

## Charting the Downfall of a Korean Venture Myth: An Organizational Failure Analysis of Pantech Inc.

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**Abstract.** Korean society was shocked by the failure of Pantech Inc., one of the major Korean ventures to realize rapid growth. Pantech, a middle market enterprise, ranked No. 2 in the domestic mobile phone market in the early 2010s. This failure reminded the market of how important management is for risks imposed by rapid growth. This study selected Pantech Inc. for a case study as the company experienced both rapid growth in earlier stages and two rounds of debt restructuring or workout due to severe risks in management. The study is designed to see whether the factors of corporate failure in the perspective of organizational life cycle, different models and the Upper-Echelons Theory can be applied to the Korean companies that went bankrupt. Korean ventures including Pantech Inc., in particular, are usually under powerful influence of the co-founders and Chief Executive Officer (CEO). Strategies based on wrong decision making by Chief Executive Officer (CEO) may lead companies to crises, which can eventually bring down the companies. The study points out five stages that led the company to failure: Pantech Inc. greatly relied on its Chief Executive Officer (CEO) and founder Byung-yup Park, which led to the development of outdated technology. Along with competitions against larger companies, Pantech Inc. proceeded with the reckless acquisition of SK Teletech during ‘the blinded stage (Year 2001 - 2003)’. The next stages were ‘the inaction stage (Year 2004 - 2005)’ when the actual sales decreased. After that, the company fell into ‘the faulty action stage and the crisis stage (Year 2006 - 2011)’ when the CEO Park implemented risky management strategies while neglecting analysis and learning. After going through ‘the faulty action stage and the crisis stage’, Pantech suspended its business in 2017 and eventually disappeared during ‘the dissolution stage (Year 2012 - 2017)’. This research draws its conclusion and implications regarding corporate failure: First, ventures need to have a structural improvement with workforces including members of top management team and other employees with a variety of knowledge, perspectives and experience. Second, ventures need to expand their capabilities through training for management as well as constant communications with the TMT so that founders are able to realize their limits and be blinded by the trap of success. Third, ventures should secure a risk management system in a systematic manner, which helps them to respond to crisis that inevitably occur in each stage of their fast growth.

**Keywords:** Pantech Inc., Korean venture, corporate failure, organizational decline model, upper-Echelons theory

## **1. Introduction**

The decline of Pantech, No. 2 Korean player in the domestic smartphone market in early 2010s was a significant shock to the society and the economy as it was the symbol of ventures with rapid growth. This has become an opportunity to remind the society of how important it is to manage risk factors that lie beneath rapid growth. Each year, there are still numerous companies that collapse. And it is particularly important to review why middle market companies fail as they could bring a great impact to the national economy.

It is said that the growing number of middle market companies was a positive sign to our society despite the sluggish economic growth rate as well as the financial crisis in 2008. Although the number of middle market companies grew, it was rare for larger companies to grow. This indirectly suggests that there are some issues on the sustainable growth of middle market companies (The Korea Economic Daily 2014). Once middle market companies fail even though they are one of the important pillars of the economy, relevant small-and-medium-sized businesses (SMEs) that are related to the inflow of public funds become at-risk one after another. This can lead to a social burden (Choi et al., 2017). In general, research regarding middle market companies mainly reviews two parts: success and failure factors. Some theories related to organizational life cycle, the theory of product life cycle and the theory of organizational life cycle focus on strategies of medium-sized companies in the course of their growth in order to realize sustainable growth (Kim and Park 2019; Lee et al., 2015; Lee and Lim 2015; Lim 2019) (Alelaimat and Marchuk 2020; Qumer and Estrella 2021). The organizational decline model and the flux and reflux model of companies are some exemplary studies to confirm Chief Executive Officer (CEO), strategies and marketing as a part of corporate failure (Park and Hong 2015; Park and Park 2019; Song and Won 2015). Most studies commonly emphasize that the role of CEO in corporate failure is very important. However, research to find out what factors specifically caused mid-sized companies that failed while growing like Pantech to fail is very scarce. In fact, it is extremely rare that middle market companies become large companies. Therefore, it is necessary to study how to identify failure factors of those middle market companies and come up with measures to make up for such failure. In this regard, this study selects a middle market enterprise called Pantech for its case study, which experienced the rapid growth in early stages, faced severe risks in its management, and went through two rounds of corporate workout. This paper is designed to analyze the period from 2001 to 2015 by applying Weitzel & Joson's organizational decline model. And it is confirmed whether the factors of corporate failure covered in the organizational life cycle and organizational decline model are applied to Korean companies' failure. In addition, this study aims at suggesting some practical takeaways for companies of which growth is sluggish or with risks in their management to review their management status and reorient their directions by identifying causes of failure regarding how these companies became at-risk and ended up with their failure. Furthermore, it is intended to support companies that have stagnated growth or face management crises reset their direction to grow into sustainable companies by identifying the failure factors of fast-growing venture companies.

## **2. Literature Review**

### **2.1. Corporate failure**

Jeong Seong-min et al. (2008) defines corporate failure as the insolvency stage when companies face organizational death including bankruptcy, merger and acquisition; and they fail to be responsible for their stakeholders such as their own employees and suppliers. According to Jeong, corporate failure also means termination to avoid losses and the discontinuation of 'make a go of it' (Seong et al., 2008).

Corporate failure is an event that can bring damages on all stakeholders including companies' own executives, shareholders and creditors, which can greatly lead to the collapse of an economic system, large-scale unemployment and consumption expenditure (Nam et al., 2018). Also, corporate failure can cause enormous losses to national and global economies, which is why it can't be treated as a simple corporate issue (Nam et al., 2018). The globe has been through repeated cycles of various economic

crises such as the Asian financial crisis, another round of financial crisis in the US and Europe and more crises in East Asia, which led to corporate bankruptcy and merger & acquisition (Nam et al., 2018).

Moreover, a series of research on corporate failure point out various factors including the characteristics of the management, the lack of strategies, changes in technologies and market environment, financial factors, systematic factors and sales & marketing as the factors of corporate failure (Park and Hong 2015; Song and Won 2015).

