

리더의 공유리더십이 조직구성원의 혁신행동에 미치는 영향 : 학습지향성의 매개효과와 폐기학습의 조절효과 중심으로

The Impact of Leader' Shared Leadership on Innovation Behavior for Employees: Focus on Mediating Effect of Learning Orientation and Moderating Effect of Unlearning

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요약

본 연구는 기업에 근무하는 구성원을 대상으로 리더의 공유리더십과 조직구성원의 혁신행동에 대한 인식에서 학습지향성과 폐기학습이 미치는 영향을 분석함으로써 리더의 공유리더십의 중요성에 대한 시사점을 제시하는데 그 목적이 있다. 본 연구의 설문조사는 국내 중소기업에서 지식근로자로 근무하고 있는 조직구성원을 대상으로 실시하였고, 회수된 설문지중 총 387개를 SPSS 24.0 통계패키지를 사용하여 통계분석 방법을 실시하였다. 연구결과, 리더의 공유리더십과 혁신행동, 공유리더십과 학습지향성 그리고 학습지향성과 혁신행동에 정(+)의 영향을 미쳤다. 또한 학습지향성은 공유리더십과 혁신행동의 관계에서 매개역할을 하였으며, 폐기학습은 공유리더십과 학습지향성의 관계를 강화하였다. 본 연구결과가 함의하는 바는 조직구성원의 혁신행동을 향상시키기 위해서는 조직구성원 스스로가 적극적인 폐기학습과 학습지향성 향상을 위한 지속적인 강화 활동이 필요하다. 또한, 조직구성원과 조직에 대한 리더의 공유리더십이 더욱 중요하다는 결과를 보이고 있다.

■ 중심어 : | 공유리더십 | 혁신행동 | 학습지향성 | 폐기학습 |

Abstract

The purpose of this study is to suggest implications for the importance of shared leadership of leaders by analyzing the influence of learning orientation and unlearning on the recognition of leader's shared leadership and employees'. The questionnaire survey was conducted on the employees who work as knowledge workers in the domestic SMEs. A total of 387 questionnaires were collected using SPSS 24.0 statistical package. The results of this study were that the relationships between a leader's shared leadership and innovation behavior, shared leadership and learning orientation, and learning orientation and innovation behavior were positive. In addition, learning orientation mediated in the relationship between shared leadership and innovation behavior, and unlearning reinforced the relationship between shared leadership and learning orientation. The implication of this study is that the employees themselves need continuous reinforcement activities for active unlearning and learning orientation in order to improve the innovation behavior of the employees. In addition, the shared leadership of leaders in employees and organization is more important.

■ keyword : | Shared Leadership | Innovation Behavior | Learning Orientation | Unlearning |

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I. Introduction

Apple's iPhone opened up the smart phone era and has changed the paradigm of life as an icon of creative innovation. While Schumpeter's creative destruction explained innovation from an economic innovation and business cycle theory in earlier times, in the latest era of the 4th industrial revolution(that is, a leading, cutting edge, high technology era in areas such as artificial intelligence, Big Data, Internet of Things, Drones, and unmanned autonomous vehicles, here in after referred to as the "4th industrial innovation era") corporations are required to achieve consistent innovation for survival beyond competition because of the quickly changing cycle of technology and the business environment[1]. In other words, the fast change of the business environment maximizes technological innovation and the voluntary innovation behaviors of employees, and it is possible to reinforce corporate competitiveness and spread an awareness of active change of an organization[3] only by placing a top priority on business[2]. Corporate innovation expresses the innovative performance of an organization by active participation beginning from a CEO to all of employees[4]. In looking at the relationship between variables in much of the preceding research[5-7] to verify factors that aid or impair the innovation behavior of employees, whereas research into fragmentary relationships and personal factors has been proven, few verifications of a structural relationship such as one between an environment and personal traits have been found[8].

Leadership is a key influential factor on organization efficiency[9], and it becomes a crucial environmental factor for the innovation behavior of the members[10]. Leadership theory is based on trait, behavior, and situational theory. In other words, it was confined to the study of vertical leadership such

as charismatic leadership, transformational leadership, and authentic leadership according to researcher's interest area such as the traits, capability, type, situation, and motivation for leader. However, in the 4th industrial revolution era, shared leadership as leadership distributed among the entire employees of an organization becomes even more important than leadership that is concentrated on one official leader, and it requires fast decision making from the perspective of active innovation that shares mutual leadership among employees[11]. Namely, a horizontal structure based on responsibility sharing and mutual cooperation among the employees of an organization is preferred over a competition driven vertical structure, and voluntary creativity and innovation among the employees generates a synergy effect[12]. In conclusion, the innovation tendency of an organization is further strengthened by shared leadership with free communications between a leader and the other employees, voluntary leadership, and exhibition of motivation and collective intelligence. Also, as many more opportunities and empowerment become available for the employees, which will lead to increased influence on each other with freedom while still being under control, organization learning and innovation can be realized. This overcomes the limitations of vertical leadership; thus, there is a need for horizontal leadership, which is a paradigm shift to a new sustainable leadership by going beyond the mere survival of an organization and all of its employees.

Learning orientation fortifies customer orientation and innovation by answering the needs of customers and improving the ability to create value. Also, learning orientation is organizational culture for cultivating new knowledge and insights[13], and it refers to an organizational trait of creating and utilizing knowledge for enhancement of a competitive

edge[14]. Learning orientation is associated with the development of new knowledge at an organizational level as organizational culture for applying learning orientation to decision making such as encouragement of learning activity, vision sharing, and collection of opinions of the employees.

Unlearning is divided into individual level and organizational level. It refers to applying problem definition, change promotion activity and new operation method at individual level. Organizational level means work autonomy, failure recognition, organizational commitment, and organization satisfaction[15]. Knowledge is changing and disappearing constantly, and unlearning is to break from an incorrect path of dependency of a knowledge system with existing fixed ideas or frames as the path dependency makes it difficult to take action for change in a fast paced new business environment[16].

Amidst such a research backdrop, it is meaningful to consider the mediating effect of learning orientation and the moderating effect of unlearning in the relationship between the shared leadership of a leader and the innovation behavior of the other members. In this study, learning orientation and unlearning were proposed among many influential variables of the shared leadership of a leader on the innovation behavior of the other members because personal learning factors have been proposed as key variables of increasing innovation behavior on a personal level. In the context of rapid knowledge acceptance environment during the 4th industrial revolution era, it contributes to the diversity of research by demonstrating the mediating effect of learning orientation and the moderating effect of unlearning in the relationship between leader's shared leadership and employees's innovation behavior. Therefore, in this study, there is theoretical difference in the empirical investigation of the relationship between

learning orientation and unlearning based on the theoretical basis in the relationship between shared leadership and innovation behavior. Accordingly, in this study, a theoretical differentiation will be addressed by identifying empirically the effects of shared leadership on learning orientation, unlearning, and innovation behavior based on the theoretical ground shown in the relationship between shared leadership and innovation behavior. Moreover, whereas samples utilized in existing studies were limited to specific targets and regions, in this study sampling was extended to the employees with different careers in more varied industries in order to generalize further the relationship between the leading variables.

The purpose of this study based on the exploratory critical awareness of the researcher as described above is as follows:

First, is to verify the relationship between the shared leadership of a horizontal leader and the innovation behavior of the other employees in the 4th industrial revolution era, and to consider diverse solutions to reinforce influential shared leadership on such innovation behavior.

Second, is to verify structurally the positive mediating effect of learning orientation and the moderating effect of interactions in unlearning in the relationship between the shared leadership of a horizontal leader and the innovation behavior of the other employees, and to provide a theoretical model on the shared leadership of a horizontal leader that is required in the 4th industrial revolution era.

Third, based on the research results, is to offer practical implications on the shared leadership of a leader for the creative innovation behavior of the other employees that is required in a corporation in the 4th industrial revolution era with its fast cycle of technological change.

II. Theoretical Background

1. Shared leadership

Change of leadership has been required in almost all sectors. As studies on leadership so far have been focused on one leader, there have been limitations on revealing the efficacy of leadership[17]. Accordingly an interest in research into shared leadership of a horizontal concept in which all the members share the effect has been growing in the quickly changing environment of today's 4th industrial revolution era[18]. Gibb[19] is the first person who mentioned distributed leadership, which is distributed sharing of leadership within an organization because of the execution of leadership in the entire organization, that is, shared leadership, and asserted the importance of shared leadership among the employees[20]. In other words, collective leadership and a distributed influence are the key concepts that distinguish clearly shared leadership from other types of leadership[21]. Shared leadership features a natural emergence of official or non-official executors of management[22], and it refers to a phenomenon in which a plural number of leaders exist and share and distribute leadership[23]. In accordance with Katz and Kahn[20], with shared leadership, as the employees have mutual influences voluntarily and spontaneously toward the achievement of an organizational goal, corporate competitive edges can be ensured such as increased commitment, improved problem solving skills for complicated tasks, and information sharing. In other words, shared leadership is distinguished from vertical leadership in that, as a dynamic process of having mutual influences toward the achievement of an organizational goal, rather than a specific leader, all of the employees exercise the influence of leadership[24].

