

**THE IMPACT OF TRANSFORMATIONAL LEADERSHIP ON INNOVATIVE  
WORK BEHAVIOR OF FINANCIAL INSTITUTIONS IN THE SEOUL  
METROPOLITAN AREA: FOCUSING ON THE MEDIATING EFFECT OF TRUST  
IN LEADERS AND THE ADJUSTING EFFECT OF KNOWLEDGE SHARING**

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**Abstract**

Due to the increasing trend of technology, customer needs, and global economic integration, companies face many challenges and challenges. Innovative behavior is attracting more and more attention from researchers and practitioners. On the other hand, innovative work behavior is an important means of achieving a company's competitive advantage and continuous success. Transformational leadership, trust in leaders, and work participation have been widely recognized as key sources of companies that can promote innovative work behavior and secure organizational effectiveness, viability, and sustainable competitive advantage. This study not only verified the difference in the impact of transformational leadership on each aspect of innovative work behavior, but also deepened the understanding of paths and conditions to improve specific aspects of innovative work behavior by verifying the trust of leaders and the mediating role of knowledge sharing mechanism. In order to achieve this research purpose, the research hypothesis was verified by applying exploratory factor analysis based on data collected from 400 survey respondents working at financial institutions in Seoul and Gyeonggi-do. Reinforcing innovative work behavior has been considered a key to opening the door to corporate success, and the results of this study show that transformational leadership can positively affect the trust of leaders and significantly improve innovative work behavior of financial institutions. In other words, this study was adopted as a result of verifying the hypothesis that transformational leadership and trust in leaders play a positive and important role in promoting innovative work behavior. In addition, the mediating effect of trust in leaders was confirmed in the relationship between transformational leadership and innovative work behavior, and the presence or absence of the moderating effect of knowledge sharing on the effect of transformative leadership on innovative work behavior was verified. As a result of the verification, it was found that there was no moderating effect of knowledge sharing in the relationship between transformational leadership and trust in leadership, and in the relationship between transformational leadership and innovative work behavior. The results of this study provide significant theoretical and practical implications for leadership, trust, and innovative work behavior that can analyze the relationship between innovative work behaviors, but there

are many limitations. In future studies, it is necessary to verify the mediating role of components even if they are involved in work, or to study the relationship between potential variables that can affect the transition of trust in leaders to better innovative work behavior.

**Topic words:** transformational leadership, trust in leaders, innovative work behavior, knowledge sharing

## **1. Introduction**

### **1.1 Background and purpose of the study**

Today's companies are facing challenges and difficulties due to technology development, diversification of customer needs, and the increasing trend of global economic integration. To overcome this situation, companies are paying great attention to the innovative behavior of their employees. The innovative work behavior of organizational members is recognized as an important means of achieving a company's competitive advantage and continuous success. Therefore, companies are trying to identify effective paths for successful innovation and become innovators themselves beyond copying previous innovations. In this context, it is becoming increasingly important to identify strategic factors that promote innovative business behavior in organizations related to banking institutions. Among the strategic elements of a company, transformational leadership and knowledge sharing are known as key sources of promoting innovative work behavior and securing organizational effectiveness, viability, and sustainable competitive advantage. In particular, transformational leadership has been considered an effective style among various leadership styles. Transformational leadership induces openness among individuals in the organization through intellectual stimulation, and induces and motivates employees' innovative work behavior. The implementation of such transformational leadership can be a decisive factor in strengthening innovative business behavior of bank financial institutions. However, research on the direct correlation between transformational leadership and innovative work behavior is still insufficient. Since the relationship between transformational leadership and innovative work behavior is still theoretically and empirically different, in-depth research on the relationship between the two is needed. Therefore, this study not only verified the difference in the effect of transformational leadership on innovative work behavior, but also verified the mediating role of trust in leaders and the mechanism of controlling knowledge sharing. Through this, it will be possible to deepen the understanding of the paths and conditions for improving the specific aspects of innovative work behavior. The purpose of this study is as follows. First, we intend to fill the gap between the relationship between transformational leadership and innovative work behavior and the influence of trust in leaders, and provide new insights to improve innovative work behavior. Improving innovative behavior is one of the most important and interesting issues today. Transformational leadership and trust in leadership are recognized as the driving force for successful innovation, but there are not many research literature on the relationship between these constituent concepts. Moreover, although trust in leaders is an important determinant in forming innovative work behavior, prior factors that encourage or frustrate trust in leaders have not been properly identified or studied. Therefore, by studying the mediating

mechanism of trust in leaders in the relationship between transformational leadership and innovative work behavior, it will be possible to fill the research gap in the field and gain a deeper insight into the mediating role of trust in leaders in the relationship between transformational leadership and innovative work behavior. Second, it was attempted to verify the moderating role of knowledge sharing as well as to confirm the relationship between transformational leadership and innovative work behavior. Each organization has a different source, opportunity, and motivation for activities, which can promote or hinder the positive impact of trust and transformational leadership on innovative behavior. In order to investigate this influence relationship in more depth, we tried to verify the moderating effect of knowledge sharing in the relationship between transformational leadership and innovative work behavior. Through this, it will be possible to provide theoretical attempts and practical implications for organizational behavior and knowledge management necessary to improve innovative business behavior of banking institutions.