## **2.2. Research on Corporate failure**

Such research tends to carry out their study by approaching the issues by stage in order to define phenomena of companies and suggesting causes and solutions on corporate issues. In those stages, studies classify major types (causes) of organizational decline. These researches have one point in common that the attitude and behavior of their CEOs are highly related to the companies' strategies (Han 2018; Miler 1990; Collins 2010; Weitzel and Jonsson 1989).

Weitzel & Jonsson (1989) and Jim Collins (2009) categorize organizational decline into five stages and suggest that such decline is highly related to the companies' management. They also warn the possible organizational decline unless that management accept issues in each stage, change their point of views and actively take actions (Collins 2010; Weitzel and Jonsson 1989). Weitzel & Jonsson (1989) classify organizational decline in five stages in terms of integration and expansion: Stage 1 is 'Blinded': companies are stuck in a rut with their business-as-usual, but don't define causes of problems for the organizational effectiveness. In Stage 2 of 'Inaction', companies are in their idle stage when they experience performance decline (e.g., sales, revenue). The management of companies recognize the need for change but take no action due to the lack of understanding for information and situational awareness. Stage 3 is called 'Faulty action': The management have some disagreement that can lead to wrong decision making or companies are set in wrong directions and often restructure their organizations without any preparation in advance. They take action, but the action is inappropriate. In Stage 4 of 'Crisis', companies reach a point of crisis when there is no way to revert the organizations unless there is any radical change that can completely change the companies. Stage 5 is 'Dissolution': companies are forced to dissolve. Shareholders lose their status while companies completely lose their corporate values by losing their customers and market (Weitzel and Jonsson 1989).

In his 'How the Mighty Fall', Jim Collins (2009) introduced five stages in the course of large companies' decline during the period when leaders in management view situations and respond to them. The 1st stage is called Hubris Born of Success: In this stage, leaders often overestimate their capabilities and forget core factors of success. In Stage 2 of Undisciplined Pursuit of More, leaders become greedier without any principles and make undisciplined leaps into areas where they cannot be great or growing faster than they can achieve with excellence, or both. Stage 3 is called Denial of Risk and Peril: Leaders in this stage neglect internal warnings and avoid risks by focusing external performance. Leaders also discount negative data, amplify positive data and blame external factors for setbacks. Stage 4 of Grasping for Salvation is when leaders look for salvation: In this stage, leaders look for 'saviors' including a bold but untested strategy, a radical transformation, a drastic cultural revolution, or any number of silver-bullet solutions. But they do not last. Capitulation to Irrelevance or Death is the last stage of all five stages towards the end of corporate life: Leaders who looked for breakthroughs in Stage 4 give up on all hope. The management team resigns, restructure their companies and the companies enter into bankruptcy in the worst case scenario (Collins 2010).

Much other research that classifies corporate decline also say those leaders' attitudes and responses are highly related to the companies' strategies (Han 2018; Miler 1990).

Miller, D. (1990) classifies companies' strategies into four types in terms of changes and the rage of corporate activities depending on the characteristics of leaders and possible issues arisen from such characters. First, the focusing type: Leaders pay too much attention to unnecessary details and end up becoming tinkerer type of companies while pulling far away from consumers' values. The 2nd type is called 'the venturing': due to excessive expansion of the business, leaders may not be able to manage

some of the suborganizations of their companies. They may also face issues of operational funds, which may hinder maintaining the companies. Third is the ‘inventing’ type. This happens when leaders emphasize technological innovation too much, which results in the development of products that are irrelevant to consumers’ lives. This makes companies fall behind the competition and become companies of escapism. The 4th type is called ‘the decoupling’: leaders establish strategies in a way that leaders prefer the external differentiation to the quality of their products. This leads to the expansion of suborganizations of the companies, which is uncontrollable and pushes the companies to decline. Han Jeong-hwa (2018) lists seven failure factors of venture startups and management strategies: choice, development, market, management, attitude, relationship and misfortune. Han also warns that companies can fail if leaders do not consider their resources and capabilities or select the type of business that draws market saturation. Also, Han points out that companies experience decline if they spend too much time and cost on R&D in technology or there are certain defects in performance or product quality. According to Han, companies may experience crises when they fail to overcome the barrier of the market entry, secure a dominant stance in competition or consumers’ desires change even if products become available in the market after development. On top of that, Han mentions some more failure factors such as the imbalance between the growth rate and the management capabilities of organizations, productivity decline, inefficient management of capital, the lack of capabilities in manufacturing and quality management, overestimated confidence of leaders, perfectionism and intuitive decision based on emotion. There can be some potential issues of internal conflicts within startup teams, exclusive attitude and ample requests for big rewards for sales personnel. According to Han, some factors can affect corporate failure including rapid changes in economy, policy fluctuation, bankruptcy of partners, fraud or embezzlement and incidents at manufacturing sites. Four of the seven listed items, choice, management, attitude and relationship, are directly correlated to corporate failure (Miler 1990).

Kwon Oh-seob & Park Sun-young (2022) study the impact of leaders’ capabilities on corporate values by corporate life cycle focusing on pharmaceutical and bio-industries. Leaders in declining stages of their companies can be negative impact on corporate values due to the lack of management capability and financial deterioration. In particular, this impact tends to be bigger at relatively smaller companies (Kwon and Park 2022). Gwon and Park also list not only leaders’ capabilities but capital power, the lack of marketing, issues of organizational system, rapport with customers and external issues of companies as certain factors of corporate failure (Park and Hong 2015; Jeon et al., 2003). Park Deok-hyeon and Hong Jin-hwan (2015) study the rise and fall of the Korean PDA industry: SMEs and ventures with great technologies were not able to settle within the PDA industry. According to the study, those companies became forced to be acquired by large companies and telecommunication service providers because of their lack of capital power and marketing. To survive, the study suggests that those companies need to continue building relationships with customers and mutually exist with companies in similar categories instead of standing alone seeking survival Park and Hong 2015. Jeon Young-il et al. (2003) provide seven types of problems including financial, sales, marketing, organizational system, production, operation and external corporate problem and six types of activities including human and organizational system, marketing, accounting and financial, production and operation, performance evaluation, and supplier management activities in ventures’ risk management by growth stage.

