Crisis Management Leadership and Organizational Culture Improvement: the Case of POSCO M-TECH in Republic of Korea

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Abstract

In this study, we examine how crisis management leadership worked in a real business environment and how financial and non - financial performance was achieved through POSCO M - TECH 's case overcoming crisis. POSCO M-TECH was founded in 1973 as Samjung Industry Co., Ltd., and changed its name to Samjung P & A after it was listed on the KOSDAQ market in 1997. In 2005, it was incorporated into the POSCO enterprise group. The main business purpose is to produce and sell various packaging materials, and to engage in steel product packaging and processing and sales business. From 2012, the company has expanded its non-ferrous metal production capacity by commissioning four plants including POSCO's magnesium, ferro silicon, FE powder and ferromanganese as well as steel product packaging and deoxidizer supply. Through this development process, POSCO M-TECH has overcome various crises. The case of POSCO M-TECH provides suggestions to overcome the crisis through the change of company inside and outside.

Keywords: Crisis Management, POSCO, Leadership, Case Study, Organization Culture

1. INTRODUCTION

The crisis of the enterprise occurs without notice, and it adds uncertainty to the enterprise. Thus, crisis can be defined as a non-routine and unpredictable event that threatens the priority objectives of the organization [1]. In the era of modern society, corporate crises are increasingly occurring more rapidly and more frequently in terms of cycle and speed. Leadership of key executives, such as CEOs and CFOs, is a key condition for a company's sustainable success in overcoming crisis situations. Leo Lacca who revived Chrysler, Louis Gerstner who created IBM's revival, Carlos Gonne who revived Nissan, and Jack Welch's example of GE's business structure and organizational reorganization can determine the company's. Many companies in crisis are turning around but fail. The failure of organizational innovation, besides business strategy and financial failure, is a significant factor. In order to achieve a turnaround, it is necessary for leaders to overcome crises on issues such as internal communication, lack of leader capacity, excessive bureaucracy, and lack of future investment.

The crisis of business is the crisis of leadership. What are the circumstances of the business environment and the role of the leader? First, due to the high uncertainty in the management environment, it is difficult for leaders to predict the future situation and it is difficult to direct them. The management environment is dominated by extreme uncertainties, and it seems to be like exploring without guidance for years to come. Second, the burden of management due to the success of the past, which is a good economic condition, is high. Shareholders expect the companies they invested to continue to grow, and their expectations are declining at a very slow pace, unlike the rapidly-market conditions. Third, lack of trust and lack of traction. Fourth, the lack of teamwork within the top management is a serious issue for governance. The top management should be operated as a real team. In order to overcome the crisis, it is important to have the cohesiveness and urgency of top management.

In this study, we examine how crisis management leadership worked in a real business environment and how financial and non - financial performance was achieved through POSCO M - TECH 's case overcoming crisis. POSCO M-TECH was founded in 1973 as Samjung Industry Co., Ltd., and changed its name to Samjung P & A after it was listed on the KOSDAQ market in 1997. In 2005, it was incorporated into the POSCO enterprise group. The main business purpose is to produce and sell various packaging materials, and to engage in steel product packaging and processing and sales business. From 2012, the company has expanded its non-ferrous metal production capacity by commissioning four plants including POSCO's magnesium, ferro silicon, FE powder and ferromanganese as well as steel product packaging and deoxidizer supply. Through this development process, POSCO M-TECH have overcome various crisis situations. The case of POSCO M-TECH provides suggestions to overcome the crisis situation through the change of company inside and outside.

The composition of this study is as follows. In Section 2, we review literature on the types and causes of corporate organizational crises, summarize the existing research on organizational crisis management and the leadership of organizational crisis management, and identify the virtues needed for leaders to overcome crisis situations for research analysis. In Section 3, we examine four examples of POSCO M-TECH's contribution to the enterprise through leadership of the CEO in overcoming crisis. Finally, in conjunction with the virtues required for leaders to overcome the crisis situation presented above, the model of the analysis is presented together with the business and academic implications of

leadership of crisis management derived from this case study. And then, the conclusion of the study is presented.

2. LITERATURE REVIEW

2. 1 Type and Cause of Organizational Crisis

Corporate crises threaten organizational viability and sustainable growth and require a fast decision-making structure with ambiguous means, causes, and consequences for decision-making [2]. This crisis is a threat to the organization's most important goals because it has a major impact on the organization's survival problems [3]. If so, why is the crisis of the modern enterprise what is happening, and how can we classify the cause of the crisis? Pearson and Mitroff [4] categorize the types of organizational crises: 1) whether they occur first within the organization or externally; and 2) whether the cause of the crisis is organizational / human / social or economic / technical. The reason for the classification of these causes is that the sense of crisis and the response method are different according to each classification type. Table 1 lists the causes of corporate crises and the types of environments they generate.