## **2. Theoretical Background**

### **2.1 Transformational Leadership**

Transformational leadership was the first to introduce transforming leadership as a distinct concept from transactional leadership based on the exchange relationship between members in a study of political leaders by Burns (1978). By developing this, Bass (1985) has continued to study more than 30 years later, changing the term to a transformational leadership that can be applied to administrative organizations and companies and motivates them to move beyond the exchange relationship between leaders and subordinates. Until now, leadership research has developed from characteristic theory centered on individual characteristics of leaders to situational theory and behavior theory, but this definition of leadership has various definitions for each person studying the concept. The leadership theory has been viewed as a traditional leadership study, and Bass (1985) defined transformational leadership as a leadership that inspires by presenting a vision based on Charisma, or presents problem solutions in a new way and boosts subordinates' desire to achieve.

### **2.2 Trust in Leadership**

Leadership is the act of an organization's chief executive presenting or motivating members to achieve the organization's goals. However, even the best leadership is useless if the members do not accept it. The link that can solve these problems is 'leader trust'. If a leader demonstrates leadership and a follower trusts such a leader, only a relationship in which the follower trusts the leader and does his best can be formed. Trust in an organization is an essential factor in promoting the stability and high performance of the organization, positively affecting the well-being of members, and maintaining and developing the organizational community. Many scholars diagnose that trust is not only necessary for the job satisfaction of members of an organization, but also an indispensable concept for the goal and productivity of the organization, and the self-realization of each member (Cook & Wall, 1980). Trust is also the

basic premise of relationship formation because it means the belief that the other person can accurately perform what they expect, and it has the effect of improving individual performance by resolving conflicts and promoting cooperation within the organization (Chan Ki Choi, 2008; Tidd, McInty& Friedman, 2004). There are also various opinions from scholars on the definition of trust. Heimer (2001) defined trust as entrusting and trusting others because he believes that it will not have harmful consequences for his own interests and risks in a situation where others have their own interests and risks. Rousseau & Camera (1998) defined trust as a psychological state that positively expects the leader's behavior or intention and is willing to accept the risk that can affect him. Johnson & Swap (1982) defined trust as a positive emotional state felt by a leader's confidence in values and a favorable attitude among members, and a state of mind in which members trust and rely on the leader. Podsakoff (90) defined trust in the boss as dependence, trust, and follow by subordinates in the boss's leadership, and explained that the relationship between supervisors and subordinates has a great influence on the behavior and attitudes of members. As a result, he suggested trust as a decisive factor in enhancing the performance of the organization, and argued that it is difficult for any leader to demonstrate effective leadership without the trust of the members. As a result of summarizing previous studies on trust in leaders so far, trust in leaders is generally expected, and it can be defined as believing that the boss is likely to act beneficial and harmless to him (compensation, 2010). The results summarizing the effect of trust are as follows. First, trust is based on trust between both parties, so transaction costs can be reduced. Second, trust is a form of social capital that promotes voluntary cooperation and non-role behavior of members. Third, trust plays a role in inducing voluntary follow-up of members in the event of conflict and increasing acceptance of solutions (Park Won-woo, Yoo Seung Min, Ahn Sung-ik, 2007).

### **2.3. Innovative Behavior**

Increasingly, global competition and rapid technological change are emerging as challenges for organizations to overcome in order to survive, and innovation to adapt and overcome these challenges is being emphasized (Park Kyung-kyu, Shin Eui-hyun, Choi Hang-seok, 2012). The term "innovation" is used in a similar sense to change, but change means changing something, and innovation means discovering and applying fresh ideas in the sense of change to create new things or bring them into different forms (Kim Il-cheon, Kim Jong-woo, Lee Ji-woo, 2004). Innovation is divided into organizational and personal levels according to the level at which it occurs (King, 1990; Staw, 1984), and refers to a set of actions by an organization that create, develop, commercialize, or introduce ideas, products, services, institutions, programs, processes, or policies. On the other hand, innovation at the individual level is distinguished from innovation at the organizational level in that it focuses on the role related to the work performed as an organization member, such as work improvement or efficiency improvement. Despite the distinct level of analysis of innovation, existing research on innovation has focused on the level of organization that can be measured with objective indicators (e.g. the number of new product developments, the introduction of new processes, etc.) Thus, research on innovation at the individual level was relatively insufficient (Janssen, 2000; Scott & Bruce,

1994; West & Farr, 1990). To overcome this, research on conceptualizing and measuring individual innovation began to be actively conducted after the mid- to late 1980s, and the concept of 'innovative work behavior', which means intentionally creating, introducing, and applying ideas to improve organizational performance, was presented. Attempts to study innovation at the individual level have begun with these research attempts and concept presentations. Innovative work behavior is a concept that can explain innovation at the individual level, and refers to the degree to which members focus on the tasks they perform and take the initiative in accepting and implementing innovation (Damanpour, 1991).