In reviewing the formation process or influential

factors of shared leadership, they are known to be affected by a shared goal, supportive organization atmosphere, and productive communications and statements[25]. When an atmosphere in which the employees leader or follow other employees is established, works can be executed based on respect and trust within the organization and, ultimately, it becomes possible to improve an organizational process and improve performance[26][27]. The generation of the shared value of an organization can be achieved only when the employees share the value within a similar understanding of the purpose of the existence of an organization suited to the goal and vision as well as of a task goal, and employees who have a common sense of purpose within an organization can unfold a higher level of shared leadership with responsibility sharing for the accomplishment of the organizational goal and the task goal[25][28]. With shared leadership, a process and performance can be enhanced in organization culture where the mutual collective influences of all the employees leader and follow one another rather than the personal influences of one leader pervade[29][30]. Shared leadership plays a crucial role in elevating collective complementary influences among the employees as well as creativity and a tendency of organizational innovation, and leadership that enables the exercise of shared influences is expressed in a shared form with mutual respect of autonomy among the employees[31]. That is, mutual empowering of leaders and the employees can exhibit a higher tendency of innovation by increasing an inherent motivation of an individual rather than the employees following a unilateral instruction of a horizontal leader[32][33]. This enables the employees to have autonomy and influences by themselves after being empowered, which results in an increased tendency to propose a new form for the achievement

of an organizational goal and a creative problem-solving solution[34]. Also, as each of the employees creates more varied alternatives voluntarily based on each of their capabilities and offers mutually intellectual stimulation, a more creative performance of innovation can be realized[22].

2. Innovation behavior

Innovation is a growth engine of social advancement and the sustainable growth of a company[35][36] while for organization innovation, innovation at an organization level of creating, developing, and commercializing a new idea, service, product, and system independently is separated from innovation at a personal level focused on the task behavior of a task role of the employees[37]. innovation behavior best expresses innovation at a personal level[38], and it refers to all the activities for creating new ideas with which the employees can improve their work and performances by themselves. innovation behavior is a key factor in the survival and growth of an organization and refers to a process of shifting the operation method of products and services by accepting and utilizing new ideas and execution methods at organizational and personal levels[40][41]. Also, problem-solving ability at a personal level increases creativity[42], and it generates a new critical awareness and new ideas. In other words, although innovation behavior is similar to creativity in terms of the generation of new and useful ideas, there is still a conceptual difference as creativity is viewed as something for the creation of nouvelle or new ideas[43]. innovation behavior is a broad concept of accepting and utilizing ideas created by others or an organization[1][37][44]. Such innovation behavior is classified into three phases: development phase (new idea phase), promotion phase (phase of attracting support within an organization),

and realization phase (phase of the execution of new ideas)[1]. innovation behavior refers to a series of activities of creating, introducing, and applying intentionally new ideas including social attributes to improve works and performances[39][44]. It refers to behavior with an unofficial voluntary extra role unlike the task of developing new ideas and accepting and executing other ideas, which is the formal behavior required from the employees[20]. innovation behavior, which is various types of extra role behavior of the employees, is committed to the creation of sustainable competitive edges of a company such as destruction of order in the existing market, introduction of new competition, and formation of a new entry barrier[45-47]. innovation behavior is a process of developing and spreading new ideas that transcend ordinary works and to create products from there, and it needs encouragement through expansion of awareness as an extra role behavior that overcomes the role behavior and preparation of a motivational system.

3. Learning orientation

Learning is a key factor in creativity[48], and a company reinforces its constitution with ceaseless changes and innovation, which enhances corporate competitive edges[49]. Learning orientation improves organization culture where an atmosphere of introducing problems freely to enhance new knowledge and insights can be created[13], while knowledge creation and utilization elevates corporate competitive edges[14]. In addition, learning orientation forms a learning climate of an organization and enhances corporate performance[50-52], and it strengthens competitiveness by enriching knowledge-regarding works[50]. As a learning oriented organization is abundant with knowledge to identify customer needs[49], it is very unlikely for such a

company to have encroachment on its market, and it is closely related to customer orientation or innovation performance. That is, learning orientation reinforces customer orientation and innovation by satisfying customer needs and raising an ability to create value. Learning orientation is a direction of determining the type and character of organization learning[53], and Sinkula et al[54] first mentioned learning orientation to activate organization learning and the construction of a learning organization. The sub-components of learning orientation are composed of three areas: commitment to learning, vision sharing, and open mindedness. In detail, commitment to learning is to show how an organization is active in pursuit, sharing, and creation of knowledge. Vision sharing is a culture of sharing a corporate mission or information important among the employees, while open mindedness is to have flexible thinking without the employees being bothered by the frame of thinking. In other words, it refers to a degree of how the employees are active and open-minded in accepting new knowledge and ideas[50]. In conclusion, a learning oriented organization has improved ability to cope with ever changing trends by identifying market information. An organization is prepared with a tendency to understand the market of the organization, namely learning orientation, along with accumulated know-how in the operation of the organization along with its growth. Subsequently, it has a tendency to understand its market, that is, learning orientation[55]. Learning orientation has become a prerequisite to ensure sustainable competitive edges of a company in an infinite competition environment such as the 4th industrial revolution era[53][56].

4. Unlearning

Unlearning refers to being brave enough to

abandon already old and useless knowledge along with outdated structures, frames, and principles that are out of date and to fill the space with new knowledge and alternatives[57][58]. Unlearning is a dynamic process of being able to develop new knowledge by overcoming the existing frame of thinking, abandon old things while learning about new things, define and remove useless or incorrect knowledge, and accept new knowledge and opportunities. That is, in accordance with Senge[59], it is generative learning that innovates ourselves and an organization through voluntary motivation and self-examination and not adaptive learning to catch up with a fast-paced environment. In other words, problem-solving means a broad concept of creating, changing, and regenerating a knowledge system and way of thinking including discontinuity and replacement while removing unnecessary knowledge and routines[15][60]. Business scholars, Hamel and Prahalad[61] mentioned the importance of overcoming any difference between existing values and behavioral patterns to shake off quickly the familiar past organizational culture and to move in a way attuned to situation change of the current environment. Also, they defined unlearning as a conscious effort to change to be disconnected from the past habitual routine while accepting that an old reality, old mental model, and old paradigm are no longer valid[58]. A psychologist, Lewin[62], asserted a certain static condition moves toward a new condition through a three stage process of organization change, namely, unfreezing of existing old behavioral patterns; changing in detail through behavior development; and refreezing of maintaining and sustaining the changed condition from such a transition[63]. In other words, "Learning-Unlearning-Relearning" needs to be able to operate like a virtuous circle of how to unlearn what was already learned and how to relearn[57][64].

A futurist, Drucker[64], insisted on a need for systematic methods of exploring and projecting internal and external change of an organization along with a policy to create the future by being a change leader, correct methods to pursue changes, and take a balance between change and continuance; and he also insisted on the necessity of planned abandonment of old or problematic learning regularly to implement those methods and policies. As a result of reviewing preceding research into unlearning, although research has been made at the organization, group, and personal levels, most of the preceding research was limited to organizations and groups[65]. Cegarra-Navarro and Moya[66] defined unlearning at a personal level as an activity to improve organization performance at an organization level with a manager's assessment and a self-reporting assessment of the employees. Also, the positive innovation behavior of the employees can be induced only by changing constantly faith, value, procedures, and norms, which are ordinary work processes; removing knowledge that is not used currently; and abandoning old and outdated knowledge to utilize existing knowledge and explore new knowledge by the employees[39][67-69].

III. Research Method

1. Research Model

Recently research into shared leadership has been expanding, and a growing interest and active research have emerged more abroad than in Korea with its stronger Confucian tendency. In particular, there are ongoing studies on horizontal leadership regarding a process of sharing or discussing information and knowledge to set up and achieve an organization goal based on autonomy rather than the constraint and control of a vertical leader, that is, on horizontal

leadership that values information sharing to create, distribute, and execute quality ideas by stimulating a propensity to balance leadership among the employees[18].

Also, while there have been many studies on the commitment of learning orientation, unlearning, and innovation behavior at a personal level for continued growth through improvement of organizational performance and personal performance[25][28-30], few studies have been found on a process-oriented learning mechanism of shared leadership within an organization leading to the innovation behavior of the employees.

In this study, a research model was proposed as in [Figure 1]. to look into the effects of shared leadership on learning orientation, unlearning, and innovation behavior with shared leadership as a preceding variable, learning orientation as a parameter, and unlearning as a control variable through a review of the theoretical considerations of the above preceding studies in order to identify and verify the effects of learning orientation and unlearning on innovation behavior.

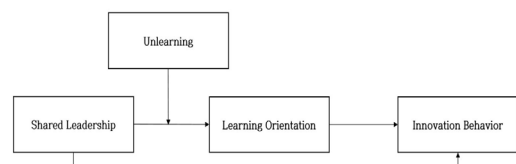


Figure 1. Conceptual Model of the Present Study

2. Research Hypothesis

2.1 Shared leadership and Innovation behavior

In accordance with the relationship and role of the employees, innovation behavior can be reinforced or weakened[10][47][70][71]. Kim[47] asserted that because influential factors of behavior in research

results regarding an individual were task, relationship, and organizational qualities, as Team-Member eXchange(TMx) has a greater effect on relational qualities than Leader-Member eXchanged(LMX), teamwork among the employees has an impact on innovation behavior in the team system. In accordance with Damanpour[70], as a result of a meta analysis of influential factors of organization innovation, whereas communication had a positive effect in distributing and maturing ideas within an organization, in a vertical organization structure, communication served as an inhibitor to innovative ideas. Song and Yang[72] asserted that empowered employees look for solutions to improve their job performance, which had a positive effect on innovation behavior. Also, Seo and Hong[10] insisted that the higher the awareness of shared leadership by the employees, the more actively they perceive innovation behavior.