Table 1. Causes and Environment of Organizational Crises

		Internal	External
Socio/Economic Perspective	**Causes**	Production service defect Industrial crisis IT equipment paralysis Defective Information Leakage Bankruptcy	Environmental destruction and industrial accidents Large-scale system failure Natural disaster Hostile merger Government Crisis / International Crisis
	Environment	Defects in production services that cannot be found, difficult to analyze, and unexpected Production faults not found Error in discovery system Backup design and control error	Environmental conditions that cannot be expected and are difficult to analyze Error in technical monitoring system Errors in strategic planning Errors in social planning Errors in global monitoring
Organizational/People /Social Perspective	**Causes**	Change and adaptation failure Organizational downfall Communication member slowdown strike Change of on-site product traits Forgery Rumor, malicious slander Illegal behavior Sexual harassment Occupational disease	Symbolic projection Slowdown strike Terrorism Abduction of manager Change of external field product traits Forgery/ Malicious rumor, Malicious slander Labor strike Boycott
	Environment	Errors in organizational control Poor corporate culture, information / communication, Structure, compensation Poor operator training Poor situation planning Human error / error Internal fracture Error in selection of staff	- Failures arising from the design and implementation of new social systems - Crime stakeholders (disgruntled former workers, assassins, terrorists, outsiders, imitation murders, psychopaths) - Social monitoring error

Source: [5]

On the other hand, it is important to categorize the crisis and to grasp the individual attributes, because crises vary widely depending on the nature of the organization and the circumstances of the organization [6- 8]. Linke [8] classified explosive crisis, immediate crisis, ongoing crisis, and chronic crisis based on the crisis and progress of the crisis, or on the time allowance to cope. Afterwards, Lerbinger [7] classified the crisis into seven categories, namely, a crisis of distorted business value, a fraud crisis, a conflict crisis, a natural crisis, a malicious crisis, a technical crisis, and a managerial crisis. In recent years, the political and social transformation of modern enterprises and conflicts between labor and management have been amplified, and the cumulative potential crisis has often been exposed to large-scale accidents. In recent years, with the development of IT technology, the amount of internal and external company information that consumers and stakeholders can obtain increases, and information security issues are emerging as a major crisis of enterprises. In addition, the scope and intensity of the crisis have become stronger throughout the entire management activities, including collective claims and lawsuits by consumers, the spread of malicious rumors through social media, key information leakage, industrial accidents, and unexpected financial risks. Therefore, crisis management ability to cope with inherent crisis or present crisis is an essential requirement for enterprise growth and survival. In recent years, many companies have created departments dedicated to crisis management, prepared crisis management manuals, and used them as opportunities by acting in accordance with manuals in the event of a crisis [9].

In general, the crisis is closely related to the CEO who is in charge of management, and the level of preparation for crisis management depends on the CEO's style of leadership [10]. Leadership that can overcome the crisis is important because uncertainty is growing as the environment around the company changes rapidly. Therefore, if the leaders cannot cope with it properly, the probability that the rise and the fall of a company were determined is increased. Therefore, a desirable leader is not a normal daily leader, but a leader who can go beyond crisis and overcome the crisis by overcoming the situation limitations [11].

2.2 Leadership for Organizational Crisis Management

As the complexity and competitive pressures of the modern business environment become worse, quick decisions and strategic choices are needed momentarily. Strategic choices such as innovation, diversification, and globalization are ambiguous, complex, uncertain, and unorganized. Thus, the fast-paced interpretation and perception of top management has a very significant impact on strategic decision making [12]. What is more important than anything else in the corporate crisis is the role of the leader. The crisis situation can be divided into several stages, and it is important that the role of the leader is common. It is the responsibility of leaders to choose what to choose from these choices because there are too many options when preparing and restoring crises to overcome organizational crises [5]. In particular, organizational crises are not fully predictable, preventable,

and manageable. Thus, a realistic approach to these is to find out the causes of some major operational crises and actively prevent them.

Boin and Hart [13] argue that when leaders fail to overcome crises in their work, leaders become victims of crisis management failures. Five important business behaviors that leaders must take in the event of a crisis are sense making, decision making, meaning making, terminating, and learning [14]. In order to overcome crises, leaders need to construct and clarify the reality of the events that threaten the event. In the second decision stage, it is important to make a decision on how to allocate them because the resources outside the company are not supplied and circulated enough during an organizational crisis. In this situation, political judgment and organizational coordination are important. Third, the role of the leader to be considered in forming meaning is to secure the reliability of the leader after resolving the organizational crisis. At the end of this process, the organizational crisis is over. At this point, leaders should discuss their responsibilities in the event of an organizational crisis. Finally, leaders should be transformed into organizational processes as well as endless learning [14].