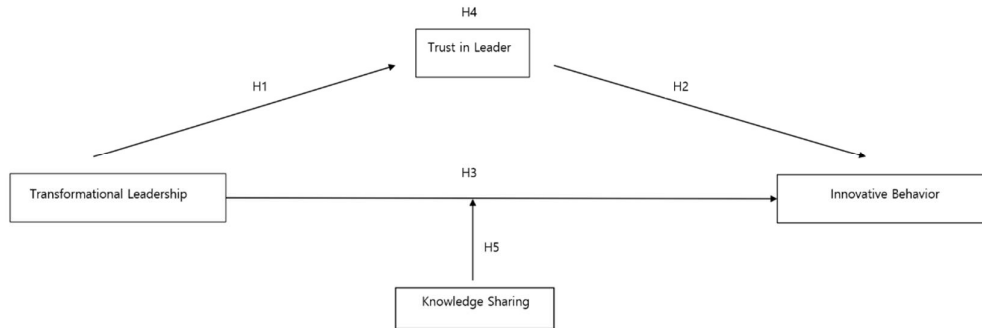
## **2.4. Knowledge Sharing**

Knowledge sharing can be defined in various ways depending on the perspective, and first of all, it can be seen as an activity that maximizes the use of knowledge by sharing knowledge within an organization (Grant, 1996). It can also be described as the concept of knowledge transfer or distribution between individuals within an organization, including the relationship between those who hold knowledge within the organization and those who wish to acquire it (Bock & Kim, 2002). Alternatively, it can be defined as an activity that spreads personal knowledge to other members of the same organization (Zack &McKen, 2009) by recognizing it as a process of converting personal knowledge into a form that others can understand, absorb, and utilize. Meanwhile, Hansen (1999) explained that knowledge sharing is the act of integrating members into their own knowledge by finding and acquiring the knowledge necessary to perform tasks within an organization. According to Hansen, knowledge sharing consists of two main processes: the first process is the process of exploring knowledge, and the second process is the process of transferring knowledge to one's knowledge through interaction with knowledge holders (Kang Kyung-sook, 2014). Until now, several previous studies have argued that knowledge sharing offers many advantages, such as improving innovation capabilities and improving team performance (Tsai, 2001; Dyer &Noveka, 2000; Darroch, 2005; Strivastava et al., 2006; Liao et al., 2007; Lin, 2007). In the study of Park Tae-ho (2002), it was confirmed that the compensation system, openness of communication, support, and trust of management, which are various preceding factors of knowledge sharing, affect innovative work behavior. In addition, it was found that knowledge sharing itself also affects the innovative work behavior of organizational members. This study emphasized that innovative work behavior of members is essential to reveal these results and improve organizational performance, and knowledge sharing, which is the basis for creating new ideas, should be activated to promote innovative work behavior.

## **3. Research Method**

### **3.1 Setting up Research Model and Hypotheses**

Based on previous studies, a research model was established and a research hypothesis was established as shown in Figure 1 below.



[Figure 1] Research Model

Relationship between transformational leadership, trust in leaders, and innovative work behavior based on previous studies on the relationship between transformational leadership and other variables, we presented an appropriate basis for hypothesis setting and added the literature to the reference. Kuhnert & Lewis (1987) said that transformational leadership is a leadership that can induce leaders' personal values and subordinates' firm beliefs and beliefs about leaders, and lead them to improve their performance and satisfaction through careful consideration and appropriate stimulation of subordinates' needs (Lee Jae-sung, 2014). House (1988) reported the dependent variables of transformational leadership theory as a high level of synchronization related to subordinate job satisfaction, trust in leaders, and additional efforts, and described the actions of presenting vision, empowering subordinates, and setting challenging goals as leaders' main actions (Hee Jun Chae, 2014). Sergeovanni (1990) defined transformational leadership as leadership that develops individual competencies and potentials and motivates them, and emphasized the importance of vision setting, goal achievement support, quality cultural management, free discretion and shared values, and moral values. External factors of innovation behavior were appropriate feedback from top positions and recognition of subordinates (Glassman, 1986), social support from leaders (West, 1989), support for idea production, organizational atmosphere, intellectual motivation, and challenging work assignment (Amabile et al. 1996), and the importance of organizational culture for organizational change and innovation attempts (Jo Yun-hyung, Yugoslavia, 2020; Kotter, 1996). Complex job characteristics, which are external factors of innovation behavior, require a high level of challenge for members, which promotes idea formation (Amabile, 1988), and the organizational context influences innovation behavior through the intrinsic motivation of organizational members (Ko Wook, Oh Seung-young, Shin Min-jung, 2020; Shelley & Wilson, 2004). It was found that the innovation behavior of members has a positive correlation with the organizational situation, including the open and participatory organizational atmosphere, support for innovation, and relationships with leaders or bosses (Ko Wook, Oh Seung-young, Shin Min-jung, 2020; Scott & Bruce, 1994; Shalley & Wilson, 2004).

Hypothesis 1: Transformational leadership will have a positive (+) effect on trust in leaders.

Hypothesis 2: Trust in leaders will have a positive (+) effect on innovative work behavior.

Hypothesis 3: Transformational leadership will have a positive (+) effect on innovative work behavior.

Hypothesis 4: Trust in leaders will mediate a positive (+) relationship between transformational leadership and innovative work behavior.