In the course of startups’ growth, those problem types and activity types show negative correlation. In terms of growth stage, Jeon’s study confirms that there is difference in issues of sales and marketing, issues of organizational systems and external issues of companies. Also, companies in decline show sales and marketing issues. In terms of activity types, ventures show some differences between HR & organizational system activities and marketing in the course of their growth (Jeon et al., 2003).

As mentioned, there are a lot of research that analyze the management team, capital, marketing, organizational system, sales, manufacturing, HR management and external factors as various causes of organizational failure, which suggests solutions for issues. In particular, all this research have one in

common: leaders and CEOs are one of the most important factors to decide the rise and fall of organizations regardless of the size of companies. It is because leaders including CEOs make decisions on corporate strategies and such strategies can be a direct impact on corporate success and/or failure.

### **2.3. Prior art in chief executive officer (CEO)**

Leaders and CEOs are one of the most important factors to decide the rise and fall of organizations regardless of the size of companies (Park and Hong 2015; Han 2018; Jeon et al., 2003). In particular, most ventures with relatively short history set strategies based on their CEOs and founders' decisions. Therefore, it is extremely important to make decisions based on the right judgement by leaders and CEOs if any of these companies pursue sustainable growth (Kim 2019). That is why the Upper Echelons Theory has been proved to be a major theory to decide whether some companies will survive or not through various research: the theory explains that corporate strategies and achievements depend on the CEOs' characteristics (Moon and Choi 2021; Seo and Jang 2010). This theory claims that the fate of companies is mostly decided by individual thoughts and behavior of powerful CEOs related to their recognition structure, values, belief and worldview (Moon and Choi 2021; Seo and Jang 2010). In this case, some demographic characteristics such as age and academic background can affect CEOs' decision making. There are some predictions that CEOs with similar recognition structure and philosophy for life will reveal as similar decision making and behavior (Moon and Choi 2021; Seo and Jang 2010). Research based on the Upper Echelons Theory mainly features ones about individual CEOs and others with his/her Top Management Team (TMT). As these two types of research mutually suggest that CEOs and their TMTs play an import role in deciding corporate strategies, it is recommended that they need to properly respond to the companies' growth and changes Seo and Jang 2010. Also, the combination of these two sides can bring some negative impact on social integration and communication as Chief Executive Officer (CEO) and their TMTs have difference experiences and backgrounds. This can lead to conflicts and hinder corporate efficiency (Seo and Jang 2010; Dalton and Dalron 2005). Ryu Ki-hyun and Jeong Ji-su (2020) discuss the strategic-choice theory presuming that CEOs have unlimited abilities in their strategic-choice theory in purchasing. Ryu and Jeong describe that Chief Executive Officer (CEO) have unlimited abilities to pursue what they want. This can lead to the corporate strategies and achievement based on what CEOs want. It is safe to say that corporate strategies depend on CEOs' tendency as those strategies become different depending on CEO's characteristic or their simple worldviews (Ryu and Jeong 2020). Park Jee-hyun and Kim Yang-min (2015), in their organizational research that include CEOs, believe that CEOs' capability building of their own and right management philosophy are the core for the sustainability of companies as CEOs who are also founders set directions as a main person for corporate decision-making. Park and Kim claim that CEOs need to their style depending on the companies' growth and market as there are chances of CEOs' overconfidence in their style if they experience rapid growth in particular, which can become fundamental threats to every aspect of corporate decision-making. Also, Park and Kim's research confirm that CEOs previous experience affect their knowledge base, recognition structure and belief, which eventually impact on their strategic decision-making (Park and Kim 2015). That means, CEOs and their TMTs prefer different strategies if they have different experience and CEOs' influence on the company's strategic decision-making is much bigger (Dalton and Dalton 2005). Various research confirm that the demographic characteristics of top management team (TMT) members are factors that affect the diversity of corporate decision-making (Jensen and Zajac 2004). Such demographic characteristics can result in different strategic orientation if there are different experience, psychological characteristics and recognition structure by different academic background among top management team (TMT) members. When it comes to risks, these top management team (TMT) members may have different solutions based on different orientation (Jensen and Zajac 2004). In a nutshell, companies should find not only CEOs and founders but also TMT members with various knowledge base, perspectives and experience if companies want to improve the quality of decision-making (Jensen and Zajac 2004). However, a variety of perspectives and languages at the same time may cause cognitive

conflict and affective conflict, which can lead to the weakened cohesion of the group and further conflicts. For the worst-case scenario, there will be distrust and hostility that deteriorate the quality and pace of decision-making. There should be enough considerations that all these phenomena may encourage the turnover rate of employees and inefficiency in the course of implementing corporate decisions (Seo and Jang 2010). Other studies including Min Ji-hong et al., (2019) point out that some CEOs focus on short-term performances as they are often evaluated based on their companies' short-term performances. These CEOs prefer options for external innovation (e.g., merger and acquisition) that can bring them short-term achievement to internal innovation (e.g., investment in R&D) that can realize more of long-term performance (Min et al., 2019). Also, there are numerous research that emphasize dynamic capabilities of CEOs in implementing their roles (Kang 2019; Chae 2021). Kang Tae-won (2019) insists that such dynamic capabilities secure corporate stance in competition amid rapid changes in management environments of companies by restructuring internal resources or structure. Chae Ju-seok (2021) points out that CEOs' roles are important as they affect dynamic capabilities of their companies (Kang 2019; Chae 2021).

As discussed, some existing research suggest that CEOs' and TMTs' decision-making (more from CEOs) have enormous impact on corporate strategies, and this can lead to the corporate dissolution. Ventures like Pantech may become at-risk and eventually go extinct due to CEOs' wrong decision-making as these companies' CEOs influence is even more powerful. As such, existing corporate failure studies identify the factors of corporate failure step by step, and emphasize that the roles of CEO And Top Management Team (TMT) are very important in this stage. However, it is difficult to confirm what stages the failed company went through and what role the manager failed to play in it. In particular, it is more difficult to identify the cause of the failure in the case of companies that failed quickly after growing into mid-sized companies through a high-speed growth period, such as Pantech, because the period was short and the market environment changed rapidly. This paper is designed to suggest the direction for companies that have stagnated growth or management crises to grow into sustainable companies by identifying the cause of Pantech's failure from the perspective of organizational decline theory and upper echelons theory.

