploitation should be practiced

autonomously (Smith and Tushman, 2005), and in order to achieve such practice there should be a “spatial separation” in the organization where a few divisions focus on improving efficiency whereas others will focus on experimentation and change (Benner & Tushman, 2003; Tushman & O’Reilly, 1996). Second approach is contextual ambidexterity which proposes that both exploration and exploitation should be brought together and practiced in the whole organization simultaneously Gibson and Birkinshaw (2004: 209). Structural ambidexterity was first discussed as maintaining balance between opposing task requirements by creating two separate kinds of work units for focusing separately on order and variation (Duncan, 1976).

Existing studies on individual ambidexterity failed to show one’s ability to simultaneously shift between exploring and exploiting, instead focuses on sequential ambidextrous behavior. This suggests that an individual explores or exploits between the tasks instead of during them, creating sequential ambidexterity versus simultaneous ambidexterity (Raisch, Birkinshaw, Probst, & Tushman, 2009). Adler, Goldoftas, and Levine (1999) suggest that whether it is simultaneous or sequential ambidexterity, individuals still need to be able to malleably shift between exploration and exploitation in a changing or dynamic environment. Smith and Tushman (2005) propose that individual cognitive capacities to cycle between exploration and exploitation are challenged when faced with dynamic contexts. Ambidextrous managers should not only work on improving their current awareness and expertise but also should work on obtaining new knowledge to master both efficiency and adaptability (Subramaniam, M. and Youndt, M.A. (2005), Lubatkin, M.H., Simsek, Z., Yan, L. and Veiga, J.F. (2006).

Bonesso, S., Gerli, F., & Scapolan, A. (2014) proposed sorting of personal ambidexterity by comparing an individual’s perception and behaviors to assess the balance of their perception

while doing ambidextrous roles. Personal ambidexterity is characterized by individual features that are considered antecedents like past work experience and aptitude.

Mom (2007) proposes that ambidextrous individuals can easily manage between exploration and exploitation. Researchers suggest that the ability to shift between processes or behaviors is the key mechanism of cognitive flexibility (Louis & Sutton, 1991; Marcel, Barr, & Duhaime, 2011). Good and Michel (2013) studied individual cognitive flexibility as the mechanism that enables ambidextrous behavior within a real time task.

Good and Michel (2013) perceive individual ambidexterity as a determinative construct that includes three variables; divergent thinking, focused attention and cognitive flexibility for managing exploration, exploitation and shifting between exploration and exploitation, respectively. Rosing, K., & Zacher, H. (2017) suggest that promoting behaviors reflecting both exploration and exploitation in routine tasks stimulate employees to attain better innovative performance. This can be done by helping the employees understand how the dual nature of work behavior can encourage innovation in their tasks, this includes improving their skills and abilities that foster exploration, exploitation and a balance between the two approaches.

As exploration involves finding novel ideas (Levinthal & March, 1993), individual exploration bonds a usual placement with the cognitive aspects of creativity (Amabile, 1996). This conceptualization can link divergent thinking with exploration in the cognitive aspect. Focusing attention to the knowledge that is already known instead of looking for new ways show exploitative behavior (Holmqvist, 2004), so in order to engage in exploitative actions, one needs to narrow the span of attention and focus on present tasks and processes (Nelson & Winter, 1982). Zacher, H., Robinson, A., & Rosing, K. (2016) propose that the balance between exploration and exploitation

is positively related to innovative performance whereas there is a negative relationship between imbalance and innovative performance.

Achieving ambidexterity needs combining the opposing behaviors to explore and exploit (Floyd & Lane, 2000). Smith and Tushman 2005 assimilated exploitation and exploration through a cognitive approach by terming it “paradoxical thinking” as it focuses on identifying and embracing the contradicting nature of both concepts instead of creating imbalance between them or avoiding them. In order to have this paradoxical thinking one has to combine these cognitive approaches in order to achieve goals with high efficiency and variability (Bonesso, Gerli, & Scapolan, 2014; Swart & Kinnie, 2007). This suggests that an individual’s mental capabilities help achieve the shift and balance between exploration and exploitation. (Eisenhardt et al., 2010; Raisch et al., 2009) suggests that previous studies examine which individuals are ambidextrous but are not able to explain why some people are while others are not. One possible reason for the variance in holding these cognitive processes might lie in their identities, whether it is role identity or an emotional one. In order to create a divergent role personalities of individuals it is necessary for the organization to expose them to various role sets, this allows them to become more flexible and adjust in any role transition Tempelaar M., Rosenkranz N. (2019). This suggests that changing work roles help them create contradicting innovative performances.

Smith and Tushman (2005) termed ambidexterity as paradoxical thinking, suggesting its contradicting nature creates a dynamic environment. (Eisenhardt and Martin, 2000) suggest that leaders have the capabilities to simultaneously allocate resources and come up with new concepts in dynamic situations. (Liao et al., 2017) supported that compassionate leadership promotes innovative environment. (Turner et al., 2013) argued that the addition of an inspirational leader combines authority with employee management to create strong employee relationships that

encourages ambidexterity. (Lin and McDonough, 2011) support this argument by indicating leadership as a vital antecedent of ambidexterity. There exists a positive and important relation between transformational leadership and creativity of employees which creates a creative environment at workplace.