### **3.2 Relationship between Transformational Leadership, Innovative Work Behavior, and Knowledge Sharing**

Bass (1985) argued four transformational leadership dimensions: motivation, inspiration, and individual consideration or intellectual stimulation, in which transformational leaders motivate employees to achieve task performance that exceeds the organization's expectations. Yukl (2006) and Northouse (1997) said that the source of inspiration as a charismatic leader is the form of a leader who becomes a role model for all employees. These leaders usually have high moral standards and are highly respected and trusted by their employees. Transformational leadership leaders are a source of inspiration because they become carriers that present future visions. Intellectual stimulation effectively encourages subordinates who are part of transformational leadership to be more innovative and creative. Leaders with these characteristics can certainly motivate employees to develop new ways to solve organizational problems (Northouse, 1997). The source of consideration is the type of leadership that creates an inspiring work environment. Leaders listen to employees' complaints and demands. This type of leader can serve as a trainer, adviser and consultant (Yukl, 2006; Northouse, 1997). Transformational leadership forms an emotional bond between leaders and subordinates expressed through trust and conviction in the influence and competence of leaders (Deluga, 1990). Leaders who act in relation to transformational leadership create an environment in which employees feel a strong emotional bond with their superiors. Strong emotional ties between supervisors and members can persuade members to develop knowledge for the organization, and emotional bonds can promote knowledge sharing among members. The success indicator of transformational leadership leaders is a higher level of collective performance than before, raising expectations by allowing employees to trust themselves and gain confidence. In this process, various knowledge is required, and knowledge sharing between employees is highly likely to be activated.

Hypothesis 5: Knowledge sharing will positively control the relationship between transformational leadership and innovative work behavior.

### **3.3 Data Collection and Analysis Method**

The sample of this study was collected from April 16 to May 20, 2022 for executives and employees of financial institutions located in the Seoul metropolitan area (Seoul, Gyeonggi-do), and it was clear that the survey response was not used except for thorough confidentiality and statistical analysis. The sampling method was performed using the convenience sampling

method among the non-probability sampling methods. A total of 500 copies of the structured questionnaire were distributed using direct visits, mail, faxes, and e-mails to recover 450 copies (90.0%), of which 400 copies (80.0%) were used for the final analysis, excluding 50 copies with poor response. In this study, SPSS version 24, a statistical program, was used for data analysis. Frequency analysis was conducted to understand the characteristics of samples, and sphericity verification was conducted to determine the number of variables and the number of samples to be used by exploratory factor analysis, exploratory factor analysis, reliability analysis, and correlation analysis.

#### 4. Results of Empirical Analysis

##### 4.1 Characteristics of Sample

The subjects of this study were 400 team leader-level and manager-level employees working at financial institutions located in Seoul and Gyeonggi-do.

##### 4.2 Investigation Procedures

The survey procedure of this study was conducted on about 400 people for 35 days from April 16 to May 20, 2022. The survey was conducted using a random sampling method by distributing 500 questionnaires with researchers and three graduate students in the master's program, and 430 copies were collected. Among them, 400 copies of data were used for empirical analysis, excluding 30 copies of the questionnaire that lacked reliability. The investigation procedure of this study is presented in <Table 1>.

##### 4.3 Demographic Characteristics of Sample

The demographic characteristics of the study subjects were identified through frequency analysis of 400 effective samples.

<Table 1> Characteristics of the study subjects (N=400)

Item	Division	Frequency	Ratio(%)
Gender	Men	193	48.2
	Women	207	51.8
Age	20's	18	4.5
	30's	168	42
	40's	172	43
	50's	42	10.5
Education Background	High School	17	4.2
	College	42	10.5



	Undergraduate	247	61.7
	Graduate	94	23.5
Job	Team Member	346	86.5
	Manager	54	13.5
Work Period	Under 5 Years	134	33.5
	5~10 Years	34	8.5
	10~15 Years	146	36.5
	Over 15 Years	86	21.5

The gender distribution was 193 (48.2%) for men and 207 (51.8%) for women. The age was found to be distributed in the order of 18 people in their 20s (4.5%), 168 people in their 30s (42%), 172 people in their 40s (43%), and 42 people in their 50s and older (10.5%). The educational background was 17 high school graduates (4.2 percent), 42 junior college graduates (10.5 percent), 247 college graduates (61.7 percent), and 94 graduate school graduates (23.5 percent). The position was found to have a distribution of 346 team members (86.5%) and 54 managers (13.5%). The working period was found to be 134 people (33.5%) for less than 5 years, 34 people (8.5%) for less than 5 to 10 years, 146 people (36.5%) for less than 10 to 15 years, and 86 people (21.5%) for more than 15 years.

<Table 2> Organizing Questionnaire

Variable	Factor	Item
Transformational Leadership	Satisfaction with the leader	8
Trust in Leaders	Emotional-based trust	8
Knowledge Sharing	Task information and know-how	10
Innovative Work Behavior	Creativity	7
Demographic Characteristics	Gender, Age, Educational Background, Position, Working Period	5
Total		38

#### 4.4 Measuring Tools

The survey tool for empirical analysis of this study used a questionnaire. Among the leadership-related questions, 38 questions (equivalent scale, 5 points Likert) rewritten by researchers were

used by referring to a study using MLQ (Multifactor Leadership Questionnaire) developed by Burns (1978), and 8 questions developed by Liu et al. (2010) were used for transformational leadership. For the questionnaire on trust in leaders, 8 questions (equivalent scale, 5 points Likerts) reconstructed by the researcher were used referring to previous studies (Sparks, 2000). For the questionnaire for knowledge sharing, 10 questions (equivalent scale, 5 points Likerts) reconstructed by the researcher were used referring to previous studies (Cheng et al, 2008). For the questionnaire on innovative work behavior, 7 questions (equivalent scale, 5-point Likert) reconstructed by the researcher referring to previous studies (Glynn, 1996) were used. Finally, as a demographic characteristic, the nominal scale was used to consist of five questions about gender, age, education, position, and working period. The contents are shown in Table 2.