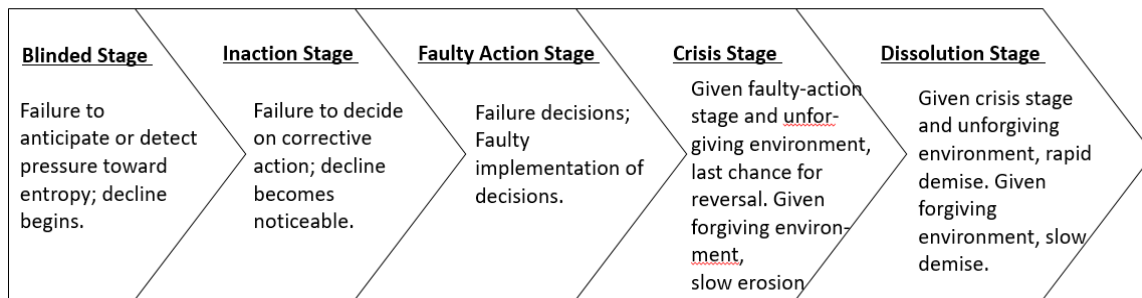
### **3. Methods**

Since its establishment in 1991, Pantech grew along with the growth of the telecommunication service market while building its capabilities in wireless technologies through its beeper business (DBR 2014). After that, the company went through a series of events since 2005 such as management deterioration due to merger and acquisition, the 1st and the 2nd workout, the business transition to B2C and sellout. Until 2017 when the company technically shut down its businesses, it was on the path of decline for 12 years. This study aims to identify Pantech's failure factors by applying data obtained through corporate reports of the Pantech, Data Analysis, Retrieval and Transfer System (DART), news articles and etc. to the CEO and management strategy identified in the organizational decline model and upper echelons theory (Park and Hong 2015; Han 2018; Jeon et al., 2003). the research questions and organizational decline frameworks for this study are shown in Table 1 below.

RQ1) What were the key stages in Pantech's decline?

RQ2) What factors drove failure at each stage?

Table 1: Organizational decline frameworks by Weitzel & Jossion (1989)



## 4. Case Study

Between 1991 and 2017, the rise and fall of Pantech for 26 years all went along with the CEO and founder Byung-yup Park and his strategies. Park started his career as a salesperson at Maxon Electronics in 1987. Thanks to his excellent sales skills and rapport with others, he was well-known at Maxon. The company's CEO then brought Park to major meetings and introduced him as a core talent of the company (Korea Economic Daily). In 1991, a guy with outstanding skills of business and momentum established the company Pantech with the capital of KRW 40 million and 6 employees with a goal of manufacturing and selling beepers. In 1993, the company acquired Pantech Electronics, followed by the listing in KOSDAQ in 1995. In May 1997, Pantech signed an OEM manufacturing and supply contract with LG Electronics. This led to business diversification to cover cellphone business that uses the method called CDMA. In 1997, having gone public 5 years earlier, the company achieved annual sales of approximately KRW 76 billion (DART 2003). Starting in 2001, the company worked with Motorola in a strategic partnership: while manufacturing cellphone devices through a method called GSM, Pantech became the 2nd largest shareholders with 16% of the corporate shares by investing USD 15 million in Motorola thanks to the excellent negotiation power of the CEO (DART 2003). In the same year, Park acquired Hyundai Curitel of which its net loss was KRW142.7 billion. This was an opportunity to build a new brand image. After changing the corporate name to Pantech & Curitel, the company accomplished 15% of the domestic market share in 2003, which helped with the total sales of KRW 2 trillion (DART 2005). After 2002, Pantech developed various cellphone technologies including 330,000 pixels and fingerprint recognition. The company's market entry into North America, Mexico, the Middle East and Russia enabled the company to maintain the growth trend (DART 2005). After that, Pantech jumped into the smartphone business: the company's first model came out around the same time Samsung released its model and Pantech continued to release a variety of line-ups since then. In particular, Pantech invested KRW 300 billion or more in its R&D. This was 10% of the company's sales, which enabled the company to hold about 4,900 granted patents and 14,500 patents filed. All these signs pointed to realizing a steady growth (Digital Daily, 2006; Wips, 2020). However, its growth trajectory showed a curve in 2005 when the company acquired SK Teletech that manufactured the SKY series. In 2017, Pantech went bankrupt (Biz, 2017).

Pantech was a venture in which its CEO and founder made important decisions. It only took a decade from getting listed in KOSDAQ in 1995 to the 1st workout in 2006, which was decline stages and makes it difficult to explain the dissolution of Pantech when the five stages of the organizational decline model by Weitzel & Jonsson are applied. Therefore, this study sets some stages including: the Blinded Stage between 2001 and 2003, the Inaction Stage between 2004 and 2005, the Faulty Action & Crisis Stage between 2006 and 2011, and the Dissolution Stage between 2012 and 2017 in order to analyze the company's case based on the Upper Echelons Theory.

### 4.1. Blinded stage (Year 2001 – 2003): 1st merger and acquisition with Hyundai Curitel

The organizational decline model describes its Stage 1 (Blinded Stage) at a time when companies do

not try to find causes of their habitual routine or confirm organizational effectiveness, and their monitoring system does not work (Song and Won 2015).

Analysts often say that this is the stage when organizations can stop their decline if they are flexible to get access to and accept quality information. If not, they will experience a decline in organizational performance. For Pantech, their 1<sup>st</sup> merger and acquisition with Hyundai Curitel was their Blinded Stage.

After 2002, Pantech developed various cellphone technologies including a cellphone camera with 330,000 pixels and fingerprint recognition. The company's market entry into North America, Mexico, the Middle East and Russia enabled the company to maintain a growth trend (DART 2005). After that, Pantech jumped into the smartphone business: the company's first model came out around the same time Samsung released its model and Pantech continued to release a variety of line-ups. In the same year, Park acquired Hyundai Curitel of which net loss was KRW142.7 billion, which was an opportunity to build a new brand image. After changing the corporate name to Pantech & Curitel, the company accomplished 15% of the domestic market share in 2003, which helped the total sales of KRW 2 trillion (Moneytoday; 2006; Hankookilbo, 2003). The growth rate of the cellphone market in 2002 was 2.4%, which was a significant decrease compared to the 60% in the late 1990s and 2000s. Pantech's growth was expected to continue in sustainable development and seemed to have no specific issues until the sudden break of the workout in 2006 (iNews24, 2003).