Accordingly, in this study, the following hypothesis was set up based on the aforementioned discussion.

H1. Shared Leadership is positively related to Innovation Behavior.

2.2 Learning orientation and Innovation behavior

The higher the learning orientation, the greater the organizational commitment, organization innovation, and employees solidarity of the employees[73].

A commitment to learning refers to the learning acceptability of the employees such as pursuit of new knowledge, knowledge sharing, and knowledge creation in the face of environmental changes outside of a company, and it becomes a leading factor motivating innovation behavior[74]. A commitment to learning has a great impact on the establishment of an innovative mind and innovation behavior of the employees; thus, it reinforces innovation[70][75]. Also,

the employees become able to cultivate the innovative ability of an organization by acquiring knowledge from a learning process[76]. In the case that the employees have a new goal of knowledge acquisition and open minded learning orientation for accepting ideas, they are encouraged to show innovation behavior. That is, innovation behavior can be understood as all of the knowledge activities to create new knowledge from active exchange and sharing of knowledge among the employees. Learning orientation has a great correlation with innovation [50][70][77]; and, as a leading variable, it is a key factor for having a positive effect on innovation [78][79] and promoting innovation[80].

Subsequently, in this study, the following hypothesis was set up based on the above discussed details.

H2. Learning Orientation is positively related to Innovation Behavior.

2.3 Shared leadership and Learning orientation

In accordance with Seo and Hong[10], it is important to help the employees share dynamically shared leadership in the entire organization and also for the employees to have a will to learn by themselves. Huber[81] said that the more the organization culture emphasizes learning, the more the employees are motivated to learn, develop, and share new technology. Learning orientation is an inherent learning tendency of the employees, and it is values created by internal and external environmental causes and the efforts of a learner [82]. Accordingly, a learner's internal factors formed by internal causes become personal motivation for learning, while external causes can distinguish the learning value of an organization where an individual learner belongs through the vision or goal of the organization. In this

regard, learning orientation is divided largely into a personal level and an organization level.

Subsequently, in this study, the following hypothesis was set up based on above discussed details.

H3. Shared Leadership is positively related to Learning Orientation.

2.4 Mediating effect of Learning orientation

Sinkula, Baker, and Noordeiweir[54] classified sub-variables into commitment to learning, vision sharing, and open mindedness, and a commitment to learning refers to an assessment and promotion level of organizational or individual learning ability and a learning atmosphere level. Learning is done usually through observation and interactions with an environment. That is, a need for learning has emerged because of insecure acceptability of customers, rapid change of technology, and an uncertain competitive environment. A learning oriented attitude has served as a consistent change factor of existing knowledge and behavior in a company, and it becomes a foundation of innovation behavior necessary to meet the change and growth of a competitive environment outside of a company[74][83]. Also, actual prerequisites of a learning organization include new ability, experimental spirit, and a strategic will to learn an ability to promote an innovative mechanism implicitly for continuous education; therefore, learning orientation has a close relationship with organization innovation and the innovation behavior of the employees[73]. A learning oriented organization strives to ensure new technologies and to solve creatively ever appearing problems. In addition, it has a strong will to possess an ability to understand and predict customer needs and knowledge[70]. An organization possesses an ability of innovation

through learning orientation, and it evaluates highly the creative problem-solving ability and ability to manage any uncertainty and crisis of the employees.

Subsequently, in this study, the following hypothesis was set up based on above discussed details.

H4. Learning Orientation partially mediates Shared Leadership and Innovation Behavior.

2.5 moderating effect of Unlearning

If existing knowledge used for decision making and problem-solving loses its ability to create value, that knowledge becomes already useless and makes the employees manage knowledge effectively[84][85]. Unlearning is felt necessary because of a recognition that something is not sufficient in the current state or rather because of an experience of failure. Starbuck[86] laid an emphasis on the importance of open mindedness so that a recognition that the current belief structure or method is insufficient enables the employees to do unlearning and that their knowledge system can be wrong at any time.

Meanwhile, some scientists said that unlearning has a scientific limitation as it is difficult to recognize it as a theory impairing learning progress or to conceptualize and execute it[87]. However, unlearning can be committed to scientific reform by breaking a link of closeness that sticks to acquired knowledge and the way of thinking in the past and stimulating people to creative destruction or convergence by differentiating themselves. Also, it can reduce the occurrence of errors in judgment or behavior caused by incorrect prejudice and methods. In accordance with Assink[88], inability to learn by the lack of learning is an inhibitor of unlearning, and any employees who fears changes becomes dependent only on the usefulness of the past or knowledge that

helped, and he or she will show a negative tendency in the unlearning process of replacement with new knowledge. Regarding unlearning, the impact of new knowledge coupled with existing knowledge on knowledge transfer has a moderating effect on the unlearning level of an organization rather than of an individual[89]. Accordingly, unlearning needs to help either an individual or an organization to accept new knowledge by abandoning old and customary knowledge and overcoming an existing way of thinking by coping with changes and making radical innovation possible[57].

Subsequently, in this study, the following hypothesis was set up based on above discussed details.

H5. Shared Leadership and Learning Orientation relationship is moderated by recognition of Unlearning of employee.

3. Definition and measurement of variables

To verify the mediating effect of learning orientation and the moderating effect of unlearning in an influencing relationship between shared leadership and innovation behavior, a survey was introduced. The survey questionnaires were restructured existing contents based on preceding research and the experience of leadership professionals, and all variables were measured with a 7-point Likert scale(1 = never, 4 = true, and 7 = very true). The operational definitions of each of the variables are as follows.

3.1 Shared leadership

Shared leadership makes it possible to secure corporate competitive edges through an increased commitment, improved problem-solving skills for complicated tasks, and information sharing as the employees become voluntarily, autonomously, and

mutually effective in achieving the goal of an organization. For the measuring instrument, 11 questions were reused after modifying and complementing items proposed in studies by Hiller, Day and Vance[90], and Seo et al.[10], and their reliability and validity were confirmed in this study. Representative questions include "The members identify various problems before a problem arises". The reliability of the scale on shared leadership (Chronbach's Alpha) appeared to be .948.

3.2 innovation behavior

Innovation behavior is a key factor in the survival and growth of an organization and it refers to a process of shifting product and service operation methods by accepting and utilizing new ideas and execution methods at organizational and personal levels[40][41]. For a measuring instrument, 8 questions were reused after modifying and complementing items proposed in studies by Scott and Bruce[1], Janssen[44], and Yoo[60], and their reliability and validity were confirmed in this study. Representative questions include "I develop new ideas to solve difficult problems in relation to work". The reliability of the scale on innovation behavior (Chronbach's Alpha) appeared to be .950.

3.3 Learning orientation

Learning orientation refers to activities such as creation of a learning atmosphere in an organization by the employees, vision sharing, information creation, expansion, open mindedness, and information sharing within an organization; and a commitment to learning is defined to be a level of working knowledge for the employees themselves along with attachment to an organization. For a measuring instrument, 5 questions were reused after modifying and complementing items proposed in a study by Lee

[91], and their reliability and validity were confirmed in this study. Representative questions include "If any problem arises, it can be well defined". The reliability of the scale on learning orientation(Chronbach's Alpha) appeared to be .860.

3.4 Unlearning

Unlearning is defined as to develop new knowledge, learn new things, and yet abandon old things by getting out of an existing frame of thinking. For a measuring instrument, 6 questions were reused after modifying and complementing items proposed in studies by Cegarra-Navarro and Moya[66], Akgun et al.[57], and Huh and Cheon [39], and their reliability and validity were confirmed in this study. Representative questions include "My boss takes the learning ability of our organization as an important factor of competitive edge". The reliability of the scale on unlearning (Chronbach's Alpha) appeared to be .848.

IV. Results of Empirical Analysis

1. Sample and Data Collection

The sample of this study was surveyed from June to August, 2017 for the organization members who have conducted knowledge management activities or experienced in domestic SMEs. A total of 409 questionnaires were collected and 387 copies were used for the final analysis, except for 22 copies of the unsuccessful answers containing duplicate missing values. [Table 1] shows the demographic characteristics of the respondents.

For this study, statistics of the collected survey data were analyzed using the SPSS 24.0 statistics program. The SPSS statistics program is the most widely used tool for social scientific research.

First, to review the demographic characteristics of the research subjects, a frequency analysis and a mean analysis were utilized as basic statistical analyses. Also, it was verified whether a normal distribution was shown by calculating descriptive statistics such as mean, standard deviation, skewness, and kurtosis of the main variables used in this research.

Second, to verify the validity and reliability of the measurement instruments used for the study, as a factor extraction method, a mathematically more visible and clear main ingredient analysis was used. Regarding factor rotation, an exploratory factor analysis was carried out with the Varimax method utilizing orthogonal rotation. The Varimax method is used commonly when there are more than two potential variables. Also, a confirmatory factor analysis was undertaken utilizing AMOS; and, to analyze and review the reliability of the measured items, a reliability analysis was performed through Cronbach's Alpha values.

Third, in order to view the causal relationship in this study between shared leadership as an independent variables, with a commitment to learning as a mediating variables, and innovation behavior as a dependent variables, a multiple regression analysis was conducted. In particular, to verify a mediating effect, a 3-stage regression analysis was carried out and a post-test was undertaken with a Sobel test. With a view to verifying the moderating effect of unlearning as a moderating variables, a hierarchical regression analysis was performed. In addition, mean centering was introduced to solve a multicollinearity problem of independent variable, moderating variable, and interactive term.