#### 4.5 Confidence in transformational leadership, knowledge sharing, and innovative work behavior

##### 4.5.1 Reliability Analysis of Transformational Leadership

Reliability is the evaluation of the degree of consistency when a variable is measured in various ways or measured several times, and measurement methods include remeasurement methods and internal consistency methods. In this study, the Cronbach's Alpha coefficient was used to analyze the internal consistency between the most widely used items. In general, a Cronbach's alpha coefficient of 0.7 or higher can determine that the measurement item is relatively reliable (Hair, Black, Babin, Anderson & Tatham, 2006). In general, the reliability coefficient is .90 or higher for applied and basic studies. It should be above 80 but at the level of analysis of exploratory research or manipulation units, 60 or more is considered good (Yeo Woon-seung, 2006).

##### 4.5.2 Transformational Leadership Reliability Analysis

The average of the transformational leadership measurement variables was 3.54 to 3.89, and the standard deviation was 0.867 to 1.126. The overall reliability of transformational leadership was 0.855, which was found to be very good. When the item of transformational leadership was removed, the Cronbach's alpha coefficient was found to be 0.852 to 0.858, and there was no variable that reduces reliability, so the measurement variable of transformational leadership was found to be reliable. The analysis results are presented in Table 3.

<Table 3> Reliability of transformational leadership measurement variables (N=400)

Item	M	SD	Cronbach a
1.My boss can understand my situation and give me encouragement and help.	3.83	.885	.854
2.My boss encourages me to challenge myself.	3.70	.954	.853

3.I believe my boss can overcome any challenge at work. My boss believes I can overcome any challenge at work.	3.86	.945	.852
4.My boss encourages me to try to realize my company's vision.	3.74	.897	.855
5.My boss encourages me to think about problems from a new perspective.	3.88	1.126	.857
6.My boss recommends that I reconsider an opinion that I have never doubted in the past. My boss recommends that I reconsider an opinion that I have never doubted.	3.85	.914	.858
7.I believe that I can complete the work under the leadership of my boss. I believe that I can complete the tasks entrusted by my boss.	3.54	.867	.857
8.My boss spends time understanding my needs. My boss takes time to understand my needs.	3.89	.935	.852

Cronbach's alpha: .855

Note: Scale. 1=Not at all~5=Very much

#### 4.5.3 Analyze the credibility of trust in leaders

The average of trust in a leader is 3.57 to 3.96 and the standard deviation is .It was 656~882, and the overall reliability of 8 questions of trust for the leader was well presented as .868, and the Cronbach's alpha coefficient was .845~.868, so there was no variable that reduced reliability, and the trust for the leader is reliable, as shown in Table 4 below.

<Table 4> Reliability of the measurement variable of trust in the leader (N=400)

Item	M	SD	Cronbach a
1.I am proud to be a member of the team	3.96	.717	.858
2.My leader puts the interests of the organization before himself.	3.76	.743	.856
3.My leader does what members admire.	3.85	.678	.854
4.My leader reminds members of an important problem.	3.66	.845	.857
5.My leader cares about each member.	3.59	.882	.845

6.I think the leader is being fair to me.	3.87	.656	.855
7.I am convinced of the professionalism and integrity of the leader.	3.57	.757	.854
8.I trust and trust the ability of the leader to push ahead.	3.79	.882	.868

Cronbach's alpha: .868

Note: Scale. 1=Not at all~5=Very much

#### 4.5.4 Reliability Analysis of Knowledge Sharing

The average of knowledge sharing is 3.86 to 4.16 and the standard deviation is .It was 615~892, and the overall reliability of 10 questions of knowledge sharing was well presented as .936, and the Cronbach's alpha coefficient was .867~.938, so the knowledge sharing scale is reliable, and is shown in Table 5 below.

<Table 5> Reliability of knowledge sharing measurement variables (N=400)

Item	M	SD	Cronbach a
1.I often share new content that I learn with my colleagues.	4.12	.642	.937
2. Colleagues often share with me the new work they learn.	4.16	.679	.938
3.I often share new information with my colleagues.	4.16	.615	.938
4. Colleagues often share with me the new information they have acquired.	3.86	.847	.937
5.Sharing knowledge with colleagues is considered normal in our company.	4.05	.892	.936
6.My colleagues often share what I know when I ask.	3.76	.617	.878
7.When my colleagues ask me, I often share what I know with my colleagues.	4.11	.619	.897
8.My colleagues often share the information I know when I ask.	3.96	.513	.867
9. When my colleagues ask, I often share information I know with my colleagues.	4.04	.616	.914
10.Our company employees frequently exchange work skills and knowledge about information.	4.14	.717	.918