However, Pantech invested KRW 300 billion in R&D under the goal of shortening the development cycle in half compared to its competitors, which was over 10% of the company's entire sales. The company hired 10% more of R&D personnel as well (Seoul Economic Daily, 2004). That was when CEO Park became obsessed with competing against large companies even though the company wasn't complete in terms of size or system like the larger companies. For such competition, Park believed that Pantech needed to expand in scale, which resulted in the 1<sup>st</sup> merger and acquisition. In the course of that, unfortunately, the company neglected to review organizational effectiveness, strategic approach and verification through monitoring system (IT Donga, 2018). Figure 1 shows Pantech's major products in the Blinded Stage:



Fig. 1: Main product of the blinded stage

Model name: SKY Slide IM-5100 (Launched in April 2002)

· ○ Major features: It uses 24 pins even though it was a black-and-white phone. The models for export purpose has 40-harmony bell, SK-5100, the model to export to Israel, is equipped with the ring tone that was used in IM-5300 and IM-6100. The booting sound is the same as that of IM-5000.

#### **4.2. Inaction stage - Stage with decrease in organizational performance (Year 2004 – 2005): 2nd merger and acquisition with SK Teletch**

The Inaction Stage is when organizations experience a significant decrease in their performance in terms

of revenue or profit. Despite such difficulties, CEOs do not carry out any management activities to resolve those issues in this stage (Seong et al., 2008). Such laziness or inaction status in this stage occurs due to the lack of understanding of the received information by CEOs and the lack of situational awareness. The habitual routine of companies discourages CEOs to respond to any issues (Seong et al., 2008).

In three years after the successful acquisition of Hyundai Curitel in 2002, CEO Park of Pantech signed another acquisition contract to purchase 60% of SK Teletech's share of Curitel (89.1%) with KRW 292.4 billion under the goal of not only the Korean market but the global ones by maximizing SK Telecom's brand power (Hankyoreh, 2005). With additional mergers and acquisition after the Curitel case, Pantech expected to enhance its brand competitiveness by reaching the sales of KRW 2.2 trillion with 12 million units of its products by 2006 (Minju News, 2019). The reason CEO Park was aggressive in his strategies of merger and acquisition is that he became more confident after the 1st merger and acquisition. Also, he firmly believed that the company should build powerful brands in order to secure dominance in the premium market where Pantech had to compete against the larger companies such as Samsung and LG (Newspim, 2014). Right after the 2nd merger and acquisition, Pantech realized the sales increase in 2006 and accomplished No. 2 market share in the Korean domestic market for cellphone a year after the acquisition of SKY Teletech. However, the business wasn't efficient as the company made duplicated investment in three brands including Pantech, Curitel and SKY that were similar businesses (IT Donga, 2018). In the Korean market, Pantech couldn't compete against larger companies in price when they are equipped with enormous capital power to provide subsidies for customers purchasing new phones. This led to the surging increase in Pantech's inventory (Newspim, 2014; CEOSCOREDAILY, 2014) and investing 5% of sales target in the Latin American market in marketing to promote its brands. This was an aggressive strategy to promote brands, but it ended up with a low level of performance and the burden of high cost, which resulted in a full decline in business (Newsis, 2016). Figure 2 shows Pantech's major products in the Inaction Stage - stage with decrease in organizational performance:



Fig. 2: Main product of the Inaction Stage

Model name: SKY Head Cam IM-7200 (Launched in February 2004)

- ○ Major features: A total of 6 types of ring tone categories were equipped. 310,000-pixel VGA image sensors and LED flash. Colors in silver, white, black and red

#### **4.3. Faulty action and crisis stage - Stage with wrong decision-making and crisis (Year 2006 – 2011): 1st workout**

According to Song Sin-geun and Won Ji-young (2015), the Faulty Action & Crisis Stage is when TMTs have some disputes that lead to wrong decision-making or often restructuring the companies'

organizations without any preparation in advance (Song and Won 2015). Any decision-making in this stage can cause crises, of which the only solution is a radical change of organizational restructuring to save the companies (Lim 2013). It will be extremely difficult to save the organizations unless CEOs recognize the crises until they reach Stage 3 of the Crisis Stage.

For companies that realize rapid growth, their internalized capabilities are accumulated and met with the explosive growth of the market (Teece, 2007). However, those companies are required to establish and implement flexible strategies to respond to any market changes. If not possible, the companies may have wrong decisions strategically, which can amplify risk factors (Rindova, 2001). To overcome such dangers, Teece (2007) insists that those companies need dynamic capabilities that include: 1) the sensing ability to capture chances and crises through analysis and learning abilities; 2) the seizing ability for opportunities; and 3) the ability to keep the companies' competitiveness and the reconfiguration ability if necessary (Teece, 2007). After the two rounds of merger and acquisition, Pantech's CEO not only introduced its first model around the similar period when one of its Korean competitors, Samsung, released their model but also pursued constant line-up development. However, he stuck to his premium strategy that gave him a big burden of raw material cost to keep certain businesses such as SKY (Financial News, 2013).

The lack of dynamic capabilities of Pantech's CEO led to wrong decisions in the strategic perspective. He set the goal to chase after large companies and build brand power by acquiring SKY through the 2<sup>nd</sup> merger and acquisition with SK Teletech. As a result, however, Pantech's debt rate reached 478% in 2006 and the interest expense in the 2<sup>nd</sup> half of the year amounted to KRW 9.7 billion (News1, 2014). After the 2<sup>nd</sup> merger and acquisition, employees showed emotional conflicts and weakened cohesion of the organization. After the acquisition of SK Teletech, the existing employees of Pantech experienced reverse-discrimination, which deteriorated the organization's rapport. In the end, a lot of research personnel left the company, which resulted in the disappearance of SKY's core talents (Etnews, 2005).