The important issues to be considered in the process of organizational crisis management are the role of leaders in post crisis management as well as overcoming leadership in crisis situations. The threat-rigidity effect suggests that in the event of a crisis, the complexity of communication within the organization diminishes and the organizational structure has a centralized hierarchical structure as power and mutual influence are concentrated. Thus, efficiency may be emphasized rather than equity, resulting in conservation of resources within the organization and rigorous behavior within the organization [15]. In this crisis situation, the organizational members of the corporation are in a situation where anxiety and uncertainty coexist, so the members are dependent on the strategic direction of the leader and on the other hand there is the possibility of abusing his power under the name of leader's reform [13]. Therefore, the leadership needed to overcome the organizational crisis successfully should not only have strong leadership that can solve the root cause of the organizational crisis, but also internal and external trust that can solve it after the crisis [16].

Leadership research is mainly focused on the analysis of leadership by focusing on the relationship between leaders and organizational members among the major human constituent members. These research trends are called transactional leadership theories [17]. Since leaders form relationships based on 'exchange' when dealing with subordinates, it is important that subordinates be clearly accountable, there seems to be an implicit contractual relationship in which people do their best to meet the demands of the organization. After that, a new leadership theory emerges that is transformative leadership. Transformational leaders change their organizational culture and their philosophy is that their subordinates change their way of thinking about themselves and their organizations and their way of thinking about their own positions in the organization. This change in organizational culture further strengthens the commitment of the subordinate to the achievement of

organizational and personal goals, which allows subordinates to do more and achieve more than expected. This transformational leadership is a type of leadership that is emphasized in a crisis situation, and charismatic, individualized consideration, intellectual stimulation, and acts are presented as the main components that transformational leaders should have.

For managers who overcame the crisis, there was a strong leadership that made changes that discarded the existing system in order to go through the crisis in common. This is because the leader who is the solution of the crisis overcomes the charismatic or transformational qualities of the leader individual in the need to build a new world by grouping the members based on ideals and goals. To the leaders who overcome the crisis, we find five characteristics as shown in Figure 1. The first is to present a vision that serves as a compass that presents the direction of overcoming crisis and transformation with 'vision presentation', so that it has unified actions and methods in the organization. Second, the company enhanced sensitivity and adaptability to the environment by delegating problem solving to members with 'agile environment adaptability'. It also serves to motivate people to have the conviction to practice the vision of a corporate leader. Third, 'formation of trust' should be formed with both company members and shareholders. Without sustainable cooperation and support from decision makers, it is difficult to expect sustainable growth. Fourth, 'creating new opportunities'. It is necessary to overcome the current crisis and overcome the unexpected crisis caused by the uncertain business environment and to demonstrate the ability to change the crisis into opportunity. Finally, it is 'harmony with humanity'.

It fosters the talent that suits the vision of the leader himself and gives motivation to adapt to transformation. Table 2 presents these five characteristics, specifically how they work and affect within the organization.

Fig 1. The factors that leaders need to overcome corporate crisis

Table 2. The virtues that leaders need to overcome crisis situations

Factors	Description
Vision Presentation	- Leadership that leads the company with goals and issues, with a broad perspective
	- Leadership that motivates members by setting goals and presenting issues as "a leader who can navigate all ships but can determine the course"
	- by clarifying the goals that must be achieved and by emphasizing the purpose of the activities
	- The desire not to be afraid of failure and the thing which started once is strong game which finish to the end
Agile Environment Adaptablity	- Ensure flexibility of organization by delegating problem solving opportunities to members
	- To ensure flexibility, it is necessary to cultivate employees' abilities through continuous learning and to provide leadership and authority that are appropriate to the individual's abilities.
	- Only confident leaders can empower others
	- Delegation of authority allows for more efficient management while expanding its role as a future predictor and business planner
Formation of Trust	- Mind-inspiring leadership
	- A good leader inspires shareholders and members of their minds before asking for another.
	- The person who touches the heart builds trust, and based on that trust, the leader can successfully implement his vision.
	- Because human beings are more likely to think and act by emotion than reason, the effect of leadership that impresses employees can be seen to be very large

Factors	Description
Creating New Opportunities	- Leadership to respond flexibly to crises and to control organizational conflicts
	- The problem situation is always variable, so the appropriateness of the goal and the means need to be reviewed depending on the situation.
	- Leadership is important to respond flexibly to situations rather than mere responses to crises.
	- Implement a system that can detect possible crises in advance and a mechanism to perform quick and effective responses to the crises that have occurred.
Harmony with Humanity	- Leadership of human trust, respect
	- An incompetent leader keeps an incompetent person close to him, and only a wise leader can put talent near him.
	- It is necessary to systematically nurture excellent talents in trust and respect and create an environment where the talented people can fully demonstrate their creative abilities.