Burns (1978) defined transformational leaders as individuals who influence people following them through forming challenging goals and motivate them at work to lift their confidence. Bass and Avolio (1994) then suggested transformational leadership to be comprised of four dimensions. (1) Idealized influence: Charisma, to be a role model for the followers because of one's power and influence, being committed to a high standard in order to achieve organizational goals and vision. They gain their followers' trust, respect and appreciation by following a code of conduct that depicts ethics, high values, morals and standards. (2) Inspirational motivation: to stimulate motivation in followers more than they were expected to perform and to inspire them to share a common vision. (3) Intellectual stimulation: to provoke followers to come with new and innovative solutions for a problem, this stimulates employees to contest the authority and status quo and to think from a fresh perspective. (4) Individualized consideration: to relate to followers on personal level by listening to their issues, guiding them in tasks, giving feedback on related issues and providing them the individual support they need.

Transformational leaders are visionaries who plan ahead for the organization and are skillful enough to inspire employees to come up with creative and unique solutions for a certain problem by thinking in a distinctive manner as proposed by Bass (1985). As suggested by (Boerner et al. 2007), primary task of leaders is to stir up creative potential in employees so that they are able to figure out problems creatively. (Schaubroeck et al., 2012) focused great attention on how transformational leadership has both practical and theoretical viewpoints in organizational

performance. James MacGregor was the first one to introduce Transformational leadership as a concept that leaders and employees encourage and improve each other by raising morals and motivation of each other. Transformational leaders inspire through their character and vision to motivate employees in order to reach shared goals by changing their perceptions and behaviors.

Kim (2014) describes transformational leaders as individuals who make learning a continuous process and also provoke others to share a mutual goal of improvement and change, this gives rise to certain behaviors and qualities that are looked for in individuals by organizations, organizational citizenship behavior in an example of such behavior. (Dionne et al., 2014) declares that transformational leadership is a central concept in every leadership discussion, (Bolden et. al, 2011) also pronounces it as the most dominant theory of leadership.

Transformational leaders at the post of CEOs can help the company promote exploitative innovation in the short run but if the organization requires long term innovation they should concentrate on creating an innovative work environment along with hiring transformational leaders (Zuraik and Kelly 2019). (Shin & Zhou, 2003; Vera & Crossan, 2004) propose that transformational leadership inspires self-confidence and inclination to contest gives rise to creativity and experimentation that form the basis of exploration. (Mittal and Dhar 2015) indicating that transformational leadership promotes the initiation of new ideas and exploring new avenues. (O'Reilly and Tushman, 2008) suggests that dynamic and complex practices involve ambidexterity and leadership. O'Reilly and Tushman (2011) highlighted that leadership is effective when it can understand and employ various behaviors. This includes focusing on efficiency by promoting explorative behavior and initiating entrepreneurial activities by promoting exploitative behavior. Leaders are responsible for the variance arising in behaviors of employees by their influence and encouragement (Rosing et al. 2011).

(Li et al., 2015) observed that transformational CEOs can promote ambidextrous behavior in top level managers by fostering risk taking behavior and providing reward systems for long term. (Chang 2015) proposed that transformational leadership is not only necessary on unit level but also at firm level to promote ambidextrous approach. Creating a climate of trust also enhances ambidexterity that is promoted by transformational leadership. Han, Seo, Yoon and Yoon (2016) support the concept that transformational leadership can psychologically empower employees and encourage them to become more involved and dedicated to their organization. This allows them to exhibit flexible behaviors for their organization. Jansen et al. (2009) suggests that transformational leadership encourages exploratory innovation in employees whereas exploitative innovation is inspired by transactional leadership. Chang (2016) explained transformational leaders as individuals who encourage their employees to come up with novel ideas and welcome change and promote innovation by setting ideal examples of influence and intelligence. (Rosing et al., 2011; Li et al., 2015) proposes that a leader who promotes ambidextrous behavior either practices exploration and exploitation parallel to each other or effortlessly shift from exploration to exploitation and vice versa. This brings us to the assumption that there is a positive relationship between how transformational leadership promotes explorative and exploitative activities in an organization.

H1a: There exists a positive relationship between transformational leadership and exploration.

H1b: There exists a positive relationship between transformational leadership and exploitation.