Fourth, as all the constructs employed in this study were measured by the same respondents, an error may occur in a common method bias; thus, the

common method bias was verified utilizing Harman’s factor test, which is a post-test.

2. Correlation with descriptive statistics

2.1 General characteristics of samples

Table 1. Demographic Data for the Participants

Variable		N	%	Variable		N	%
Gender	Male	238	61,5	Position	Junior	162	41,9
	Female	149	38,5		Senior	103	26,6
Education Level	junior college	62	16,0	General Manager	63	16,3	
	bachelor's degree	227	58,7		Director	38	9,8
	Master degree	91	23,5	CEO	21	5,4	
	Others	7	1,8		Manufacturing	97	25,1
Occupation	Office worker	339	87,6	Industry	Finance	30	7,8
	Civil servant	1	0,3		Distribution	27	7,0
	Professional occupation	23	5,9		Construction	32	8,3
					IT&Service	170	43,9
	Self-employed	15	3,9		Others	31	8,0
				1 to 5	114	29,5	
	Year of Working	9	2,3	6 to 10	82	21,2	
11 to 15				64	16,5		
16 to 20				73	18,9		
Others	54	14,0	21 over	54	14,0		
Total		387	100	Total		387	100

2.2 Verifying Reliability, Validity and Confirmatory

Table 2. Confirmatory Factor Analysis

Variable		Factor 1	Factor 2	Factor 3	Factor 4	CR	AVE			
Factor	items									
Shared Leadership	SL3	.669				.899	.599			
	SL4	.685								
	SL5	.679								
	SL6	.709								
	SL7	.769								
	SL8	.791								
	SL9	.773								
	SL10	.792								
	SL11	.794								
	SL12	.757								
	SL13	.736								
	Innovation behavior	IB1		.690					.900	.648
		IB2		.735						
IB3			.796							
IB4			.812							
IB5			.760							
IB6			.759							
IB7			.776							
IB8			.694							

Unlearning	UL1			.704		
	UL2			.682		
	UL4			.639		
	UL5			.749		.788
	UL6			.743		
	UL7			.432		.553
	Learning orientation	LO1				.708
LO2					.672	
LO3					.547	.782
LO4					.737	
LO5					.691	.545
Eigen value		15,303	2,938	1,447	1,327	
Explanation variance (%)		49,364	9,478	4,669	4,281	
Cumulative variance (%)		49,364	58,842	63,511	67,792	
Cronbach α coefficient		.950	.950	.848	.860	
KMO = .961, Bartlett (χ^2 = 9766,109, df = 465, p=.000)						

SL: Shared Leadership, IB: Innovation Behavior, UL: UnLearning, LO: Learning Orientation

2.2.1 reliability of variables

For the purpose of the study, first, the reliability of variables was verified. The result of a reliability analysis of a total of 4 potential variables showed that the coefficient of Cronbach α was more than .7, which indicates a very high reliability. In general, if the coefficient of Cronbach α is over .6, the reliability is deemed efficient; thus, all the questions can be analyzed comprehensively with one scale[92]. Accordingly, it is concluded to have a relatively higher internal coherence.

2.2.2 Exploratory factor analysis(EFA)

Also, in order to verify the validity of variables, a main ingredient analysis was conducted for factor extraction while an exploratory factor analysis was undertaken using a Varimax method as a rotation method. Then, it was concluded to be significant only when the eigenvalue is over 1 and factor loading is .5. From the result, a total of 30 questions were adopted after removing 4 questions (shared leadership 1, 2, and 14 and unlearning 3) with remarkably low factor loading. If factor loading is over .4, it is deemed as an effective variable; while, if it is over .5, it is taken as

an important variables. As all of the 52 questions showed a factor loading of more than .4, they can be deemed as important variables. Also, 4 factors are considered to have 67.7% of explanation power. As the KMO value of measuring the suitability of a sample is .961, which is close to 1, and the sphericity test statistic of Bartlett, which verifies whether the correlation between variables is 0, is 9766.109 (df=465, p=.000), which is significant at the significance level of .01, it was determined that the correlation matrix is suitable for a factor analysis. In particular, from the results of the factor analysis conducted in this study, as the factor analysis was carried out by applying all the constructs at the same time, it was concluded that the validity of the constructs among each of the variables was very high.

2.2.3 Confirmatory factor analysis(CFA)

The suitability assessment of this study was evaluated by RMSEA, TLI, CFI, GFI, and AGFI in consideration of the sample size and the parsimony of the model. In accordance with Browne and Cudeck[93], an RMSEA value, which is an Incremental fit index shows good suitability if it is less than .05 while considering parsimony without being affected by the sample size; if it is between .05 and .08, it exhibits moderately good suitability; and, if it is more than .10, it displays inappropriate suitability. Also, regarding GFI as an index influenced by the sample size without considering parsimony, if it is over .9, the model is concluded to be good. For TLI and CFI, which are incremental fit indexes, they are not influenced by the sample size while considering parsimony; and if they are over .9, their suitability is considered to be good. Meanwhile, for AGFI, which is a parsimony-adjusted index, if it is over .85, it is considered to be good.

Table 3. Suitability assessment of measurement model

Model	χ^2 (p)	χ^2/DF (Q value)	GFI	AGFI	CFI	TLI	RMSEA
Measurement model	384.252	2.668(.000)	.904	.874	.959	.951	.066

In reviewing a suitability index the result of the confirmatory factor analysis(CFA) of the measurement model showed that χ^2 (p-value) is 384.252(.000), which does not satisfy the acceptance standard; however, considering other suitability indexes, $\chi^2/df = 2.668$, which is smaller than 3 while GFI = .904, CFI = .959, and TLI = .951, all of which are over .9 and AGFI = .874, which shows more than .85. Accordingly, the suitability acceptance level is concluded to be good. Also, as RMSEA = .066, which is close to .05, this measurement model is deemed appropriate.

The result of the CFA of the measurement model showed that the standardization regression coefficient was found to be relatively good as the CR value was over .7 and the AVE value was more than .5. This signifies that the construct reliability (Convergent validity) is ensured.

Table 4. Discriminant validity analysis result between constructs

Item	Shared leadership	Innovation behavior	Learning orientation	Unlearning
Shared leadership	.599			
Innovation behavior	.649	.648		
Learning orientation	.708	.596	.545	
Unlearning	.545	.737	.520	.553

The greatest coefficient between potential variables is .737 (innovation behavior and unlearning). The square of coefficient, namely, coefficient of determination is .543169 (.737X.737). The result of the analysis showed that the AVE value calculated between each of the potential variables is greater than

the coefficient of determination of .543169; thus, it is analyzed as ensuring discriminant validity.

2.3 Descriptive statistical analysis

The results of deducing mean, standard deviation, skewness, and kurtosis among each of the items with descriptive statistics showed that there was no case in which the standard deviation is over 3, the absolute value of skewness is more than 3, and the absolute value of kurtosis is over 8.0; thus, the individual measurement variable is deemed to have a normal distribution.

Table 5. Descriptive statistical analysis

Item	N	Mean	Standard deviation	Skewness	Kurtosis
Shared leadership	387	4.9165	.99570	-.526	.779
innovation behavior	387	4.9105	1.02204	-.295	.314
Learning orientation	387	4.9044	1.03205	-.148	.006
Unlearning capability	387	4.8824	.91941	-.244	.550

2.4 Result of correlation analysis between potential variables

A correlation between potential variables included in the research model is as in the following table.

With regard to the correlation of potential variables, all the variables were discovered to be statistically significant. Shared leadership and innovation behavior had the greatest positive correlation($r=.681$), and this was followed by the correlation between learning orientation and innovation behavior($r=.680$). Besides, gender showed a negative correlation with potential variables, whereas position exhibited a positive correlation with potential variables. When comparing all variables, a correlation between independent variables and parameters, independent and dependent variables, between parameters and dependent variables, was revealed to be relatively stronger.

Table 6 Correlation analysis of potential variables

Potential variable	1	2	3	4	5	6	7
Gender	1						
Educational level	-.195**	1					
Position	-.414**	.282**	1				
Shared leadership	-.179**	.166**	.253**	1			
innovation behavior	-.253**	.255**	.239**	.681**	1		
Learning orientation	-.136**	.131**	.191**	.550**	.680**	1	
Unlearning capability	-.172**	.171**	.216**	.704**	.611**	.526**	1

p < .05 *, p < .01 **

3. Verification of Hypothesis

To verify a hypothesis a multiple regression analysis was conducted, whereas a 3-stage regression analysis was carried out to verify the mediating effect of learning orientation. Also, in order to verify the moderating effect of unlearning, a hierarchical regression analysis was undertaken. In addition, a post-test was performed through a Sobel test.

Table 7. Effect of Shared leadership on Innovation behavior

	Innovation behavior			
	B	SE	β	t
Constant	1.786	.274		
Gender	-.246	.087	-.117**	-2.831
Educational level	.203	.060	.134**	3.363
Position	.017	.037	.020	.457
Shared leadership	.610	.041	.595**	15.030
R ² = .448, adj R ² = .442, F = 77.533** (p < .01), Durbin-Watson = 2.054				

p < .05 *, p < .01 **

Hypothesis 1 is that the shared leadership of a leader will have a positive effect on the innovation behavior of the employees.