Based on the five leadership characteristics presented above, the present age demands transformational leadership with creative and pioneering characteristics without fear of change. This phenomenon is a natural result because the change of the management environment called crisis is shifting the center of power from organization to individual (leader). Each of the five characteristics can have a different positive impact on the stakeholder group. Correct and accurate vision presentation means meeting the needs of shareholders, communities and the environment as well as businesses and customers. The agile adaptability of the environment is basically a factor that provides employees with the power to provide benefits to customers and shareholders. In addition, trust formation can be achieved by fostering confident and competent talents, and by the company's efforts to maintain trust, customers enjoy products that are guaranteed function and quality, and shareholders can enhance their value. Next, the creation of new opportunities finds out the causes of crisis management and resolves conflicts with all stakeholders in overcoming them. Finally, the corporate culture of human resources and harmony is a great basis for overcoming the crisis in difficult situations.

3. CASE ANALYSIS: POSCO M-Tech

3.1 Overview of the Company

POSCO M-Tech was established in December 1973 as Samjung Co., Ltd. and was designated as a partner of POSCO in February 1976. This company registered and listed in the KOSDAQ market in November 1997, changed its name to Samjeong P & I Co., Ltd. in March 2001, and transferred to the POSCO corporate group as an affiliate in July 2005. In March 2011, the name of corporation was changed into POSCO M-Tech Co., Ltd., and it is reaching to today. The largest shareholder is POSCO Corporation (48.85%) and the Chungam Foundation (1.80%), which accounts for 50.65% of the POSCO Group. As of the end of 2018, there were 7 full-time executive officers including the CEO, 1,095 employees (15 general managers), and 20 organizations with more than one department. In addition, there are one labor-management council and two labor unions under the metal union (the

Korean Confederation of Trade Unions and the Korean Confederation of Trade Unions).

Since the foundation of the company, POSCO M-TECH has mainly focused on packaging engineering business and aluminum manufacturing and sales to support the production and operation of packaging facilities based on the packing work of steel products produced by POSCO. In 2010, POSCO expanded its business scope to the non-ferrous metal materials sector, expanding its business to include the municipal mining business, which recycles waste resources, molybdenum and high-purity alumina, high value-added materials, And the establishment of an overseas joint-venture corporation such as investment in Moly Mine. However, these new businesses were forced to withdraw most of their businesses due to lack of technology and experience and worsening of the market. In addition, the company operated a magnesium smelting plant, an Fe-Si plant, an Fe powder plant, and an Fe-Mn plant from POSCO from 2012 to 2016. However, the Fe powder plant stopped operating due to lower profitability (in 2017), The magnesium plant in Okgye-myeon of Gangneung City closed the plant due to environmental problems (in 2015), and in 2018, it started trial production of the steel plate production plant.

3.2 POSCO Group's Business Expansion and Management Crisis (2009 ~ 2012)

In March 2009, POSCO assumed the long-term vision of the POSCO Group as a new CEO, while promoting POSCO Group's overall long-term vision. In 2009, the company aimed to achieve 100 trillion won in total sales for the next 10 years. However, by 2010, the company set a target of 200 trillion sales and operating profit of 10 trillion won by 2020. In addition to POSCO, the company has maximized sales and operating profit targets to a level that is unrealistic compared to 2008 operating results. In particular, rather than creating stable profits, many projects have been launched to increase sales in a short period of time. In addition to the construction of new factories, various types of joint ventures and M & As have also been rapidly promoted.

In 2007, sales of POSCO Chemical (POSREC at the time, sales of KRW290.2bn), POSCO M-TECH (at the time, sales at KRW257.6bn) and POSCO PLANTEC The company has plunged into new business areas. In the midst of this, POSCO

M-TECH has also pursued an excessive growth strategy that emphasizes sales, making it possible for the company to enter the trading area as well as to invest in new materials business. As a result of this unreasonable growth-oriented management strategy, some of the affiliates and subsidiaries were either bankrupt or sold, resulting in serious aftereffects.

Fortunately, in the crisis situation of POSCO Group, POSCO M-TECH is proactive in managing the crisis of CFO, which is one of the main management, and risk management, it has successfully completed the restructuring of the POSCO Group companies without any financial support, such as capital increase or revenue support, from the company through 2013, which is three years from now. It is becoming an exemplary case. In this case study, how to achieve the management normalization effectively in a short period of time by conceiving and implementing a countermeasure strategy while accepting the demands of all stakeholders in the management crisis such as the ever changing business environment and wind power equalization. We examines the success factors through specific examples of executive leadership. In fact, corporate management is aimed at creating a sustainable company as a living organism even in the midst of many variable changes. However, since the management environment and response strategy are different for each company, it is difficult for a generalized and standardized solution to exist when a management crisis occurs. However, regardless of the size of the industry or business, some principles and response strategies for crisis leadership can be presented sufficiently.