Cronbach's alpha: .936

Note: Scale. 1=Not at all~5=Very much

#### 4.5.5 Reliability Analysis of Innovative Work Behavior

<Table 6> Reliability of innovative work behavior measurement variables (N=400)

Item	M	SD	Cronbach a
1.In our organization, the innovative behavior of financial services is superior to that of competitors.	4.15	.650	.940
2. Our organization always takes outstanding innovative actions in transforming financial institutions into better financial services.	4.19	.682	.941
3.Our organization often attempts different operational procedures to speed up the realization of the goal.	4.19	.618	.941
4. Our organization always acquires new technologies or information to improve better services.	3.93	.850	.940
5.Our organization can develop more efficient operational procedures.	4.08	.895	.939
6.Our organization can flexibly provide services according to the needs of customers.	3.98	.804	.882
7.In our organization, the operational procedures introduced always elicit imitation from competitors.	4.03	.843	.839

Cronbach's alpha: .939

Note: Scale. 1=Not at all~5=Very much

The average of innovative work behavior was 3.93~4.19 and the standard deviation was .618~.895, and the overall reliability of 7 items of innovative work behavior was .939. It was well presented as .939, and the Cronbach's alpha coefficient was .839 to .941 when the item was removed, so the innovative work behavior scale can be considered reliable, and is shown in Table 6 below.

#### 4.6 Data Processing

When describing a timely procedure to achieve the purpose of this study, first, a research subject is selected and a response to a questionnaire is received from the research subject. Coding was conducted for empirical analysis of valid questionnaires. After that, the hypothesis was verified through frequency analysis, validity analysis, and reliability analysis using the statistical package program (SPSS24). The test results are interpreted to determine whether the research purpose is achieved, and the research results and implications are presented accordingly. In addition, in this study, the following data processing and analysis methods were used to achieve the purpose of the study with an effective sample obtained through the final questionnaire. --> Shouldn't we add the old map and the Bartlett test? 5. The reliability and validity of the research variables are shown below.

#### 4.6.1 Sphericity, Bartlett's test

First, frequency analysis and descriptive statistical analysis were conducted to find out the distribution of various variables according to the demographic variables of the study subjects. Second, validity analysis and reliability analysis were conducted to verify the validity and reliability of the questionnaire.

----> Shouldn't we also add factor analysis and validity sphericity verification? 5. The reliability and validity of the research variables are shown below.

#### 4.7 Verification of reliability and validity of research variables

##### 4.7.1 Sphericity, Bartlett's test

A sphericity test was performed using the KMO scale and Bartlett's test to determine whether the number of variables to be used for factor analysis was appropriate. The sphericity test uses a Bartlett test that examines the partial correlation between the Keiser-Meyer-Olin (KMO) measurement and the variables used in factor analysis, and refers to a sample fit that indicates whether the number of variables and cases is appropriate and has values from 0 to 1. 0 means that it is inappropriate for factor analysis as a correlation, and the closer it is to 1, the more reliable and discriminating the factor is. In general, a KMO index of 0.7 to 0.9 means that it is suitable for factor analysis, and a KMO index of 0.9 or higher means that it is very suitable for factor analysis (Tabaconick& Fidel, 2007). And the Bartlett test is judged to be valid if the p value of the approximate value is less than 0.05. As a result of testing this data, all factors satisfied KMO 0.8 or higher with KMO 0.975, and Bartlett's significant probability p value was 0.000 or less, so the number of variables was suitable for factor analysis, and factor analysis was not unreasonable. The results are shown in Table 7.

<Table 7> Sphericity test results

Keiser-Meyer-Olin Measure of Appropriateness of Standard Formation (KMO)		.975
Bartlett's Sphericity Test	Approximate Chi-Square	16083.637
	Degree of Freedom	668
	Probability of Significance	.000

##### 4.7.2 Exploratory Factor Analysis

Exploratory factor analysis was conducted to analyze the content validity. The principal component analysis extraction model and the Varimax rotation method were used. The load on each factor was 0.50 or more, and the reliability was significant as the reliability coefficient for each factor was 0.70 or more. The commonality value, which indicates how much the extracted

factors explain each variable, is judged to be 0.50 or higher, with 11 factors accounting for 70.284% of the total variance, and the largest value for each factor is 16.988%. Excluding demographic questions, the total questionnaire was composed of 8 transformational leadership questions, 8 trust questions for leaders, 10 knowledge sharing questions, and 7 innovative work behaviors, and all of these questions were used for analysis because the factor load was 0.50 or higher. In addition, in this study, the Kronbach alpha ( $\alpha$ ) value was used to verify reliability, and the transformational leadership factor (8 questions) was  $\alpha=.946$ , the confidence factor for the leader (8 questions) is  $=.928$ , the knowledge sharing factor (10 questions) is  $=.937$ , Innovative work behavior factors (7 questions) are  $=.All 919$  secured trust with 0.7 or more. <Table 8> shows the results of exploratory factor analysis and reliability analysis.