In the analyzed result, shared leadership($\beta=.595$, $p=.00$) was discovered to have a significantly positive(+) effect on innovation behavior. Accordingly, hypothesis 1 was adopted. The regression model was

proposed as being significant through an F-value test($F=77.533$, $p < .01$), and independent variables including shared leadership have an explanation power for 44.8% ($\text{adj } R^2 = .442$) of innovation behavior, which is very high. As the VIF value is smaller than 10, no multicollinearity was found among the independent variables. Also, there appear to be no problems of autocorrelation as the Durbin-Watson (2.040) value is close to 2. Consequently, from the results of the test of this hypothesis it was shown that the higher the shared leadership of a team leader ($B = .610$), the greater the innovation behavior of the employees.

Table 8. Effect of Learning orientation on Innovation behavior

	Innovation behavior			
	B	SE	β	t
Constant	2,046	.274		
Gender	-.262	.089	-.125**	-2,948
Educational level	.194	.062	.128**	3,121
Position	.029	.038	.034	.439
Learning orientation	.562	.040	.568**	14,063
$R^2 = .421$, $\text{adj } R^2 = .415$, $F = 69,525^{**}$ ($p < .01$), Durbin-Watson = 2,040				

$p < .05$ *, $p < .01$ **

Hypothesis 2 is that the learning orientation of the employees will have a positive(+) effect on innovation behavior.

In the analyzed result, learning orientation($\beta = .568$, $p = .00$) was discovered to have a significantly positive(+) effect on innovation behavior. Accordingly, hypothesis 2 was adopted. The regression model was proposed as being significant through an F-value test($F=69.525$, $p < .01$), and independent variables including shared leadership have an explanation power for 42.1% ($\text{adj } R^2 = .415$) of innovation behavior, which is relatively high. As the VIF value is smaller than 10, no multicollinearity was found among the independent variables. Also, there appear to be no problems of autocorrelation as the Durbin-Watson

(2.040) value is close to 2. Subsequently, from the results of the test of this hypothesis it was shown that the higher the learning orientation of the employees($B = .562$), the greater the innovation behavior.

Table 9. Effect of Shared leadership on Learning orientation

	Learning orientation			
	B	SE	β	t
Constant	1,250	.264		
Gender	-.021	.084	-.010	-.253
Educational background	.065	.058	.042	1,107
Position	.044	.035	.051	1,239
Shared leadership	.703	.039	.678**	17,921
$R^2 = .495$, $\text{adj } R^2 = .490$, $F = 93,674^{**}$ ($p < .01$), Durbin-Watson = 1,938				

$p < .05$ *, $p < .01$ **

Hypothesis 3 is that the shared leadership of a leader will have a positive effect on the learning orientation of the employees.

In the analyzed result, the shared leadership of a leader($\beta = .678$, $p = .00$) was discovered to have a significantly positive(+) effect on the learning orientation of the employees. Accordingly, hypothesis 3 was adopted. The regression model was proposed as being significant through an F-value test($F=93.674$, $p < .01$), and independent variables including shared leadership have an explanation power for 49.5% ($\text{adj } R^2 = .490$) of learning orientation, which is very high. As the VIF value is smaller than 10, no multicollinearity was found among the independent variables. Also, there appear to be no problems with autocorrelation as the Durbin-Watson(2.040) value is close to 2. Subsequently, from the results of the test of this hypothesis it was shown that the higher the shared leadership of a leader($B = .703$), the greater the learning orientation of the members.

Hypothesis 4 is that the learning orientation of the employees will have a mediating effect role in the shared leadership of a leader and the innovation

behavior of the employees.

With regard to the test of a mediating effect role through a regression analysis, a 3-stage regression analysis of Baron and Kenny[94] is used widely. Accordingly, also in this study, verification on whether or not the mediating effect role exists was limited to this procedure.

With regard to the 3-stage regression analysis, in stage 1, an independent variable should have a significant effect on a mediating; while, in stage 2, an independent variable needs to have a significant effect on a dependent variables. Finally, in stage 3, as a result of testing an independent variable and a mediating at the same time by including them in a regression equation, a mediating should have a significant effect on a dependent variable and either an independent variable should not be significant or the significance level should be weaker than the result of stage 2. If in stage 3, independent variable is not significant to a dependent variable, it can be seen as complete mediator. Meanwhile, although significant, if the significance level is less than that of stage 2, a mediating is deemed to have a partial mediator role between an independent variable and a dependent variable.

The results of testing hypothesis 4 through the above 3-stage hierarchical regression analysis showed that the learning orientation of the employees has a mediating effect role in the innovation behavior relationship between the shared leadership of a leader and the innovation behavior of the employees. First, in the stage 1 regression model, as an F-value was 93.674, which means the p-value(.000) is smaller than the significance level of .01, the result was significant. $R^2 = .495$, which shows a very high explanation power. Meanwhile, as $\beta = .678$, the shared leadership of a leader, which is an independent variable, is considered to have a significantly positive(+) relationship with the learning orientation of the employees, which is a mediating variables.

Next, in the stage 2 regression model, as an F-value was 77.533, the p-value(.000) is smaller than the significance level of .01 and the result was significant. As $R^2 = .448$, the explanation power was very high. Also, as $\beta = .595$, the shared leadership of a leader, which is an independent variable, is considered to have a significantly positive(+) relationship with the innovation behavior of the value, which is a dependent variable.

Finally, in the stage 3 regression model, as an F-value was 77.533, the p-value(.000) is smaller than the significance level of .01, and the result is significant. As $R^2 = .496$, the explanation power was very high. Also, as $\beta = .386$, which is a standardization regression coefficient, while it is .386 in stage 3, which is lower than that in stage 2, the learning orientation of the employees, which is a mediating variables, is considered to play a mediating effect role between the shared leadership of a leader, which is an independent variable, and the innovation behavior of the employees, which is a subordinate variable.

In addition, no autocorrelation was shown as the Durbin-Watson value, which shows autocorrelation

Table 10. Mediating Effect of Learning orientation

	Step 1			Step 2			Step 3		
	Learning orientation			Innovation behavior			Innovation behavior		
	B (SE)	β	t	B (SE)	β	t	B (SE)	B	t
GD	-.021	-.010	-.253	-.246	-.117	-2.831	-.240	-.114	-2.880
EL	.065	.042	1.107	.203	-.134	3.363	.184	.121	3.169
PO	.044	.051	1.239	.017	.020	.457	.003	.004	.096
SL	.703 (.039)	.678**	17.921	.610 (.041)	.595**	15.030	.396 (.053)	.386**	7.512
LO	-	-	-	-	-	-	.305 (.051)	.308**	6.015
	$R^2 = .495$, adj $R^2 = .490$, F = 93.674** (p < .01), Durbin-Watson = 1.938			$R^2 = .448$, adj $R^2 = .442$, F = 77.533** (p < .01), Durbin-Watson = 2.054			$R^2 = .496$, adj $R^2 = .489$, F = 77.533** (p < .01), Durbin-Watson = 2.069		

p < .05 *, p < .01 **

GD: Gender, EL: Education Level, PO: Position, SL: Shared Leadership, LO: Learning Orientation

between two variables, was close to 2. In addition, as the VIF value of all the variables is smaller than 10, it was concluded that there is no multicollinearity.

Next, a Sobel test was additionally conducted for a post-test to see whether a direct effect is significant through the learning orientation of the employees. This test is to find out directly whether the size of an indirect effect (mediating effect) that an independent variable has on a subordinate variable through a mediating variable is significant. A Sobel test is conducted by utilizing a non-standardization regression coefficient of stage 1 and 3, and a non-standardization standard error. If, from the result of the test, the resulting value Z is greater than 1.96 or smaller than -1.96, a mediating effect is concluded to be significant[94]. The results of the test showed that $B = .703$ and $SE = .039$ in stage 1 and $B = .396$ and $SE = .053$ in stage 3 and that $Z=6.903$, $p < .01$. This means that as the Z value is greater than 1.96, the indirect effect of learning orientation mediating effect the relationship between shared leadership and innovation behavior is statistically significant. These results show that the learning orientation of the employees plays a mediating effect role in the relationship between the shared leadership of a leader and the innovation behavior of the employees. Accordingly, hypothesis 4 was adopted.

Hypothesis 5 is that the unlearning of the members has a moderating effect on the relationship between the shared leadership of a leader and the learning orientation of the employees.

To verify the hypothesis, a hierarchical regression analysis was undertaken. A hierarchical regression analysis is one useful method to verify an interactive effect, and it considers an order of entry in consideration of a causal priority of variables[95]. It was conducted with a total of 3 stages, and the 3-stage hierarchical regression analysis was

performed by applying independent variables, moderating variables, and an interactive term between independent variables and moderating variables. In the method, the R^2 of a regression formula in stage 2 is compared with R^2 (ΔR^2) in stage 3 to discover whether there is any statistically significant increase from the addition of an interactive term of an independent variable and a moderating variable and to determine whether there is any moderating effect. Also, even if no multicollinearity appears during the application of an interactive term, multicollinearity can occur from multiplying an independent variable and a moderating variable; thus, mean centering was introduced to solve this problem [96].