## **2.2. Mediating role of learning culture**

The transfer of information in an organization includes both learning and culture of the organization so it is important that learning culture in an organization is well defined to encourage learning behavior (Opengart, 2015). Researches indicating the importance of learning culture in



organizations and how it can become competitive advantage has made leaders inclined towards adopting and encouraging learning in their own organization (Pantouvakis and Bouranta, 2013). Marsick and Watkins (2003) suggested the willingness of employees is more important in promoting learning culture than creating dimensions of learning organizations and using them to inspire employees to practice learning behaviors. Similarly, to yield constantly increasing organizational performance, prime focus on managing knowledge might not be enough but it is vital that knowledge sharing and distribution is practiced by organizational leaders themselves in order to encourage and generate learning culture at workplace. In the reference of flow of information, forming processes and arrangements that enable the provision of information and reinforce information sharing abilities in employees refers to empowerment (Curado, 2006). Bates and Khasawehn (2005) suggests that organizations that support the practice of learning culture, establishes an organizational culture that is favorable for innovation to take place and flourish. Consequently, it becomes important for organizations who strive to become creative and follow explorative actions that they create an environment that develops learning culture.

Brown and Thomas (2011) proposed that employees of this generation dwell in entrepreneurial culture so their learning mechanism mirrors the same, tagging them as entrepreneurial learners. Along with their entrepreneurial skills, these learners add to the organization by introducing their culture where imagination and analysis are considered central basis for their learning process. This make it important for organizations to connect with them on their level so that they can bring in such innovative individuals and from their learning culture form their competitive advantage. It is vital for organizations to provide a safe platform to their employees to practice and learn new skills and expertise so that they can take risks and come up with innovative ideas that can be of assistance in the long run. Such welcomed approach to new

ideas makes the organization flexible and adaptive to any kind of change expected in future (Tiwari and Lenka, 2016). Learning culture allows employees to polish their existing skills and learn new competences which encourages them to exchange knowledge and become innovative, leading them to prompt adaptive qualities according to the changing processes and market (Hodliffe, 2014). This advocates that learning is a process that provides employees with opportunities to build confidence in their skills and become psychologically progressive.

An open organizational culture welcomes learning that comes with mistakes, such organizations allow employees to learn by making mistakes Putz et al. (2013). This allows them to provide room for improvement to their employees where they can practice continuous learning. On the other hand, if employees are not allowed to make mistakes, they tend to hide them which results in creation of same mistakes without changes and corrections. This causes reduced efficiency and performance of the organization and production level.

Gil and Mataveli (2017) presented us with three constructs of learning culture to measure: orientation, empowerment and information transfer. Orientation discusses the act of assisting employees in the organization, with the aim to form instructions regarding information and its development. An organization can help use information as a guide by planned trainings, forming and communicating organization's mission and maintaining technology. Empowerment refers to the idea of giving the control of decision making to the employees and take actions according to their own understanding and solidarity (Pérez et al., 2006). Nemanich and Vera (2009) constructed three social dimensions as values of cultures that indulge in learning: psychological safety; employees feeling safe from consequences of taking risks, openness to opinion; employees feeling stimulated to come up with various ideas and involvement in decision making; employees feeling a part of organization's strategy. Transformational leaders can encourage explorative behavior by

allowing them to participate in decision making and providing platform to share opinions. This leads us to the assumption that learning culture in organization can mediate the effect of transformational leadership on explorative activities.

H2: Learning culture can mediate the effect of transformational leadership on exploration.

### **2.3. Mediating role of Knowledge Sharing**

(Becerra-Fernandez and Sabherwal, 2010) expressed the communication of explicit and tacit knowledge among individuals as a part of knowledge sharing. (Alavi and Leidner 2001) separated this knowledge sharing process into three steps: Effective knowledge transfer, sharing knowledge instead of recommendations and transferring knowledge among various groups and levels. The knowledge that is shared should be well understood by the receiver so that it can be acted upon. This shared piece should be actual knowledge and not one's interpretation of what might be internalized by it. This transfer of knowledge can be among individuals, groups within the organization or inter organization.

(Von Krogh *et al.*, 2000; Jackson *et al.*, 2006) also suggest that employees can come up with novel ideas and various problem solving methods when they discuss and combine what they already know, this increases efficiency in daily routine tasks or coming up with new items..

Masa'deh *et al.* (2015) reasoned that every organization, may it be public or private, considers knowledge sharing as a mandatory part of its knowledge management processes. This is due to the fact that by managing and maintaining the productive knowledge sharing competencies, such organizations are able to improve their performance. Therefore, a theoretical model is developed by researchers to assess the influence of leadership styles on knowledge sharing activities as its effects job performance and in turn organizational performance.

Masa'deh *et al.* (2013b) revealed that when knowledge sharing culture is enabled by helping fellow employees, support from top levels managers or rewards, there is a high level impact on employees' knowledge sharing abilities. Furthermore, a causal link was developed between knowledge sharing and innovation, these findings support the existence of explorative behavior due to knowledge sharing culture. Van den Hooff and Van Weenen, 2004a) suggested knowledge sharing as progression of exchanging knowledge and consequently resulting in new knowledge streams. (R Masa'deh *et. al.*, 2015) suggested that such knowledge sharing improves innovation and performance on organizational level. Knowledge sharing also helps employees to use resources efficiently, as they can easily practice relevant information to their benefit, this allows them to have fast and continuous access to all the necessary information (Jackson *et al.*, 2006). This shows that easy access to relevant information can help employees to come up with new ideas or ways to solve current problems.