In this case study, we presents some principles and countermeasures for POSCO M-TECH overcoming the management crisis and achieving management normalization. In particular, I would like to present some key factors, such as maintaining a balanced sense of management necessary to use prior awareness and response strategies for risks and step-by-step solutions (correct decision making → strong execution ability → centralized responsibility). This case study can provide suggestions on how to approach and solve various management crises that all companies face in the future, and how to solve them faster, more accurately and efficiently. This study analyzes four cases of POSCO M-TECH based on the five major influencing factors of crisis leadership overcome.

3.3 Case 1: Sale of insolvent business (sale of city mine / MO factory / PMI factory)

POSCO M-Tech acquired Ricoh Metals, a waste resource collector, and Nitin Digit, a metallurgical smelter, to secure domestic self-sufficiency capacity of Rare Metals, which is managed as a national strategic material. Through such active M & A activities, the company promoted urban mining projects that produce high-purity rare metals from the collected resources.

From 2010, a total of 19.4 billion was invested in the purchase of shares. However, since 2011, the deficit has continued, and the extent of the deficit has increased, raising questions about the sustainability of the business, finally. The restructuring is promoted through the following three internal and external conditions. First, after the market entry, the market for rare metals has deteriorated and sales and profitability have deteriorated. Second, it has shown technological strengths

such as high purity and impurity removal compared to competitors in the same industry. Finally, bad debts have increased due to insufficient risk management compared to unreasonable sales growth, and excessive tax collection due to copper trading business canl occur.

However, the final buyer did not appear due to poor profitability of the industry and limitations in technology of the division. If the business division continues to exist in 2014 when the restructuring is not clear in 2014, the company's 3-year consecutive business performance loss could not be ruled out due to the deficit in the city mine business until 2015. Maintaining a listed corporation could also be unclear. And maintaining a sluggish sale in the first restructuring project could undermine staff morale to rebuild a restructured first-year company. As a result, the company was considering the business interruption of the city mine business as an alternative. The company was able to reevaluate the value of its business units through business interruption, to recognize any losses that could arise from the sale during the year, and to prevent additional losses.

However, if we decide to suspend operations, the organic relationship of assets such as sales, licenses and licenses of the relevant business units maybe disappear, and the possibility of selling all of the divisions as a whole can be lowered due to this depreciation. In this situation, key executives responsible for key decisions have decided to recognize the financial impact of restructuring early, rather than delaying restructuring in anticipation of uncertain profit. At the same time, it was decided that it is more important to announce the company's strong commitment to restructuring and to speed up the turnaround period by eliminating bad debts. In November 2014, the company decided to suspend the city mine business, and the company proceeded to sell the assets through the sale of individual assets. The discontinued resolution was a bold and important decision that allowed the company to turn around in 2015.

The rapid decision-making of executives who made strategic changes in a flexible way was key to realizing corporate restructuring. In a situation where restructuring was delayed due to sluggish sales, we decided to halt the sale and stop the business, reflect the restructuring costs for accelerated restructuring, and shorten the turnaround period by selling individual assets. In the background of this rapid decision-making, there was a rapid restructuring decision-making process through formation of Working Group and POSCO Value Management Center and Legal Affairs Office.

3.3.1 The case of the sale of Yeongwol Mo factory

POSCO M-Tech promoted direct manufacture of molybdenum oxide by wet smelting low-grade molybdenum concentrate. The company established "Mo Wet Smelter Plant" in Yeongwol through transfer of EEZE's wet smelting technology and know-how. This business, which started with the new business, was restructured due to the continuous deficit. Due to process recovery and impurities that are not feasible, product sales were limited. In addition, business and environmental issues have arisen, as the profitability of the molybdenum market has deteriorated, and the cost of investment has increased due to the restriction on the

environment, which was not considered when establishing the business plan.

In order to cope with the issue of restructuring, we first introduced the management process of the investment business. We have standardized processes such as Gate Review, rather than a simple investment business exit, to judge whether the business is continuing or not and to utilize it for other investment projects. Second, we developed and promoted new investment business processes based on investment failure cases. By benchmarking the Stage-Gate process, we developed an internal investment business process and gradually expanded our business through business expansion and verification. During the process of restructuring, internal punishment was required as well as internal harmful accusations. The audit department of the company has asked the executives for the termination of the TaeguTec contract. However, since the company has strictly complied with the company's regulations, procedures and principles, it ended with no conclusion.