Table 11. Moderating Effect of Unlearning

	Step 1			Step 2			Step 3		
	B (SE)	β	t	B (SE)	β	t	B (SE)	β	t
GD	-.021	-.010	-.253	-.012	-.006	-.143	-.016	-.008	-.201
EL	.065	.042	1.107	.063	.041	1.108	.064	.042	1.136
PO	.044	.051	1.239	.032	.037	.917	.025	.029	.709
SL	.703 (.039)	.678**	17.921	.599 (.045)	.578**	13.384	.591 (.045)	.570**	13.203
UL	-	-	-	.214 (.048)	.190**	4.457	.234 (.049)	.208**	4.791
SL X UL	-	-	-	-	-	-	.055 (.028)	.073**	2.005
	$R^2 = .495$ adj $R^2 = .490$ F = 93.674**			$R^2 = .520$ adj $R^2 = .514$ F = 19.868**			$R^2 = .525$ adj $R^2 = .518$ F = 4.019**		

$p < .05$ *, $p < .01$ **

GD: Gender, EL: Education Level, PO: Position, SL: Shared Leadership, UL: UnLearning

To verify hypothesis 5, a moderating effect was analyzed by applying the interactions between shared leadership and unlearning on to the effect of shared leadership on learning orientation. The results of testing effectiveness by applying only shared leadership in stage 1 showed that the F-value was 93.674 while the p-value(.000) was smaller than the significance level of .01, thereby showing a significant result. As R^2 was .495, it exhibited a very high

explanation power. In stage 2, the results of applying shared leadership and unlearning at the same time showed that an F-value was 19.868 and p-value(.000) was smaller than the significance level of .01, thereby showing a significant result. As R^2 was .520, it demonstrated a very high explanation power. In stage 3, the results of applying the interactive term of shared leadership and unlearning with the use of mean centering showed that the F-value was 4.019 and p-value(.046) was smaller than the significance level of .05, thereby showing a significant result. Also R^2 changes increased gradually. Accordingly, hypothesis 5 showed a statistically significant result and was adopted.

V. Conclusion and proposals

The study aimed to identify empirically the effect of the shared leadership of an organization leader on the learning orientation of the employees and the effect of unlearning on innovation behavior. That is, to promote the innovation behavior of the employees in an organization of the 4th industrial revolution era where a team system has become universal, prompt decision-making and a horizontal shared leadership of interactions were proposed and the mediating effect of learning orientation by a commitment to learning, which is a personal trait of the employees, and the interaction moderating effect of unlearning were studied empirically in the relationship between the shared leadership of a leader and learning orientation. Subsequently, the research results concerning the relationship between each of the variables through this research model could be discovered to reach the following conclusions.

First, the shared leadership of a leader had a positive(+) effect on the innovation behavior of the

employees. In the business environment of today's 4th industrial revolution era where complexity and diversity are demanded, it was proven that the higher the shared leadership of a leader of a horizontal organization with a tendency to share sufficiently based on mutual trust among the employees while avoiding a rigid vertical organization, the greater the innovation behavior of the employees[10][72]. In other words, a company can succeed in the competition for survival in a fast changing industrial environment through consistent innovation only when prompt business decision-making is realized by empowered shared leadership based on trust among the employees rather than by one leader of an inflexible vertical organization[21][45].

Second, the learning orientation of the employees had a positive(+) effect on innovation behavior. It was discovered that the higher the learning orientation through passion toward learning and activities to commit to learning by each individual employees, the greater the innovation behavior of the employees. To ensure competitiveness of a company in an age where the technical change cycle is becoming faster on a daily basis, the importance of a learning oriented organization culture is growing even more [13][14]. As business management is called a living thing, there should be an effort to improve the learning orientation of the employees for creative innovation through ceaseless changes.

Third, the shared leadership of an organization leader had a positive(+) effect on the learning orientation of the employees. The higher the tendency to share knowledge by a leader empowered in a horizontal organization, the higher the learning orientation of the employees[74][84]. In particular, the will to share the goal and vision among the employees by the creation of sympathy within an organization serves as a crucial internal factor for the

achievement of organizational performance as well as for learning orientation[81][82].

Fourth, from the result of verifying a mediating effect of learning orientation in the relationship between the shared leadership of a leader and the learning orientation of the employees, the learning orientation of the employees was found to play a moderating effect role in the relationship between the shared leadership of a leader and the innovation behavior of the employees. This becomes a foundation for sustainable growth by enhancing the learning orientation of the from the result of verifying a mediating effect of learning orientation in the relationship between the shared leadership of a leader and the learning orientation of the employees, the learning orientation of the employees was found to play a moderating effect role in the relationship between the shared leadership of a leader and the innovation behavior of the employees. through the demonstration of shared leadership of a leader, fortifying the sense of belonging and sense of unity toward the organization, and ultimately improving an innovative process of a company along with a positive effect on the improvement of the innovation behavior of the from the result of verifying a mediating effect of learning orientation in the relationship between the shared leadership of a leader and the learning orientation of the employees, the learning orientation of the employees was found to play a moderating effect role in the relationship between the shared leadership of a leader and the innovation behavior of the employees[70][73].

Fifth, from the result of verifying the moderating effect of the unlearning of the from the result of verifying a mediating effect of learning orientation in the relationship between the shared leadership of a leader and the learning orientation of the employees, the learning orientation of the employees was found

to play a moderating effect role in the relationship between the shared leadership of a leader and the innovation behavior of the employees. on the relationship between the shared leadership of a leader and the learning orientation of the from the result of verifying a mediating effect of learning orientation in the relationship between the shared leadership of a leader and the learning orientation of the employees, the learning orientation of the employees was found to play a moderating effect role in the relationship between the shared leadership of a leader and the innovation behavior of the employees. the unlearning of the employees was found to be controlled by the interactive term of shared leadership and unlearning in the relationship between the shared leadership of a leader and the learning orientation of the from the result of verifying a mediating effect of learning orientation in the relationship between the shared leadership of a leader and the learning orientation of the employees, the learning orientation of the employees was found to play a mediating effect role in the relationship between the shared leadership of a leader and the innovation behavior of the employees.

The greater the unlearning capability of the employees, the stronger is a leader's will to share; thus, the learning orientation of the employees becomes improved. On the contrary, the smaller the unlearning capability of the employees, the weaker is a leader's will to share; thus, the learning orientation of the employees does not improve[13][48][49]. Consequently, the improvement of the shared leadership of a leader and learning orientation become possible only when there is an innovative effort for change to reinforce continuously the creative learning of the employees and when an organization culture is realized that allows the free introduction of objections to enable critical thinking.

In accordance with the aforementioned empirical

research results, the implications of this study are proposed as follows.

First, as theoretical implications reviewed in this study, while research in shared leadership is still at the early stage and few relevant empirical studies are available, it was revealed that the shared leadership of a leader had a direct effect on the innovation behavior of the employees. In addition, whereas existing preceding research took the result variable at an organization level merely fragmentarily, this study considered a mediating effect and a moderating effect of both learning orientation and unlearning as an influence factor of innovation behavior, which is a result variable at a personal level. In particular, although many studies on direct influence factors on shared leadership and innovation behavior have been conducted, little research into the mediating effect and the moderating effect of learning orientation and unlearning could be found. Accordingly, this study made a theoretical commitment by identifying empirically that shared leadership had an effect on innovation behavior through learning orientation and unlearning based on a theoretical ground shown in the relationship between shared leadership and innovation behavior. To overcome the limitation that samples utilized in the existing preceding studies were limited to specific regions or targets, extended samples from employees in more varied industries and with more varied working careers and positions were introduced in this study and a more universal relationship between leading variables was furnished.

Second, as a practical implication considered in this study, it is proposed that a direction of shared leadership should be prepared by a leader of an organization. A team leader Y(director) at B company when met at the company said, "The employees of the current organization require leadership that can help provide sustainable corporate growth and

activities to reinforce the capability of the employees through mutual sympathy and communications between an organization and the employees in the 4th industrial innovation era." This means that a leader who can reflect the phenomena of the times requires shared leadership from a horizontal perspective rather than leadership from a vertical perspective, which is a paradigm shift of leadership brought about by the rapid change of the business environment. In particular, individual learning, the abandonment of existing old knowledge, absorption of new knowledge, and knowledge sharing are even more important for the innovation behavior of the employees in an era of ever changing technological advancement. This study is meaningful in that it proposed that the shared leadership required in the 4th industrial revolution era was needed based on the shared leadership of a leader by helping the employees to abandon existing knowledge or to try to create a sense of unity and sympathy within an organization and raise a shared organization culture of mutual cooperation. Accordingly, with a concept of distributed leadership, it is necessary to develop and distribute a practical program for cognitive education of a leader and the employees in the company. In addition, cases studies on detailed case collection and practical application methods of shared leadership should be conducted.

In this study, theoretical and practical implications were provided through an empirical analysis; however, the following limitations were discovered.

First, as research and investigation were carried out mostly on the employees of private companies in this study, there is a limitation in generalizing the sample of research subjects. In follow-up research to overcome such a limitation, it is necessary to include more varied industries such as financial institutions and public institutions and to expand the samples.

Second, although indexes at a personal level such

as learning orientation and unlearning were used to measure the innovation behavior of the employees, it is necessary for follow-up research to extend the study with various performance indexes such as objective financial information, performance assessment, and individual productivity.

Third, a research model was designed to verify the efficiency of its effect on the shared leadership of a leader and the innovation behavior of the employees, and learning orientation as mediating variable and unlearning as a moderating variable were set up. However, follow-up research is necessary into diverse variables, other than these variables, regarding the efficacy at personal and organization levels.