Reid, F. (2003) proposes that in order to ensure effective knowledge sharing in an organization top level managers should initiate a knowledge sharing strategy and make sure that its implementation is guaranteed. Encourage team players and use technology to bind them together regardless of physical distances to promote knowledge exchange regularly. Evaluate the knowledge being circulated to inculcate it in other relevant projects and keep it accessible to other employees at the same time. Minimize knowledge barriers by omitting knowledge hoarders who remain reluctant to share knowledge as they may interpret that this knowledge gives them power and control over other employees. These hoarders think that sharing their knowledge will wear down their power and they will not be compensated as before. To ensure the eradication of this behavior and encourage sharing of knowledge is to introduce effective systems and incentivize knowledge sharing behaviors. Lin, H. F., & Lee, G. G. (2004) focuses on inspiring knowledge

sharing through top level managers as they have the authority, status and command to promote such behavior whereas middle level or bottom line managers do not have the strong position to implement such actions and run knowledge sharing systems in organizations.

Encouraging a knowledge sharing culture in an organization not only needs integrating knowledge into the system but also by inclining employees to agreeably and regularly share knowledge (Connelly and Kelloway, 2003; Lin and Lee, 2004).

Mom et al. (2007) proposed that managers who encourage top-down inflow of knowledge are more involved in exploitative activities rather than exploration, whereas, when flow of knowledge is bottom-up and horizontal, managers tend to positively involve in exploration instead of exploitation. This indicates that when top down knowledge flow is encouraged and increased, managers' exploitative activities exhilarates without having any impact on exploration. Same is observed when bottom up and horizontal knowledge inflow increases, managers' exploration take a hike with no impact on any exploitative activity. This specifies that by controlling and responding to knowledge inflows managers can manage level of exploration and exploitation in organizations.

(Liu et al. 2018) found that employees who are ambidextrous are more inclined towards sharing knowledge and perform better because they are able to handle different tasks at the same time and adapt constructive competition. To promote knowledge sharing culture, managers should incorporate ambidextrous individuals in their teams so the members deliberately get involved in tasks that challenge their competencies and move towards achieving organization's goals.

When an organization promotes the culture of knowledge sharing, its employees become aware of the fact that they are allowed to improve their efficiency by polishing and enhancing their activities, which eventually promotes exploitative behavior. This knowledge sharing culture allows employees to share their ways and exchange information that can help them develop

efficient work ways, thus increasing exploitation. This is argued by Grinsven and Visser (2011) that when employees are oriented in the same direction as are the company's strategies then the exploitative activities are also increased.

Transformational leader who encourages developing knowledge sharing in an organization can thus enhance the exploitative activities by giving polishing existing strategies and improving efficiency.

H3: Knowledge sharing can mediate the relationship between transformational leadership and exploitation.

## 2.4. Hypothesis

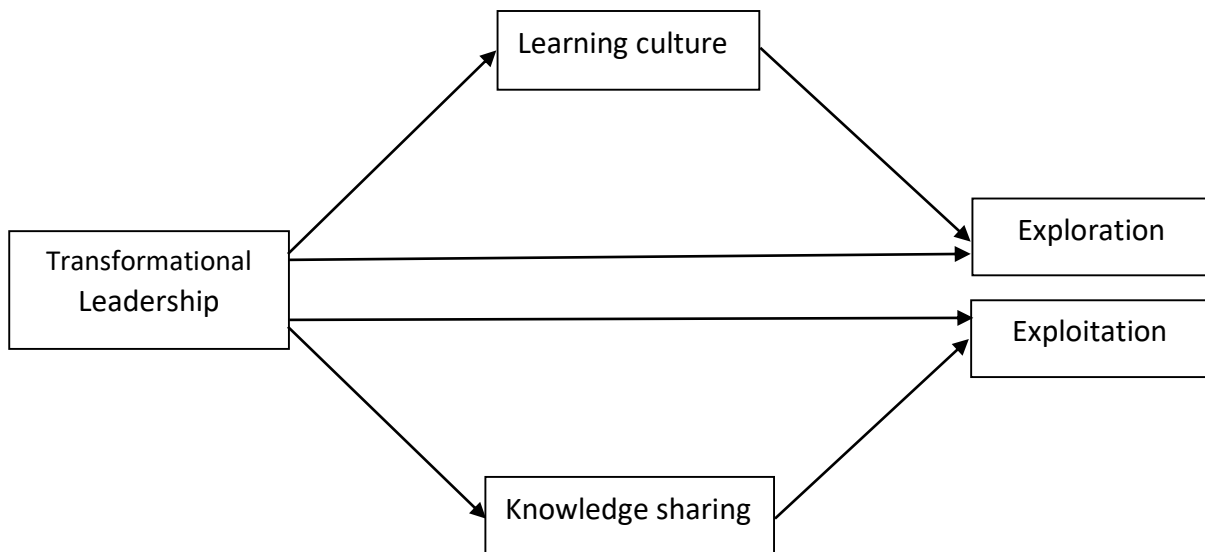
H1: There exists a positive relationship between transformational leadership and exploration.