3.3.2 PMI factory sale in Indonesia

Indonesia POSCO Mtech Indonesia (PMI) POSCO M-Tech established joint venture with DS Liquid Co., Ltd. to establish a foreign subsidiary in order to supply stable supply of AI deoxidizer at iron mill and to enter AI alloy manufacturing business in Southeast Asia.

The company reported the necessity of restructuring the PMI to the Board of Directors due to the accumulation of deficits and operating capital limitations, and conducted detailed management diagnosis on the direction of restructuring by selecting the accounting / legal affairs corporation. As a result of the management diagnosis, PMI started to restructure and to conclude that it is not rational to keep the enterprise because the continuous enterprise value is lower than the liquidation value. Although the accounting firm that conducted the management diagnosis was selected as the sale counseling company, it was decided to speed up the business and continue the sale of PMI, but it was not feasible to acquire the buyer. In the case of new business operators, there is a risk of overcoming the inexperienced investors due to the company's deficit, and existing operators did not feel attracted to new investments because the deodorant market was oversupply.

It has become increasingly opaque to secure potential buyers, and it has been suggested that it is better to make bold decisions rather than bear continuous losses from the staff. However, according to the management audit review conducted in the past, the liquidation period of Indonesia takes about 2 years, so restructuring can be prolonged rather than the sale, and the amount recoverable through liquidation is lower than the sale method Was expected. In addition, during the liquidation process, there were other risks such as capital losses, manpower dismissals, and contingent liabilities.

CEOs and other executives, instead of relying on the marketing pool of the sale counselors, conducted sales marketing directly with local corporations. The executive members informed the local company about the sale of the company and began to find out local corporations interested in the acquisition. After this effort, we met a company that showed interest in PMI locally, and we proceeded to proceed

with the sale based on the pre-prepared process. In addition, the amount of the sale was responded to base on the appraisal value. As a result, the Company entered into a sales contract with an amount of 6 billion more than the liquidation value. It would have been impossible to secure a new buyer unless it was based on the marketing activities of the sale counselor and did not do the internal will and effort. Even though the roles and responsibilities between the companies were differentiated, efforts to dissolve scarce work were shone so that the company's profits would be the best, resulting in dramatic results such as shortening the period of restructuring and maximizing the sale amount.

3.4 Case 2: Poshihal regeneration procedure

The POSHAL project was a project to manufacture high purity alumina for LED manufacturing, anticipating growth in the LED market in the future. However, after the project was launched, the LED market was overshadowed by oversupply, LED prices fell sharply compared to business plan standards, and prices of high-purity alumina also fell. In addition, since POSHIRE was a new business in the industry, the long-term test process of the customer in the process of entering the market was carried out and the operating cash flow as well as the working capital limit of the company were expected.

POSHI is a joint venture between POSCO M-TECH, KC and Samsung C & T, and the Korea Development Bank and Woori Bank lend about KRW50 billion to major creditors. If Poshihal cannot borrow additional operating funds as an individual corporation, he or she must choose a procedure such as workout through consultation with the creditors, regeneration from the court or bankruptcy. POSCO Value Management Center, POSCO M-TECH, and POSCO M-TECH. As a result, POSHIAL was asked to apply for regeneration procedures. However, stakeholder opposition to these internal decisions continued. First, the joint venture, KC, requested that POSCO and others pay for the amount invested by them. Despite being the same shareholder, KC could not bear the loss, and it was a tough demand that POSCO should take responsibility for the investment. Counterparts also continued in the creditors' side. Creditors KDB and Woori Bank unanimously declared their creditors' opinions on the rehabilitation proceedings requested by the court in May 2017, and due to the lack of willingness to plan for the normalization of operations, it was thought that it would do so.

In a situation where the rehabilitation process became uncertain as opposed to creditors, the CEO and head of the restructuring department conducted direct face-to-face meetings with stakeholders rather than communicating in writing. KC, a joint venture, shared the reasons to pursue the rehabilitation process and the benefits that could be pursued by making the rehabilitation process, and continued consultations between the two companies on the detailed implementation plan of the rehabilitation process. Although it is difficult for creditors and Doosan Hahn to regenerate themselves, it is necessary to share the plan to promote liquidation-type recovery plan based on M & A and to inform the possibility of M & A that has been temporarily examined. And explains that it is a way to save the greatest profit. The court also worried about the possibility of fund procurement, business planning, and M & A needed in the regeneration

process, but actively explained the contents considering the operation funding and the possibility of regeneration. POSHIAL has had a bad time for regaining procedures such as creditors, shareholders, and courts, but after concentrating on its internal capabilities and actively making efforts to persuade stakeholders, POSHIAL is seeking consent from creditors and shareholders, I was able to receive.