참 고 문 헌

- [1] S. G. Scott and R. A. Bruce, "Determinants of innovation behavior: a path model of individual innovation in the workplace," *Academy of Management Journal*, Vol.37, No.3, pp.580-607, 1994.
- [2] R. E. Johnston and J. D. Bate, *The Power of Strategy Innovation: A New Way of Linking Creativity and Strategic Planning to Discover Great Business Opportunities*: Amacom, New York, N. Y., 2013.
- [3] A. H. Van de Ven, "Central Problems in the Management of Innovation," *Management Science*, Vol.32, No.5, pp.590-607, 1986.
- [4] G. W. Moon, S. B. Choi, and J. S. Moon, "Effects of leadership style and features of organizational culture on innovation behavior," *Journal of Industrial Economics and Business*, Vol.22, No.6, pp.3289-3320, 2009.
- [5] M. A. West and J. L. Farr, *Innovation and Creativity at Work: Psychological and Organizational Strategies*: Chichester, England: Wiley, 1990.
- [6] J. Zhou and C. E. Shalley, "Research on Employee Creativity: A Critical Review and Directions for Future Research, In J. J. Martocchio & G. R. Ferris (Eds)," *Research in Personnel and Human Resource Management*, Greenwich, CT, JAI, pp.165-217, 2003.
- [7] N. King, "Innovation at Work: The Research Literature, In M. A. West and J. L. Farr(Eds.), *Innovation and Creativity at Work*," New York, NY, Wiley, pp.15-59, 1990.
- [8] G. R. Oldham and A. Cummings, "Employee creativity: Personal and contextual factors at work," *Academy of Management Journal*, Vol.39, No.3, pp.607-634, 1996.
- [9] S. G. Cohen and D. E. Bailey, "What makes teams work: Group effectiveness research from the shop floor to the executive suite," *Journal of Management*, Vol.23, No.3, pp.239-290, 1997.
- [10] J. K. Seo and A. J. Hong, "The Effect of Shared Leadership on Innovative Work Behavior and the Mediating Effect of Job Embeddedness and Informal Learning," *Korean Journal of Business Administration*, Vol.28, No.3, pp.981-1008, 2011.
- [11] J. F. Cox, C. L. Pearce, and M. L. Perry, *Toward a model of shared leadership and distributed influence in the innovation process*, In C. L. Pearce & J. A. Conger, *Shared leadership: Reframing the hows and whys of leadership*: Thousand Oaks, CA, Sage, 2003.
- [12] E. Sundstrom, K. P. De Meuse, and D. Futrell, "Work teams: Applications and effectiveness," *American psychologist*, Vol.45, No.2, p.120, 1990.
- [13] S. F. Slater and J. C. Narver, "Market orientation and the learning organization,"

- Journal of Marketing, Vol.59, pp.63-74, 1995.
- [14] R. J. Calantone, S. T. Cavusgil, and Z. Yushan, "Learning orientation, firm innovation capability, and firm performance," *Industrial marketing management*, Vol.31, No.6, pp.515-524, 2002.
- [15] J. G. C. Navarro and B. R. Moya, "Business performance management and unlearning process," *Knowledge and Process Management*, Vol.12, No.3, pp.161-70, 2005
- [16] H. Martin de, P. N. Phillips, and T. B. Lawrence, "Managing organizational forgetting," *MIT Sloan Management Review*, Vol.45, No.2, pp.45-51, 2004.
- [17] G. Yukl, *Leadership in organizations(7th Edition): Upper Saddle River*, NJ, Prentice Hall, 2010.
- [18] J. O'Toole, J. Galbraith, and E. E. Lawler, "When two (or more) heads are better than one: The promise and pitfalls of shared leadership," *California Management Review*, Vol.44, No.4, pp.65-83, 2002.
- [19] C. A. Gibb, "Leadership, In G. Lindzey(Ed.)," *Handbook of social psychology*, Reading, MA, Addison-Wesley, Vol.2, pp.877-917, 1954.
- [20] D. Katz and R. L. Kahn, *The social psychology of organizations(2nd ed.)*: New York, Willey, 1978.
- [21] T. O. Sanders, "Collectivity and influence: The nature of shared leadership and its relationship with team learning orientation, vertical leadership and team effectiveness," *Doctoral dissertation*, The George Washington University, 2006.
- [22] C. L. Pearce, "The future of leadership: Combining vertical and shared leadership to transform knowledge work," *Academy of Management Executive*, Vol.18, pp.47-57, 2004.
- [23] A. Mehra, B. Smith, A. Dixon, and B. Robertson, "Distributed leadership in teams: The network of leadership perceptions and team performance," *Leadership Quarterly*, Vol.17, pp.232-245, 2006.
- [24] J. E. Hock and J. H. Dulebohn, "Shared leadership in enterprise resource planning and human resource management system implementation," *Human Resource Management Review*, Vol.23, pp.114-125, 2013.
- [25] J. B. Carson, P. E. Tesluk, and J. A. Marrone, "Shared leadership in teams: An investigation of antecedent conditions and performance," *Academy of Management Journal*, Vol.50, pp.1217-1234, 2007.
- [26] D. V. Day, P. Gronn, and E. Salas, "Leadership capacity in teams," *The Leadership Quarterly*, Vol.15, No.6, pp.857-880, 2004.
- [27] M. A. Marks, J. E. Mathieu, and S. J. Zaccaro, "A temporally based framework and taxonomy of team processes," *Academy of Management Review*, Vol.26, pp.356-376, 2001.
- [28] B. L. Kikman and B. Rosen, "Beyond selfmanagement: Antecedents and consequences of team empowerment," *Academy of Management Journal*, Vol.42, pp.730-757, 1999.
- [29] D. Day, P. Gronn, and E. Salas, "Leadership capacity in teams," *Leadership Quarterly*, Vol.15, No.6, pp.857-880, 2004.
- [30] M. A. Marks, J. E. Mathieu, and S. J. Zaccaro, "A temporally based framework and taxonomy of team processes," *Academy of Management Review*, Vol.26, No.3, pp.356-376, 2001.
- [31] C. L. Pearce and C. C. Manz, "The importance of self and shared leadership in knowledge work," *Organizational Dynamics*, Vol.34, No.2, pp.130-140, 2005.
- [32] S. B. Choi and P. S. Yang, "A Study on the Antecedents of Innovation Performance: The

- Role of Core Self-Evaluations and Intrinsic Motivation," *Korean Journal of Business Administration*, Vol.24, No.5, pp.2827-2848, 2011.
- [33] E. L. Deci and R. M. Ryan, *Intrinsic motivation and self determination in human behavior*: New York, Plenum, 1985.
- [34] T. M. Amabile, *From individual creativity to organizational innovation*, In K. Gronhaug & G. Kaufman (Eds.), *Achievement and motivation: A social-developmental perspective*, New York, Cambridge University Press, 1988.
- [35] T. M. Amabile, *Creativity and innovation in organizations(Vol. 5)*: Boston, MA, Harvard Business School, 1996.
- [36] P. F. Drucker, "The discipline of innovation," *Harvard Business Review*, Vol.63, No.3, pp.67-72, 1984.
- [37] J. W. Lee, J. W. Kim, and I. C. Kim, "Psychological Empowerment, Organizational Supports, and Innovative Work Behavior of General Hospital Employees," *Health Policy and Management*, Vol.13, No.1, pp.46-68, 2003.
- [38] O. Janssen, "Innovative behaviour and job involvement at the price of conflict and less satisfactory relations with co workers," *Journal of Occupational and Organizational Psychology*, Vol.76, No.3, pp.347-364, 2003.
- [39] M. S. Heo and M. J. Cheon, "An Empirical Study on the Relationship between Employee's Knowledge Integration Capabilities and innovation behavior: Factors Influencing Knowledge Integration Capabilities and the moderating effect Effect of Unlearning," *Korean Corporation Management Review*, Vol.22, No.4, pp.41-28, 2015.
- [40] T. W. Robbins and B. J. Everitt, "Neurobehavioural mechanisms of reward and motivation," *Current opinion in neurobiology*, Vol.6, No.2, pp.228-236, 1996.
- [41] E. M. Rogers, *Diffusion of innovations*: New York, Vol.12, 1995.
- [42] T. M. Amabile, "A model of creativity and innovation in organizations," In *Organization Behavior*, Vol.10, pp.123-167, 1988.
- [43] R. Rosenfeld and J. C. Servo, *Facilitating innovation in large organizations*: New York, NY, John Wiley & Sons, 1990.
- [44] O. Jassen, "Job demand, perceptions of effort-reward fairness and innovation work behavior," *Journal of Occupational and Organizational Psychology*, Vol.73, pp.287-302, 2000.
- [45] H. M. Porter and S. Macintyre, *Antenatal care assessed: a case study of an innovation in Aberdeen*, Aberdeen University Press, 1985.
- [46] U. S. Daellenbach, A. M. McCarthy, and T. S. Schoenecker, "Commitment to innovation: The impact of top management team characteristics," *R&D Management* Vol.29, No.3, pp.199-208, 1999.
- [47] I. C. Kim, J. W. Kim, and J. W. Lee, "Determinants of Innovative Work Behavior," *Journal of Business Research*, Vol.19, pp.282-317, 2004.
- [48] R. W. Weisberg, "Creativity and Knowledge: A challenge to theories, In R. J. Sternberg (Ed)," *Handbook of Creativity*, New York, Cambridge University Press, pp.226-250, 1999.
- [49] P. R. Dickson, "The static and dynamic mechanics competition: A comment on Hunt and Morgan's comparative advantage theory," *Journal of Marketing*, Vol.60, pp.102-106, 1996.
- [50] W. E. Baker and J. M. Sinkula, "The synergy effects of market orientation and learning orientation on organizational performance," *Academy of Marketing Science Journal*, Vol.12,