H2: There exists a positive relationship between transformational leadership and exploitation.

H3: Learning culture will mediate the effect of transformational leadership on exploration.

H4: Knowledge sharing will mediate the relationship between transformational leadership and exploitation.

## 2.5. Theoretical Framework



## **Chapter 3: Research Methodology**

### **3.1. Research strategy**

Study comprises of quantitative research that includes survey questionnaires to gather primary data. Questionnaires were distributed as hard copies as well as in soft form through Google Docs. This provided convenience for the participants and saved time and cost.

### **3.2. Population and sampling**

Population for this study includes employees from IT industry of Islamabad and Rawalpindi. As ambidexterity is a paradoxical approach, it cannot be observed in all or most of the industries in Pakistan, but Informational Technology is a stream where efficiency and innovativeness are practiced side by side so there is a greater chance of finding ambidextrous individuals in IT industry. Convenience sampling is done following the non-probability method to get easy access to various and available employees in IT companies as their employees are usually in transit. Questionnaires were distributed among 230 employees in 20 IT companies of Islamabad and Rawalpindi. 174 useable responses were finalized for processing. The questionnaire has demographical data including age, gender, and designation. Questions related to variables have different measurements based on the previous studies from where they have been adopted.

### **3.3. Measures**

Questions for explorative and exploitative activities was adopted from Mom et al. (2009) with 7 items for exploration and 7 items for exploitation, both measured on a scale from 1 responding to “strongly disagree” to 7 responding to “strongly agree”. These questions reflected how much they engage in activities or used the approaches to be efficient or creative or both. A 26 item scale for transformational leadership was adopted from Seval DÖNMEZ and Yonca TOKER



(2017) answering on a scale from 1 to 5, displaying the motivation and inspiration inculcated by their leader. Questions for knowledge sharing was adopted from questionnaire developed by Goh and Richards (1997) with 4 items on a scale of 1 to 7 responding to the extent with which knowledge sharing is practiced in the organization. An 11 item scale was adopted from Victoria and Karen (2003) for assessing learning culture on a scale of 1 to 6.

### **3.4. Data collection and analysis**

List of companies working in the vicinity of Islamabad and Rawalpindi was made, their availability and involvement was assured and then questionnaires were either sent to them through mail or directly to their physical location as hard copies. 20 companies in total agreed on filling the questionnaire and provided response according to their availability. Data from 174 questionnaires was gathered and processed in SPSS to generate results.

## Chapter 4: Results

Multiple linear regressions were run simultaneously through PROCESS for SPSS developed by Hayes (2013) was used to test the mediating effect of both learning culture and knowledge sharing. Multicollinearity was also assessed, the values for variance inflation factors VIF were lesser than 10, 1.59 was the highest VIF. Values for condition index were also calculated that came out to be less than 20, 8.73 was the highest index. These results specify that multicollinearity was not present (Hair *et al.*, 1998).

**Table No. 1. Multicollinearity**

Model		Coefficients <sup>a</sup>					Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	.598	.209		2.864	.005		
	KS	.430	.052	.495	8.287	.000	.629	1.591
	TL	.430	.068	.377	6.312	.000	.629	1.591

a. Dependent Variable: LC

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition	Variance Proportions		
			Index	(Constant)	KS	TL
1	1	2.907	1.000	.01	.01	.01
	2	.055	7.258	.95	.33	.08
	3	.038	8.733	.05	.67	.91

a. Dependent Variable: LC

#### 4.1. Reliability test

Reliability analysis assures us the consistency of the measures we used. High value of Cronbach's alpha shows greater reliability of measures, reliability is poor if the value is less than 0.5. The measures used in this study are highly reliable. Table shows that both exploration and exploitation

**Table No. 2. Reliability Test**

	Items	Cronbach's alpha
Exploration	7	.821
Exploitation	7	.826
Transformational leadership	26	.975
Knowledge sharing	4	.783
Learning culture	11	.953

#### 4.2. Descriptive analysis

Descriptive statistics provide us with quantitative summary of our data. Exploration has a mean value of 4.71 and standard deviation 1.17, exploitation has a mean value of 4.94 and standard

deviation of 1.18. Knowledge sharing has mean value of 4.23 and standard deviation 1.44. Transformational leadership has a mean value of 3.41 and standard deviation 1.10. Learning culture has a mean value of 3.88 and standard deviation 1.25.