3.5 Case 3: Copper tax return cases

In June 2014, the National Tax Service's investigation into beneath the underground economy revealed that 43.5 billion won of tax was collected due to a false tax bill receipt when the subsidiary (former Nine Digit) buys Cu scrap. POSCO M-TECH continued to raise tax risk for Nine Digit, the ultimate buyer, in the case of small / heavy and abrupt transactions. The tax refunds were filed with the Tax Tribunal and eventually the tax refund amount (45.1 billion won) was fully refunded, additional taxation (44.5 billion won) was prevented, and criminal charges were dropped. As a result, the repayment of external borrowings and the operation of funds were normalized.

These tax surcharges were caused by the fact that the company decided to launch a business in order to understand the new business of distribution and increase sales without prior knowledge. In order to secure the volume of the purchase, the buyer was exposed to tax risks such as enormous advance payment execution and lack of understanding about tax policy (VAT), which was transferred to POSCO M-TECH, which is a merger corporation. POSCO M-TECH's management team was able to resolve tax issues from the earliest stages of tax investigation through dramatic vocations through aggressive responses. When the court and tax referees responded, most of the evidence of actual transactions such as vehicle records, personal identification documents, and video materials scattered throughout the country was secured to demonstrate normal business operations. It eventually can be cited by the court's acquittal and the joint meeting of the tax referees through logic refutation such as the taxation logic contradiction of the tax office by collaboration with the taxation / legal affairs corporation, POSCO M-TECH and the taxation promotion group of the copier POSCO.

3.6 Case 4: Recovering bad debts and solving financial problems

The company continued to trade in the non-ferrous trading business of low-margin, small-to-medium-sized sales structure, while the countermeasures for collecting funds and guarantee guarantees were insufficient. At that time, executives and executives continued to trade despite the problem of bad transactions, and as of the end of March 2002, 43.9 billion won of bad debts occurred. In this situation, the executives worked together with the legal affairs corporation, and carried out all possible legal actions such as the auction of real estate and disposition orders of the liquid movable property, and they were committed to collecting the bonds. For the three years, the recoveries were 20.7 billion won (cash withdrawal) and the accounting revenues were 42.6 billion won. At the same time, we implemented system improvement and risk prevention measures. We strengthened our self-management and management to prepare for advance management and preventive measures. We also strengthened management responsibilities, such as establishing customer management guidelines and conducting credit check / credit limit setting. We also tightened control of spending by strengthening funding and monitoring of business units. The finance department established self-diagnosis and recovery policy for each bond class, but it boldly imposed legal measures on grades C and D while managing bond classes A, B and C & D. In the case of new contracts, we have strengthened the system to prevent bad debts. In connection with the legal affairs company, we reviewed the contracts before the contract, examined the factors that caused the risk, reviewed the countermeasures such as collateral, guarantees and notarization. The company was unable to compromise with the insolvent companies and set up a policy of legal response, responded positively and transparently, and responded to external pressures both inside and outside the company in principle.

3.7 Qualify management by securing financial soundness

Through unreasonable business expansion, POSCO M-TECH recorded a deficit in 2013 and expanded its deficit in 2014. In the meantime, the debt ratio also increased, causing problems with the financial soundness. As seen in many of the examples presented above, bold restructuring and management leadership, which began in 2014, provided a sound financial condition for the company. The 2016 OP margin is expected to reach the 6% level for the first time since it was incorporated as a subsidiary of POSCO Group in 2005. In addition, the debt ratio continues to decline and share prices rise.

Table 2. POSCO M-TECH Major Financial Status (Separate basis)

	Y2013	Y2014	Y2015	Y2016	Y2017	Y2018
Sales (Billion Won)	695.6	432.2	343.7	259.1	257.8	301
Opernation Benefit (Billion Won)	8.4	-17.1	8.9	15.9	12.2	19
Net Benefit (Billion Won)	-10.6	-100.5	26.2	3.1	9.9	14.1
Loan (Billion Won)	148.7	127.9	26.2	3.1	27.1	0
Share Price (Won)	6,640	2,900	2,445	3,065	2,290	6,570
Liability Ratio (%)	157	473	166	110	73	39

4. COCLUSION

4.1 Implications

Corporate crises can seriously affect an organization's achievement of strategic goals or reputation, or even threaten its existence. Whether it is deliberate action or a simple mistake or whatever, the crisis sometimes starts small and leads to a huge event. In the recent corporate environment, the frequency of crises has increased and the impact has also increased. Executives face numerous challenges and errors in the process of responding to the new crisis. This study examines the process through which POSCO M-TECH overcame the crisis in four crisis situations. The first cases of non-performing businesses, including the sale of urban mining, Mo, PMI and the second force is a high practices known regeneration process, copper is the third tax refund case, the last number of distressed debt and resolve financial difficulties.