After 2006, the CEO was not able to properly evaluate overseas markets that were going through rapid changes. He only focused on the Korean market, which disabled him to seize the changes of corporate growth. The Korean market temporarily experience sales increase by the end of June thanks to subsidies for purchasing cellphones, which came back in operation after April 2006. In the 2<sup>nd</sup> half of that year, however, the domestic market witnessed significant deterioration in sales (Newspim, 2014). It was around when Motorola's RAZR was a mega-hit in the overseas markets and Apple entered the Japanese market in 2008, which decreased Pantech's overseas sales. To tackle the issue, Pantech started focusing the domestic market, although the company failed to secure the market dominance as the Korean domestic market is more complicated than overseas ones (Newsis, 2016) due to subsidies: phones that come with subsidies are usually ones with advanced functions with higher prices. And Pantech's performance fell behind its competitors like Samsung and LG.

Pantech's CEO was obsessed with excellence in technological capabilities, which discouraged him from developing products that customers really want. As a result, the company created what they wanted to manufacture instead of what will be sold and failed to earn back the enormous investment the company made in mass production and R&D even though the company held about 4,900 granted patents and 14,500 patents filed. In particular, companies like Pantech who need to manufacture products that can help respond to the fast-changing market environment need to develop products and services that cater to market needs through multi-dimensional forecast and established market-oriented strategies. Pantech, however, didn't pay much attention to price, sentiment, and convenience that customers want even though the company was equipped with its marketing motto including 'Korea's first' in many aspects of its business (Biz, 2023). Entering the 2<sup>nd</sup> half of 2006, Pantech and Pantech & Curitel overcome a few rounds of bankruptcy, but the company get delisted as of December 11, 2006, right before celebrating the 10<sup>th</sup> anniversary of listing. After getting delisted, the company applied for corporate restructuring (workout) to the financial institutes and the application was finally approved in

April 2007 (Newsis, 2016). Then, Pantech went through a large-scale restructuring, which reduced 35% of the entire employees including 60% of executives. Another example of its downsizing effort is the 1/5 reduction of the overseas distribution line (50 →10), which helped the company turn back to black in the 3<sup>rd</sup> quarter of 2007. The company's management status got back on track in some ways.

On December 31, 2009, the company merged its affiliates Pantech and Pantech & Curitel. Under one unified name, the company made strategic efforts to escape from crises by dividing businesses into the Korean brand managed by SKY and overseas brands by Pantech. The company's Android phone was released in May 2010 and the premium Android phone as well as inexpensive phones in July 2010 (Inews24, 2018). As of December 2010, Pantech realized a total of 980,000 units in sales, which reclaimed the No. 2 spot of Korea's smartphone market (Financialnews). In June 2011, the company released SKY Vega Racer, which later became the most hit product of Pantech as a single model with the highest sales record of 1.8 million units. This seemed to help the company get back on track along with the conclusion of the workout as of December 2011 (Seouleconomics, 2011). During the course of those events, the CEO was under the suspicion that he took KRW 8.3-billion-worth of dividends (Yonhapnews, 2014), and the company failed to secure extra capital from sales growth that would help the company become more resilient. This brought the company the 2<sup>nd</sup> corporate crisis. Figure 3 shows Pantech's major products in the Faulty Action & Crisis Stage - stage with wrong decision-making & crisis:



Fig. 3: Main product of the faulty action & crisis stage

Model name: SKY Head Cam IMB-1000 (Launched in April 2005)

Main features: Horizontal slide phone equipped with satellite DMB and touch screen, 2-million-pixel CMOS image sensor and LED flash, 2.4-inch QVGA (240 x 320) 262K Color TFT-LCD display

#### 4.4. Dissolution stage (Year 2012 – 2017): 2nd workout and disposal period

The dissolution stage is when it is possible for an organization to recover (Kim 2019). In this stage, the organization loses everything from its shareholder status to customers and market.

Pantech excluded SKY from its lineup from September 2012 and started rolling out the Vega series (Maeil Business Newspaper, 2012). However, the series recorded low sales and the company went in the red due to LG's strategic reorganization in their smartphone business, which dropped Pantech to the No. 3 spot in the Korean domestic market (Next Daily, 2013). Starting from 2013, Pantech tried to revert its negative image due to unpleasant experience of customers and unkind customer centers of the company, but it was hard to revert it once the image had plunged. On top of that, all the new products

released since 2013 recorded low sales, which added more debt onto the company. The company finally reached the point of not being able to pay back the commercial bonds to SME partners (Moneytoday, 2014). While applying for the 2nd workout in February 2014, the CEO and founder resigned and then tried another merger and acquisition. The M&A failed after four rounds of trials: the 1st failure of bidding on November 21, 2014. On June 16, 2015, the company signed an M&A MOU with Optis Consortium, a professional firm of optical storage devices. After signing the MOU, Optis Consortium acquired Pantech on October 8 in the form of P&A, which allowed Pantech to finish out its court protection as of October 16 (Etoday, 2015). During the 19 months of court protection, on June 22, 2016, the company released a new product under SKY, but the sales didn't reach half of the original goal of 300,000 units in sales. Starting in August 2016, Pantech stopped manufacturing and went into capital impairment (IT Chosun, 2017). On May 11, 2017, the Company suspended its cellphone business and conducted another large-scale restructuring to focus on its IoT business. However, the company sold that IoT business to Woori Net as of October 11. On October 26, 2017, the entire shares of Pantech were sold to KNA Holdings with the price of KRW 10 million, which made the company vanish. Figure 4 shows Pantech's major products in the Dissolution Stage:

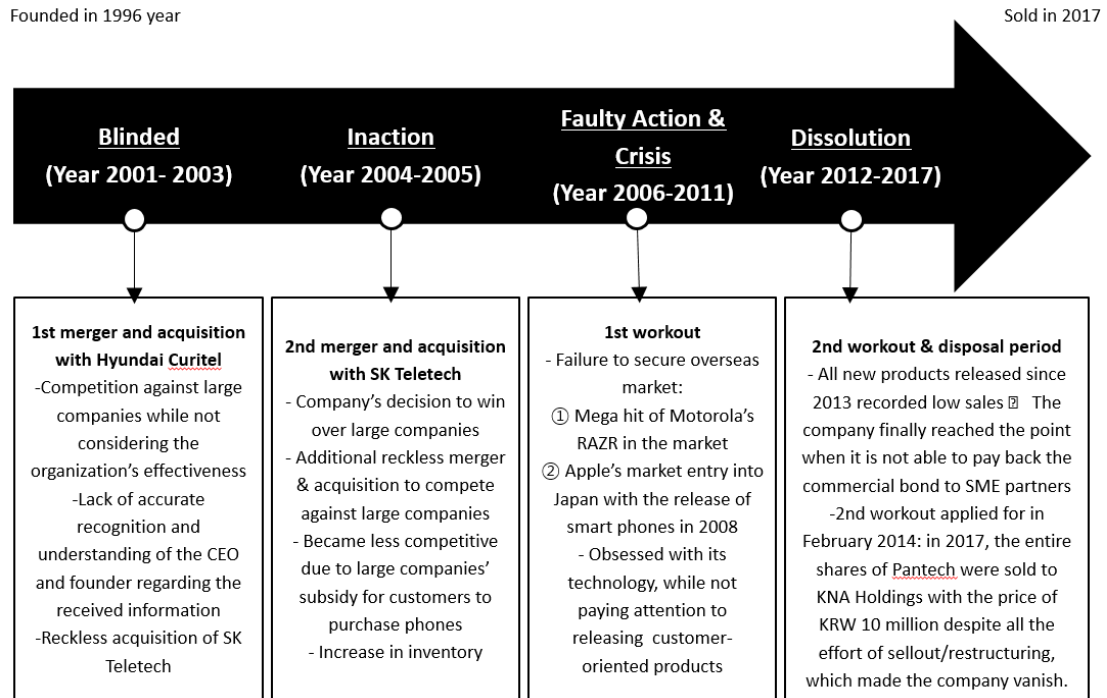


Fig. 4: Main product of the dissolution stage

Model name: Vega R3 (Launched in September 2012)

Major features: World's first LTE, mounted with Korea's first 13-million-pixel camera while expanding the screen into 5.3 inch, the zero-bezel technology is applied to minimize the width

Table 2: 4 stages of organizational decline of Pantech



## 5. Conclusion

The decline of Pantech, a symbol of venture with ultra-speed growth, brought significant shock to Korea's society and economy. This confirmed company with ultra-speed growth can also fail depending on the characteristics of the CEO and the corporate strategies that are highly influenced by the CEO. If any companies such as Pantech fails, related SMEs can collapse accordingly as those companies are the important axis of the economy. Therefore, this study reviews whether CEOs and their management strategies are confirmed failure factors for companies in terms of corporate integration and expansion by applying the organizational decline theory (Park and Hong 2015; Han 2018; Jeon et al., 2003).

As a result of the study, Pantech, despite its rapid failure while growing into a mid-sized company, followed the organizational decline stages claimed by Weitzel & Josen (1989) and Jim Collins (2009) in the order of 1st M&A, 2nd M&A, 1st workout, and 2nd workout. In addition, Pantech's failure is consistent with the findings of Moon, Y. R., Choi, M.S. (2021), Seo, J. I., Jang, and H. W. (2010) that CEO and TMT's decision-making determine the success or failure of the corporate in organizational decline, given that CEO's poor decision-making due to excessive business expansion and deterioration of crisis detection capabilities had a decisive impact on Pantech's organizational decline. This study shows the following conclusions and implications: first, there should be some effort to improve strategies that were originally established based on the characteristics of CEOs without any skills of analysis and learning. To improve any structure that highly depends on CEOs' and founders' decision-making, it is important to secure some talents with various knowledge, perspectives and experience in their TMTs including the CEOs.

Second, there should be some training to educate CEOs and founders so that they can do some capability building and establish the right management philosophy. To help them realize their limit, there should be constant communications with TMTs so that they can get out of the trap of their success. By actively utilizing CEO training, companies can reduce mistakes in their strategic decision by expanding dynamic capabilities.

Third, a systematic structure needs to be established for risk management: as Pantech's case teaches us, there are always signs before the corporate decline. There are always some inevitable risks along with high-speed growth and companies will end up facing completely unexpected risks if they can't detect such risks in advance and the risks become reality. Therefore, a systematic structure for risk

management is required, which can be handy to tackle any possible risks in each growth stage.

Despite these various implications, the study also has some following limitations:

First, this study only provides exploratory research by limiting the example of one company called Pantech, which was a technology company in 2000s and disappeared rapidly after ultra-speed growth. Since technology continues to develop, Pantech's study of failure factors can be applied to technology-based companies, but there is a limit to expanding and applying them to all companies.

Second, the failure factors of companies are various as well as the characteristics of CEOs, but this study focus on the analysis only on the characteristics of CEOs and the strategic aspects accordingly.

This study is considered to be a step forward from existing research in that it is the first study in Korea to confirm how Pantech's organizational life cycle, CEO characteristics, and CEO-oriented strategies, once led the mobile market globally despite having several limitations, acted as factors in Pantech's failure. Furthermore, in practical terms, it is significant that it provided useful information on how CEOs should cope with sustainable growth in technology-based companies.

Future research will study not only technology-based companies such as Pantech but also companies in various categories, and since the factors of failure are not only CEOs, it will contribute to expand research if it could be approached from a diversified perspective such as competitive advantage, resource-based view, and dynamic capabilities.