**Table No. 3. Frequency table according to gender**

		<b>Gender</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	136	78.2	78.2	78.2
	female	38	21.8	21.8	100.0
	Total	174	100.0	100.0	

**Table No. 4. Descriptive Table**

	Mean	Std. Deviation
Exploration	4.7184	1.17306
Exploitation	4.9417	1.18233
Knowledge Sharing	4.2385	1.44550
Transformational Leadership	3.4156	1.10218
Learning Culture	3.8877	1.25449
N = 174		

### 4.3. Correlation analysis

This table displays the correlations among all variables. (\*\*) denotes that correlation is significant at 0.01 level. Transformational leadership has a positive significant relationship with exploration (.3392\*\*) and with exploitation (.401\*\*).

**Table No. 5. Variable Correlation**

	ER	ET	KS	TL	LC
Exploration	1				
Exploitation	.704**	1			
Knowledge Sharing	.339**	.387**	1		
Transformational Leadership	.3392**	.401**	.609**	1	
Learning Culture	.394**	.397**	.725**	.679**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 4.4. Regression Analysis

This analysis will help us study the relation, impact and effect of our independent variable on our dependent variables with the addition of mediators involved. Linear regression (Table no. 5) shows that there is a significant and positive relationship between Transformational leadership as independent variable and exploitation as dependent variable. Linear regression (Table no. 6) shows that there is a significant and positive relationship between Transformational leadership as independent variable and exploration as dependent variable. Correlation done earlier and linear regression results prove that Hypothesis 1 and 2 are accepted.

**Table No. 6. Linear Regression TL-ET**

	R	R <sup>2</sup>	F	$\beta$	Sig.
<b>TL</b>	.401	.160	32.866	.430	.000
Dependent variable: ET					

**Table No. 7. Linear Regression TL-ER**

	R	R <sup>2</sup>	F	B	Sig.
<b>TL</b>	.332	.110	21.242	.353	.000
Dependent variable: ER					

Model 4 from Process procedure was applied to check the effect of mediation on exploration and exploitation. First we ran the model with Transformational leadership as independent variable, Exploration as dependent variable and learning culture as the mediator. The results showed that transformational leadership has a significant impact on learning culture ( $p=0.00$ ) ( $R\text{-sq}=0.4615$ ). We have already established that transformational leadership has a positive effect on exploration, and now with the mediation of learning culture the effect on exploration still stands out to be significant (Effect .2268). This indicates that the effect of transformational leadership reaches 22.6% on exploration when there is mediation of learning culture. This finding supports H3 that states that learning culture can mediate the effect of transformational leadership on exploration.

We again ran the model, now with Transformational leadership as the independent variable, Exploitation as the dependent variable and knowledge sharing as the mediator. The results showed that transformational leadership has a significant impact on knowledge sharing ( $p=0.00$ ) ( $R\text{-sq}=.3714$ ). We also established that transformational leadership has a positive effect

on exploitation, and now with the mediation of knowledge sharing this impact is significant (Effect .1484). This indicates that the effect of transformational leadership on exploitation is 14% under the mediation of knowledge sharing. Here, H4 is supported that said that knowledge sharing can mediate the effect of transformational leadership on exploitation.

#### 4.5. Mediation

Direct effect of TL on ER

Effect	SE	t	p	LLCI	ULCI
.1261	.1015	1.2428	.2156	-.0742	.3264

Indirect effect of TL on ER with LC as mediator

	Effect	BootSE	BootLLCI	BootULCI
TL-LC-ER	.2268	.0860	.0647	.4065

Direct effect Of TL on ET

Effect	SE	t	p	LLCI	ULCI
.2813	.0930	3.0262	.0029	.0978	.4648

Indirect Effect of TL on ET with KS as mediator

	Effect	BootSE	BootLLCI	BootULCI
TL-KS-ET	.1484	.0598	.0333	.2717

#### 4.6. Hypothesis results

H1: There exists a positive relationship between transformational leadership and exploration.	Accepted
H2: There exists a positive relationship between transformational leadership and exploitation.	Accepted
H3: Learning culture will mediate the effect of transformational leadership on exploration.	Accepted
H4: Knowledge sharing will mediate the relationship between transformational leadership and exploitation.	Accepted



## Chapter 5: Discussion

Results show that there is a significant correlation among all variables, transformational leadership has a strong effect on the exploitative and explorative behavior of employees and this effect is mediated by knowledge sharing and learning culture, respectively. This mediation refers to the existence of a culture that promotes and encourages employees to manage knowledge effectively and share information, it also shows that learning behavior of employees can help them gain new ideas and develop processes that enhance their explorative abilities.