<Table 8> Exploratory Factor Analysis and Reliability Analysis Results

Compositio n concept	Ite m	S u r v e y  D e t a i l s	Ing red ien t	Co mm onal ity	alp ha val ue
Transform ational Leadershi p	1	My boss can understand my situation and give me encouragement and help.	0.7 46	0.78 5	0.9 46
	2	My boss encourages me to challenge myself.	0.7 39	0.79 7	
	3	I believe my boss can overcome any challenge at work.	0.6 82	0.71 6	
	4	My boss encourages me to try to realize my company's vision.	0.6 25	0.65 3	
	5	My boss encourages me to think about problems from a new perspective.	0.6 87	0.70 5	
	6	My boss recommends that I reconsider an opinion that I have never doubted in the past.	0.7 26	0.75 7	

	7	I believe that I can complete the work under the leadership of my boss.	0.6 97	0.73 7	
	8	My boss spends time understanding my needs.	0.6 45	0.66 8	
Trust in Leadership	1	Members take pride in their management.-> I have pride as a member of the leader (management).	0.7 27	0.68 6	0.9 28
	2	Managers prioritize the interests of the organization over their own.-> My leader (manager) prioritizes the interests of the organization over himself.	0.7 13	0.67 5	
	3	The manager acts to respect the members. -> My leader (manager) does something that members can respect.	0.6 38	0.57 7	
	4	Managers remind members of important issues. My leader (manager) reminds members of an important problem.	0.6 85	0.60 9	
	5	Managers have individual interests in each member. My leader cares about each member.	0.7 14	0.65 5	
	6	I think the manager treats me fairly. I think the leader is being fair to me.	0.7 42	0.70 7	
	7	I am convinced of the professionalism and sincerity of the manager. I am convinced of the professionalism and integrity of the leader.	0.7 36	0.70 6	
	8	I certainly believe in the ability of managers to drive their work. I trust and trust the ability of the leader to push ahead.	0.7 46	0.72 6	
Knowledge Sharing	1	I often share new content that I learn with my colleagues.	0.6 88	0.71 2	0.9 37
	2	Colleagues often share with me the new work they learn.	0.6 67	0.70 6	
	3	I often share new information with my colleagues.	0.6 32	0.60 9	
	4	Colleagues often share with me the new information they have acquired.	0.5 96	0.59 6	
	5	Sharing knowledge with colleagues is considered normal in our company.	0.6 75	0.65 4	



	6	My colleagues often share what I know when I ask.	0.635	0.634	
	7	When my colleagues ask me, I often share what I know with my colleagues.	0.673	0.658	
	8	My colleagues often share the information I know when I ask.	0.655	0.639	
	9	When my colleagues ask, I often share information I know with my colleagues.	0.706	0.687	
	10	Our company employees frequently exchange work skills and knowledge about information.	0.675	0.667	
Innovative Behavior	1	In our organization, the innovative behavior of financial services is superior to that of competitors.	0.635	0.763	0.919
	2	Our organization always takes outstanding innovative work behaviors that transform financial institutions into better financial services.	0.597	0.724	
	3	Our organization often attempts different operational procedures to speed up the realization of the goal.	0.647	0.715	
	4	Our organization always acquires new technologies or information to improve better services.	0.625	0.734	
	5	Our organization can develop more efficient operational procedures.	0.662	0.792	
	6	Our organization can flexibly provide services according to the needs of customers.			
	7	In our organization, the operational procedures introduced always induce imitation from competitors.			
Factor Loadings	6	5.8	5.6	5.0	3.1
	.2	57	66	18	87
	8				
	7				
Explanation Variance(%)	1	15.	15.	13.	8.6
	6	826	309	558	06

		. 9 8 6				
Cumulative Variance(%)	Explanation	1 6	32. 814	48. 117	61. 677	70. 286
		. 9 8 6				

## 5. Conclusion

### 5.1 Discussion

The purpose of this study is to provide an integrated perspective on the path that transformational leadership leads to trust in leaders, knowledge sharing, and specific aspects of innovative work behavior. To this end, the relationship between transformational leadership and innovative work behavior was verified, and the mediating effect of trust in leaders was verified in the relationship between transformational leadership and innovative work behavior. The research method used in this study used exploratory factor analysis to find out the causal relationship between the factors of the research model based on the data collected from 400 survey respondents working at financial institutions in Seoul and Gyeonggi-do using the SPSS version 24. Reinforcement of innovative work behavior has been considered the core of corporate success, and the results of this study also show that transformational leadership has a positive effect on trust in leaders and can significantly improve innovative work behavior. In other words, this study was adopted as a result of verifying the hypothesis that transformational leadership and trust in leaders play a positive and important role in promoting innovative work behavior. In addition, the mediating effect of trust in leaders in the relationship between transformational leadership and innovative work behavior was revealed, and the presence or absence of the moderating effect of knowledge sharing on the effect of transformative leadership on innovative work behavior was verified. As a result of the verification, it was found that knowledge sharing has a moderating effect between transformational leadership and innovative work behavior. These results can be inferred that there is no difference in the degree to which transformational leadership affects innovative work behavior in both groups with high and low knowledge sharing. Overall, the results of this study are not different from previous studies, and the role of trust in leaders and the mechanism of knowledge sharing were identified to expand the understanding of paths and conditions to improve specific aspects such as innovative work behavior. In addition, it was found that the implementation of transformational leadership along with long-term and appropriate organizational support for members is of paramount importance in order to create a positive environment that greatly contributes to strengthening organizational capabilities.