As mentioned above, five characteristics are found in leaders and companies that overcome crisis situations, which is also evident in the case of POSCO M-TECH. The first is to present a vision that serves as a compass that presents the direction of overcoming crisis and transformation with 'vision presentation', so that it has unified actions and methods in the organization. At the time of the crisis, the CFO of POSCO M-Tech recognized the management crisis in advance, set up a periodic emergency management system, and launched a continental contingency plan. In addition to this, we have prevented the leaking of management by giving clear goals and task period and periodic inspection. In addition, as a manager, he emphasized the sense of ownership to the members and emphasized the determination of the manager to achieve the goal and protect the company. Second, the company enhances sensitivity and adaptability to the environment by delegating problem solving to members with 'agile environment adaptability'. It also serves to motivate people to have the conviction to practice the vision of a corporate leader. In the case of POSCO M-TECH, it was a great power to overcome the crisis that the leader ensured autonomy through a clear role and responsibility sharing in crisis situations, and instilled the belief that the manager had all responsibility. Third, 'formation of trust' should be formed with both company members and shareholders. Without sustainable cooperation and support from decision makers, it is difficult to expect sustainable growth. POSCO M-TECH's executives were able to show their behaviors, not words, so that they could build trust in their members, and continuously improved the processes and methods of their work processes and their salary and welfare benefits. Fourth, 'creating new opportunities'. It is necessary to overcome the current crisis and overcome the unexpected crisis caused by the uncertain business environment and to demonstrate the ability to change the crisis into opportunity. POSCO M-TECH has strengthened its position through the implementation of basic management apart from management crisis. The company has achieved normalization of management through self-restructuring without receiving support from POSCO. In the midst of these efforts, the executives have made efforts to find new growth engines, and have also achieved achievements in environmental and quality targets, safety awards, and

innovation candidates. Finally, it is 'harmony with humanity'. It fosters the talent that suits the vision of the leader himself and gives motivation to adapt to transformation. During restructuring, we have taken measures to ensure that the best talent can be assigned to other affiliates, and it nurture its own talent and contribute to the company. In addition, the company motivated them to work with talented people considering their performance and ability. In the course of their work, managers responded directly to freeing themselves from the pressure of intervening in the interests and harmful pamphlets.

Some suggestions can be drawn from POSCO M-TECH overcoming the crisis. First, if a crisis occurs in general, it may fail to present the strategic direction of crisis management by concentrating too much on direct disaster recovery. Therefore, it is necessary for managers to structure crises to clearly define and properly deal with strategic areas such as customers and stakeholders, and it is necessary to view the entire organization rather than individual departments or functions within the organization. Second, crisis situations arise when the size of the crisis, the scope of the crisis, the speed of the spread and the consequences of underestimating or underestimating the outcome. Therefore, first of all, it is necessary to overcome the impact of corporate leadership and the board of directors and objectively accept the seriousness of the situation. In addition, it is necessary to define management teams with sufficient experience as countermeasures for crisis situations and to develop response activities centered on them during the crisis. In addition, recognizing that the business activities may be severely hindered by the crisis, it is assumed that individual responsibilities are taken into consideration. In the third crisis situation, damage is widened due to wrong decision of leaders. Therefore, it is important to give trust to the members of the organization by balancing organizational protection with honest and transparent communication. In addition, it is necessary to cultivate situational awareness. In crisis situations, it is often necessary to make decisions based on organizational values and intuition with limited information. The executives must establish a communication system that can provide the necessary information to each stakeholder group in a timely and concurrent manner while maintaining creative and demoralizing crisis management thinking. Finally, in a crisis situation, there are fake news, intimidation, or pressure to intervene, which shakes the inside of the company and causes confusion. Therefore, it is necessary to organize a response organization by dividing into roles such as information gathering, information analysis, external media response, and communication with internal and external stakeholders. In addition, if there is a possibility that the taxpayer or other regulatory authorities may be exposed to such measures or lawsuits, the taxpayer immediately started the process of identifying, collecting and maintaining relevant data and information.

This study is meaningful in that it examines leadership and organizational culture elements that can overcome crisis situation through actual management cases. Although most of the existing literature is based on successful case studies, this study has implications for presenting the situation of crisis and its overcoming process. Also, it is meaningful that we

analyzed the multiple cases of POSCO M-TECH by classifying and proposing the leadership components of crisis in five categories.

4.2 Research Limitation and Further Study

Although this study has academic and practical implications and contributions, it has limitations in several studies. First, there is a limit to whether the results and implications of case analysis of POSCO M-TECH can be generalized to other companies. Therefore, it is necessary to analyze and compare the crisis cases of other industries. It is also necessary to analyze whether the implications derived from this study are verified by actual data through quantitative analysis such as hypothesis testing.

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