Cultural dimensions of Pakistani IT industry differs a lot from developed countries, this deviates the usual mediation of external factors on ambidexterity but finding of this study suggests that the mediation of knowledge sharing and learning culture can still enhance the effect transformational leaders have on ambidextrous individuals. Cultural dimensions developed by Hofstede (2011) includes: power distance, individualism-collectivism, masculinity-femininity, and uncertainty avoidance. Power distance refers to the understanding that there is an unequal distribution of authority and power in the existing culture. Cultures that have high power distance tends to accept power as a fact that it exists and should be used, so the people there expect to be given orders and follow said rules without any resistance. Whereas, cultures with low power distance resist power and people expect to be included. Minai and Varma (2017) proposed that different dimension of transformational leadership have different impact on different cultures, so in cultures with high power distance values the most relevant dimensions are charisma and inspiration whereas in cultures with low power distance, intellectual stimulation and individual consideration are more relevant. This differentiation of dimensions according to culture shows that the impact of transformational leadership will vary according to variation in power distance. In comparison with other countries, Pakistan has an intermediate score of 55, indicating that there is

no preference of power perception in Pakistani IT companies, allotting maximum control to the leaders regardless of any dimensional preference. This indicates that these employees follow their leaders regardless of how they perceive their power, this not only allows leaders to have full control over their followers but also allows the integration of approaches like knowledge sharing and learning culture to improve their ambidextrous behavior.

This finding can be supported by leader member exchange theory (LMX) (Day and Grestner, 1997), the co-existence of leader member exchange and transformational leadership in Pakistani work place. LMX theory shows how the relation of leader and its employees can either cause progress or hindrance in the development. This theory proposes that the leader assesses every employee and provides tasks and roles that suits his/her skill set and capabilities and then form positions in the organization that comply with employees' capabilities, taking in account that cultural and ethical differences are handles properly. This can be accomplished successfully when there establishes a sense of trust and etiquette between both sides. Employees that are respected and trusted by the leader are given responsibilities and resources to polish their explorative or exploitative skills resulting in ambidextrous environment whereas the employees that are not well liked by the leader are deprived of these opportunities. The employees who are confidential are contended follow their leaders due to mutual understanding and trust, this trust allows the leader to incorporate an environment that encourages them to practice sharing of knowledge to improve their routine tasks and make the most use of existing resources in order to increase organizational efficiency. Similarly, reliable leaders inspires employees to include learning as a continuous practice resulting in creating a learning culture that forms competence in them. Transformational leaders exercise leader member exchange theory to assure employees that they will get the same understanding and consideration as they provide for their leaders. This ensures a mutually

beneficial relation that develops an organizational culture which has space for productive approaches.

## **5.1. Conclusion**

Analyzing data from IT companies indicate that the presence of transformational leaders as managers enhances employees' abilities to explore and exploit in order to attain organizational goals. Maintaining trade-off between exploration and exploitation and inspiring employees to practice and polish such skills is how these leaders achieve high levels of success. This study figures that transformational leaders play an important role in building an environment which supports learning as a culture to explore new opportunities and sharing of knowledge as a routine to exploit how their resources can be best used to increase efficiency of existing processes. These findings can help managers of IT companies in Pakistan to apply Transformational Leadership style to enhance employee ambidexterity.

This concludes that in order to create an innovative culture, learning practices can help mediate the creative approach of exploration to be used as a competitive advantage. Similarly, sharing knowledge at work place can develop new streams of knowledge, resulting in increased efficiency and assistance in decision making by exploiting current resources and improving process execution.

## **5.2. Practical Implications**

IT industry in Pakistan aims to boost its production and compete on international level but there is a lot of room for improvement in many areas. This study can help them sort out matters on managerial level in context to leadership role and employee treatment. The establishment of effect of transformational leadership on ambidextrous abilities in employees of IT sector suggests

that there is a need to choose such individuals for the role of leaders who have the potential to motivate and encourage employees in attaining said goals. This will not only improve success factor but will also encourage employees to learn and practice ambidextrous behavior at workplace.

As this study suggests that knowledge sharing mediates the relation of transformational leadership and exploitation, employees in IT companies should be encouraged to manage knowledge with the aim to practice exchange of knowledge in order to improve efficiency of their performance and make the most of their available resources. Similarly the mediation of learning culture in the relation of transformational leadership and exploration suggests that learning is a continuous process that not only provides a platform for ideas to flourish but also assists leaders to encourage employees in coming up with innovative and novel ideas in creation of advance technologies and practices related to their field. It is important for Pakistani IT industry to create improvements from their core level that comprises of the individuals aiming to develop and maintain a growing paradigm. This study will help them understand how maintaining culture of knowledge sharing and learning will give rise to their exploitative and explorative competencies that can be made into competitive advantage by establishing a strong relationship between leaders and employees who can take guidance of inspiration and goal attainment in the form of transformational leaders.

### **5.3. Limitations**

First limitation for this study was the limited population that was reached for data collection. Population for this study included IT companies of Islamabad and Rawalpindi only, so this study represents the leadership style and ambidexterity of only a few companies in Pakistan. Pakistan is a country with variation in cultural norms that form the culture of its workplace, so the

reaction of companies to knowledge sharing and learning culture cannot be generalized to all IT companies in Pakistan.

Second limitation was the limited time available to survey IT companies and gather data from them. This created a gap of being thorough and getting maximum companies to participate in data collection.

Third limitation was the neglect from IT companies to being cooperative in giving information and time. Many companies resisted in sharing data and being available for filling in the questionnaires, irresponsible and uncooperative attitude of such companies not only participated in delayed data collection process but also wasted time.