## 5.2 Significance of Research

The verification results of the hypothesis set up in this study provide significant theoretical and practical implications for the field of leadership that can analyze the relationship between transformational leadership, trust in leaders, and innovative work behavior. This study will greatly contribute to the theory of leadership and innovative work behavior management in the following aspects. First, transformational leadership is recognized as one of the most effective types of leadership, but the relationship between transformational leadership-leadership and transformational leadership-innovative work behavior is not receiving much attention as a research subject (Wang and Noe, 2010; Total., 2016; Lei, 2017; Jia et al., 2018). To compensate for the lack of such research, this study presented a research model that connects transformational leadership and trust in leaders, and empirically verified the degree of impact of transformational leadership on knowledge sharing. Research has shown that transformational leadership not only provides companies with the right environment to stimulate employees' innovative behavior, but also provides an effective path to innovative behavior in banking institutions. Second, the results of this study show that trust in leaders is very necessary for employees' innovative work behavior. The higher the trust in leaders, the greater the impact of transformational leadership on innovative work behavior. The results of this study supplemented the results of previous studies by revealing how innovative work behavior strengthens the effect of transformational leadership on trust in leaders. In addition, the results of this study show that the impact of transformational leadership on innovative work behavior differs in terms of effectiveness, and the results may vary depending on the degree of knowledge sharing of employees. More specifically, leaders show that employees are very concerned with encouraging and providing the help and resources they need to share knowledge, and that innovative behavior can be improved if employees perceive their goals and success as closely related to the success of innovative behavior. The results of this study provide better insight into the causal relationship between transformational leadership, trust in leadership, knowledge sharing, and innovative work behavior. Therefore, it can be used as useful information for managers of bank financial institutions in Seoul and Gyeonggi Province who want to increase trust in the leaders of banking institutions and improve innovative business behavior. The specific practical implications are as follows. First, it was found that implementation of transformational leadership is a key factor in enhancing trust in leaders, which eventually leads to innovative work behavior. Implementing transformational leadership can be a useful way to build trust in leaders that helps organizations reduce the vulnerabilities and risks inherent in interpersonal relationships. This will help to increase leaders' confidence in innovative behavior. This study will provide managers with important implications, practical guidelines, and clear paths leading to innovative work behavior. Specifically, the results of this study showed that transformational leadership and trust in leaders had a greater influence on innovative work behavior. The main reason is that transformational leadership practices encourage employees to freely discuss and try innovative ideas, processes, procedures, or structures. Trust in leaders and participation in work within the organization help financial sector-related organizations operate more efficiently. Therefore, focusing on the

implementation of transformational leadership will help managers form a culture of trust in leaders and improve innovative work behavior by invoking and stimulating trust in leaders among employees. Second, the results of this study show that transformational leadership is very necessary to stimulate the organizational members' willingness to innovate work behavior. The degree of high knowledge sharing can increase the impact of transformational leadership on trust in leaders. This study showed that trust in leaders among employees can improve the level of innovative work behavior. The results of this study supplemented previous studies by discovering how knowledge sharing strengthens the effect of trust in leaders and transformative leadership on innovative work behavior. In addition, the results of this study are consistent with the idea that employee behavior is a long-term task in innovative work behavior, and external support is needed to make it effective. In this sense, employees may need significant financial or non-financial support and can help. The results of this study emphasize that knowledge sharing is the driving force of innovative work behavior and plays a leading role in the process of employees sharing knowledge. Therefore, team leader-level managers should focus on finding effective paths and appropriate motivational measures so that members can participate positively and actively in the knowledge-sharing process for innovative work behavior. For example, managers can design systematic compensation strategies that help employees collect, share, and utilize knowledge. Content related to employees' involvement in the knowledge management process should be integrated with the performance evaluation process. Accordingly, when employees find out that their goals and career success are closely related to their participation in knowledge-sharing activities, they actively share core and expertise to convert individual knowledge into organizational or collective knowledge and contribute positively to financial institutions.

### **5.3 Limitations of Research and Future Research Projects**

The results of this study provide various implications theoretically and practically, but have the following limitations. First, innovative work behavior set as the dependent variable of this study is a variable at the organizational level and is possible by individual knowledge sharing, but there are various variables that cause innovative work behavior. For example, if the survey respondents in this study are members directly related to innovative work behavior, there is no problem, but if not, there is a problem of not controlling various variables between knowledge sharing and innovative work behavior. Second, knowledge is widely accepted as a key and ongoing resource that enables companies to innovate and maintain a competitive edge. The results of this study focus on identifying the mediating role of trust in leaders between transformational leadership and innovative work behavior. In order to fully understand the important role of the organization in innovative work behavior, it is necessary to verify the mediating mechanism of the knowledge management process between transformational leadership and specific aspects of innovative work behavior in future studies. Third, it is necessary to consider the characteristics and differences of knowledge sharing that affect innovation capabilities between venture companies and general companies, large and small companies, manufacturing companies and service companies. In order for managers to better

understand the factors, processes, and mechanisms that affect innovation, future studies will need to look at the relationship between potential variables that can affect knowledge sharing and shift to better innovation.

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