- No.1, pp.54-74, 1999.
- [51] C. L. Wang, "Entrepreneurial orientation, learning orientation, and firm performance," *Entrepreneurship Theory and Practice*, Vol.32, No.4, pp.635-657, 2008.
- [52] B. H. Yoo, "Learning Orientation of Small and Medium Enterprise : Antecedents and Consequences," *The Journal of Small Business Innovation*, Vol.14, No.3, pp.121-143, 2011.
- [53] E. C. Nevis, A. J. DiBella, and M. Gould, "Understanding organizations as learning systems," *Sloan Management Review*, Winter, pp.73-85, 1995.
- [54] J. M. Sinkula, W. Baker, and T. G. Noordewier, "A framework for Market-Based Organizational learning Linking Values, Knowledge and Behavior," *Journal of the Academy of marketing Science*, Vol.25, pp.305-318, 1997.
- [55] S. F. Narver and J. C. Narver, "Does competitive environment moderate the market orientation performance relationship?," *Journal of Marketing*, Vol.58, pp.46-55, 1994.
- [56] J. Burgoyne, M. Pedler, and T. Boydell, *Towards the learning company: concepts and practices*: London, McGraw-Hill, 1994.
- [57] A. E. Akgün, J. C. Yrme, S. L. Ynn, and H. Keskin, "Organizational Unlearning as Changes in Beliefs and Routines in Organizations," *Journal of Organizational Change Management*, Vol.20, pp.794-812, 2007.
- [58] S. H. Cho and T. Y. Kim, "A Study on Unlearning Theory in the Context of Public Administration Study in Korea: With a Focus on Decision Making and Leadership," *Korean Association of Governmental Studies*, Vol.47, No.4, pp.47-71, 2013.
- [59] P. Senge, *Peter Senge and the learning organization*: 1990.
- [60] H. S. Yu and A. J. Hong, "The Influence of Empowering Leadership on Employees' Innovation Behavior and the Mediating Effect of Unlearning," *Journal of Competency Development & Learning*, Vol.10, pp.101-127, 2015.
- [61] G. Hamel and C. K. Prahalad, "Strategy as a Field of study: why search for a New Paradigm?," *Strategic Management Journal*, Vol.15, pp.5-16, 1994.
- [62] Lewin and Kurt, *Field theory in social science: selected theoretical papers*, Edited by Dorwin Cartwright, 1951.
- [63] H. S. Lee and H. S. Lee, "The Impact of University Students' Openness to Diversity on Creativity: The Mediating Effect of Cooperative Learning Competency and Unlearning Competency," *Journal of Lifelong Learning Society*, Vol.12, No.1, pp.277-305, 2016.
- [64] P. F. Drucker, *The new realities*, Transaction publishers, 2003.
- [65] Hislop and Donald, *Knowledge management in organizations: A critical introduction*, Oxford University Press, 2013.
- [66] J. G. Cegarra-Navarro and B. R. Moya, "Business Performance Management and Unlearning Process," *Knowledge and Process Management*, Vol.12, pp.161-170, 2015.
- [67] J. G. Cegarra-Navarro, S. Eldridge, and A. Martinez-Martinez, "Managing Environmental Knowledge Through Unlearning in Spanish Hospitality Companies," *Journal of Environmental Psychology*, Vol.30, pp.249-257, 2010.
- [68] J. G. Cegarra-Navarro, S. Eldridge, and A. L. Gamo Sánchez, "How an Unlearning Context can Help Managers Overcome the Negative Effects of Counter-Knowledge," *Journal of Management & Organization*, Vol.18, pp.231-246, 2012.

- [69] J. G. Cegarra-Navarro, M. E. Sánchez-Vidal, and D. Cegarra-Leiva, "Balancing Exploration and Exploitation of Knowledge Through an Unlearning Context: An Empirical Investigation in SMEs," *Management Decision*, Vol.49, pp.1099-1119, 2011.
- [70] F. Damanpour, "Organizational innovation: A meta-analysis of effects of determinants and moderators," *Academy of Management Journal*, Vol.34, No.3, pp.555-590, 1991.
- [71] R. M. Kanter, "When a thousand flowers bloom: Structural, collective, and social conditions for innovation in organization," *Research in Organizational Behavior*, Vol.10, pp.169-211, 2010.
- [72] J. S. Song and P. S. Yang, "Mediating Effects of the Psychological Empowerment on the Relationship Between Trust in Supervisor and innovation behavior," *Academy of Korean Industrial Economic*, Vol.22, No.5, pp.2437-2455, 2009.
- [73] M. A. Farrell, "Antecedents and consequences of a learning orientation," *Marketing Bulletin*, Vol.10, pp.38-51, 1999.
- [74] Y. B. Park and H. K. Park, "A Study on the Effect of the Learning Orientation on Organizational Performance and the moderating effect Effect of Contingent Variables," *Korean Academy of Organization & Management*, Vol.27, No.2, pp.83-109, 2003.
- [75] G. T. M. Hult, R. F. Hurley, and G. A. Knight, "Innovativeness: Its antecedents and impact on business performance," *Industrial marketing management*, Vol.33, No.5, pp.429-438, 2004.
- [76] I. B. Choi and J. H. Lee, "Leader Empowerment Behaviors, Trust in Leader, and Organizational Citizenship Behaviors," *Korean Journal of Management*, Vol.14, No.2, pp.215-247, 2006.
- [77] H. N. Nasution, F. T. Mavondo, and M. J. Matanda, "Entrepreneurship: Its relationship with market orientation and learning orientation and as antecedents to innovation and customer value," *Industrial marketing management*, Vol.40, No.3, pp.336-345, 2011.
- [78] G. T. M. Hult, R. F. Hurley, and G. A. Knight, "Innovativeness: Its antecedents and impact on business performance," *Industrial marketing management*, Vol.33, No.5, pp.429-438, 2004.
- [79] D. Y. Chung and G. H. Park, "An Influence of Learning Orientation in Small & Medium Enterprise on Corporate Performance - Centered on mediating effect of market orientation and innovativeness-," *Business Education*, Vol.24, No.2, pp.153-176, 2010.
- [80] J. H. Rhee, T. K. Park, and D. H. Lee, "Drivers of innovativeness and performance for innovative SMEs in South Korea: Mediation of learning orientation," *Technovation*, Vol.30, No.1, pp.65-75, 2010.
- [81] G. P. Huber, "Organizational learning: The contributing processes and the literatures," *Organization science*, Vol.2, No.1, pp.88-115, 1991.
- [82] G. H. Kim and S. I. Na, "The Causal relationship among learning orientation, learning activities, organizational environment and learning outcomes in small and medium enterprises," *Journal of Employment and Skills Development*, Vol.11, No.3, pp.171-192, 2008.
- [83] S. H. Cho and S. C. Yoon, "The Effect of Organizational Learning Capability on Innovation Performance in SME: moderating effect Effect of Middle Manager Leadership," *The Journal of Vocational Education Research*, Vol.28, No.2, pp.71-87, 2009.
- [84] U. Lichtenthaler and E. Lichtenthaler, "A

- Capability-Based Framework for Open Innovation: Complementing Absorptive Capacity," *The Journal of Management Studies*, Vol.46, pp.1315-1338, 2009.
- [85] C. Soosay and P. Hyland, "Exploration and exploitation: the interplay between knowledge and continuous innovation," *International Journal of Technology Management*, Vol.42, No.1-2, pp.20-35, 2008.
- [86] W. H. Starbuck, "Unlearning ineffective or obsolete technologies," *International Journal of Technology Management*, Vol.11, No.7-8, pp.725-737, 1996.
- [87] M. M. Crossan, H. W. Lane, and R. E. White, "Organizational learning: Dimensions for a theory," *The international journal of organizational analysis*, Vol.3, No.4, pp.337-360, 1995.
- [88] Assink and Marnix, "Inhibitors of disruptive innovation capability: a conceptual model," *European Journal of Innovation Management*, Vol.9, No.2, pp.215-233, 2006.
- [89] H. E. Yildiz and C. F. Fey, "Compatibility and unlearning in knowledge transfer in mergers and acquisitions," *Scandinavian Journal of Management*, Vol.26, No.4, pp.448-456, 2010.
- [90] N. J. Hiller, D. V. Day, and R. J. Vance, "Collective enactment of leadership roles and team effectiveness: A field study," *The Leadership Quarterly*, Vol.17, No.4, pp.387-397, 2006.
- [91] J. T. Lee and S. B. Yi, "Computer Education Curriculum and Instruction : A Study on the Development and Verification of a Logical Thinking Ability Measuring Tool in Computer Programming Learning," *The Journal of Korean Association of Computer Education*, Vol.7, No.4, 2004.
- [92] J. Nunnally, *Psychometric Theory*, Mc-Graw-Hill, New York, 1967.
- [93] M. W. Browne and R. Cudeck, "Alternative ways of assessing model fit," *Sage focus editions*, Vol.154, pp.136-136, 1993.
- [94] R. M. Baron and D. A. Kenny, "The moderator - mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations," *Journal of personality and social psychology*, Vol.51, No.6, p.1173, 1986.
- [95] J. Cohen and P. Cohen, *Applied multiple regression - correlation analysis for the behavioral sciences (2nd ed.)*, Hillsdale NJ, Erlbaum, 1983.
- [96] L. S. Aiken, S. G. West, and R. R. Reno, *Multiple regression: Testing and interpreting interactions*, Sage, 1991.

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