#### **5.4. Future research**

This research studied the effect of transformational leadership on exploitation and exploitation but this is not the only kind of leadership practiced in Pakistan, cultures in Pakistan are diverse in nature so different regions have different leaders to lead in IT sector. Research can further be conducted on country level to get a general view of how this relation is practiced. Consequently, the mediation of knowledge sharing and learning culture might generate different results or confirm the validity of these findings. Researchers can look into other leadership approaches that are practiced in Pakistan and study their effects on ambidexterity of employees, different treatment of employees will also effect the level of exploitation and exploration and the factors mediating this effect.

Birkinshaw and Gibson, 2004; O'Reilly and Tushman, 2008) suggests that there are various antecedents that effect exploration and exploitation differently, they can either increase the occurrence of certain activities or hinder them. This leaves room for investigating how knowledge

sharing and learning culture mediate differently than other organizational culture factors. This also suggests that there is room for studying effect of other organizational mechanisms that form organizational culture on explorative and exploitative abilities of employees.

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## Annexure

### Questionnaire

Company's Name: \_\_\_\_\_

Gender:        Male            Female

Designation: \_\_\_\_\_

Strongly disagree responding to 1 and strongly agree to 7.

Sr. no.	Statements	1	2	3	4	5	6	7
1	I search for new possibilities with respect to products/services, processes, or markets							
2	I evaluate diverse options with respect to products/services, processes, or markets							
3	I focus on strong renewal of products/services or processes							
4	I engage in activities of which the associated yields or costs are currently unclear							
5	I engage in activities requiring quite some adaptability of me							
6	I engage in activities require me to learn new skills or knowledge							
7	I engage in activities that are not (yet) clearly existing company policy							
8	I engage in activities of which a lot of experience has been accumulated by myself							
9	I engage in activities which I carry out as if it were routine							
10	I engage in activities which serve existing (internal) customers with existing services/products							
11	I engage in activities of which it is clear to me how to conduct them							
12	I engage in activities primarily focused on achieving short-term goals							
13	I engage in activities which I can properly conduct by using my present knowledge							
14	I engage in activities which clearly fit into existing company policy							

Sr. no.	Statements	1	2	3	4	5	6	7
1	I often have an opportunity to talk to other staff about successful programs or work activities in order to understand why they succeed							
2	Failures are seldom constructively discussed in our organization							
3	New work processes that may be useful to the organization as a whole are usually shared with all employees							
4	We have a system that allows us to learn successful practices from other organizations.							

Sr. no.	Statements	1	2	3	4	5	6	7
1	My manager tries to enhance my internal motivation when s/he wants to motivate me for a task.							
2	My manager knows about our competencies, work-related personal concerns and needs and how to motivate each of us.							
3	My manager makes me feel that what I do is valuable and useful.							
4	My manager encourages us to generate ideas and gets our suggestions while planning and conducting work.							
5	My manager makes the workplace feel like a family environment.							
6	My manager informs me about the short or long term potential contributions of my work to the company.							
7	My manager not only appreciates my ideas, but also encourages me to put them into practice.							
8	My manager is a role model with the way s/he conducts work, his/her personality and communication skills.							
9	My manager encourages me to freely express my ideas.							
10	My manager encourages me to question the status quo, to produce new solutions and supports my creativity.							
11	My manager encourages us to follow the innovations in the field.							

12	My manager thrills us with the things we can do and succeed at by reminding us of our specifications and abilities.							
13	My manager tries to convey all the information to us about the work processes.							
14	My manager plans trainings for the areas I am in need of improving.							
15	My manager makes me feel like there are things s/he could also learn from me.							
16	My manager makes me feel that s/he cares about me, not only as an employee, but also as a person.							
17	My manager considers our personal interests and abilities, when s/he allocates tasks in the team.							
18	My manager sets us performance goals and rewards us as much as we succeed.							
19	My manager lets me use part of my work hours for new projects that I have in mind.							
20	My manager would help me with my personal problems.							
21	My manager supports our attendance to personal and professional development seminars.							
22	My manager would talk about non-work related matters with me, if I wish to.							
23	My manager acts respectfully to me.							
24	My manager attends non-work social events (wedding, birthday etc.) upon my invitation.							
25	My manager supports me to take initiative.							
26	My manager would give us important responsibilities, when necessary.							

Sr. No.	Statements	1	2	3	4	5	6
1	In my organization, people openly discuss mistakes in order to learn from them.						
2	In my organization, people identify skills they need for future work tasks.						
3	In my organization, people help each other learn.2						
4	In my organization, people can get money and other resources to support their learning.						
5	In my organization, people are given time to support learning.						

6	In my organization, people view problems in their work as an opportunity to learn						
7	In my organization, people give open and honest feedback to each other						
8	In my organization, people listen to others' views before speaking						
9	In my organization, people are encouraged to ask "why" regardless of rank						
10	In my organization, people treat each other with respect						
11	In my organization, whenever people state their view, they also ask what others think.						