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## References

- Alalimat, A. & Marchuk, V. (2020). Analysis of corporate pricing strategy based on word-of-mouth communication on social networks, *International Journal of Smart Business and Technology*, 8(2), 13-24.
- Bloter.net. Following Pantech, LG Electronics 'considering withdrawal'...Native Mobile, Samsung is the only one left. <https://www.bloter.net/newsView/blt202101200018>.
- Biz, H. (2023). Indignity of the best of the best 'Shooting Star Phone'. 2023.09.10. <https://www.consumernews.co.kr/news/articleView.html?idxno=58839>.
- CEOSCOREDAILY. Pantech's second workout that didn't stop the craze...Why? 2014.02.25. <http://www.ceoscoredaily.com/news/article.html?no=5280>.
- Chae, J. S. (2021). The The mediating effect of dynamic competency and the dual moderating effect of job security in the relationship between excellent talent acquisition strategy and management performance in SMEs. *Korean Review of Corporation Management*, 12(4), 247-287. DOI:10.20434/KRICM.2021.11.12.4.247.
- Choi, S. H., Kim, I. S. & Choi, J. H. (2017). A study on the accounting of account receivable factoring: A case of Moneual. *Korean Accounting Journal*. 26(1), 279. DOI:10.24056/KAJ.2016.10.001.
- Chosun Biz. Solid, Pantech purchased with KRW 50 billion was sold KRW 10 million "It was because IM-100 failed and it deteriorated our corporate management", 2017.10 .26. [https://biz.chosun.com/site/data/html\\_dir/2017/10/26/2017102602357.html](https://biz.chosun.com/site/data/html_dir/2017/10/26/2017102602357.html)
- Collins, J. (2010). How the mighty fall, KimYoungSa.
- Dalton, D. R. & Dalton, C. M. (2005). Upper echelons perspective and multi-level analysis: A case of the cart before the horse? Research in multi-level issues” In Dansereau, F. & Yammarino, F. J (Ed.),

Multi-level issues in strategy and methods, Oxford, UK: Elsevier Ltd., 249-261. DOI:10.1016/S1475-9144(05)04011-7.

DART. Pantech Asset Management Business Report. 2003.03.29.

DART. Pantech & Curitel Business Report. 2005.03.31.

DBR., David, who wrote a global myth at the pager company, lost the 'consumer' after believing only in 'technology', 2014.12. [https://dbr.donga.com/article/view/1203/article\\_no/6794](https://dbr.donga.com/article/view/1203/article_no/6794).

Digital Daily. [Special Coverage] Key Point to Observe the Cellphone Industry in 2006: Pantech & Its Affiliates. 2005.12.29. <https://n.news.naver.com/mnews/article/138/0000005238?sid=105>.

Etnews. Regular Restructuring at Companies towards the End of the Year Already Draws Attention. 2005.11.16. <https://n.news.naver.com/mnews/article/030/0000123979?sid=105>.

Etoday, [Pantech Sales Diary Log] From venture myth to signing M&A MOU with Optis. 2015.06.17. <https://www.etoday.co.kr/news/view/1145449>.

Financial News. [Smartphone Market through the Review of 'Pantech on the Brink'fr] (1) the 'Myth of SKY' that Was Pushed behind the Economies of Scale. 2013.09.29. <https://www.fnnews.com/news/201309291721353133?t=y>.

Financialnews., 'exclusive' of Samsung Electronics and 'struggle' of LG Electronics. <https://www.fnnews.com/news/201101041753128606?t=y>.

Han. J. W. (2018). *Venture Creation & Management Strategy*. HongMonSa.

Hankookilbo, PANTECH & CURITEL, a company that beats the recession, 2003.12.29. <https://www.hankookilbo.com/News/Read/200312290081348126>.

Hankyoreh. Pantech and Its Affiliates Were Acquired by SK Teletch. 2005.05.03. [https://www.hani.co.kr/arti/economy/economy\\_general/31306.html](https://www.hani.co.kr/arti/economy/economy_general/31306.html).

iNews24. Cellphone Device Market in 2002 Increased 2.4%. 2003.02.19. <https://www.inews24.com/view/84720>.

Inews24, The Fall of 'Sky•Vega' Pantech., 2018.08.25. <https://www.inews24.com/view/1120059>.

IT Chosun., Pantech sold for 10 million won, controversy over solid running without paying. [http://it.chosun.com/site/data/html\\_dir/2017/10/27/2017102785021.html](http://it.chosun.com/site/data/html_dir/2017/10/27/2017102785021.html).

IT Donga., [the rise and fall of a brand] How did the Pantech, which was famous for Sky and Vega, collapse. 2018.07.25. <https://it.donga.com/27984/>.

Jensen, M. & Zajac, E. J. (2004). Corporate elite and corporate strategy: How demographic preferences and structural position shape the scope of the firm. *Strategic Management Journal*, 25, 507-524. DOI:10.1002/smj.393.

Jeon, Y. I., Hyun, S. Y. & Lee, G. H. (2003). Crisis management in venture business: An empirical study on problems and activities. *Asia Pacific Journal of Small Business*. 25(3), 3-23.

Kang, T. W. (2019). The impacts of startups entrepreneurship on business performance: Focused on the mediating effect of dynamic capabilities. *Asia-Pacific Journal of Business Venturing and Entrepreneurship*, 14(4), 39-49. DOI:10.16972/apjbve.14.4.201908.39.

- Kim, Y. J., Kim, J. E. & Jeon, S. I. (2019). Relationship between R&D investment and firm value by characteristics of CEO: Focused on venture business. *Asia Pacific Journal of Small Business*, 41(1), 75-96. DOI:10.36491/APJSB.41.1.4.
- Kim, Y. K. & Park, W. (2019). The impact of corporate life cycle and business strategy on future performance. *Korea International Accounting Review*, 83, 189-212. DOI:10.21073/kiar.2019.83.008.
- Korea Economic Daily. Exploration on Entrepreneurs, Park Byung-yup <Vice Chairman, Pantech & Curitel> 'Human Relationships'. 2006.04.02. <https://www.hankyung.com/amp/2002022177471>.
- Kwon, O. S. & Park, S. Y. (2022). Managerial ability and firm value by life cycle: Focusing on the biopharmaceutical industry. *Journal of Korea Technology Innovation Society*, 25(4), 809-836.
- Lee, S. W., Lim, T. J. & Lee, J. Y. (2015). The effects of business strategy, corporate life cycle and uses of management control systems on organizational performance. *Review of Accounting and Policy Studies*, 20(1), 63-91.
- Lee, S. W. & Lim, T. J. (2015). The role of MCS in the relationship between environmental uncertainty, business strategy, corporate life cycle and organizational performance: With a focus on service corporations. 62, 109-132. DOI:10.21073/kiar.2015.62.005.
- Lim, O. S. (2013). A historical study on the growth and decay process of camera makers in Japan. *The Review of Business History*. 67, 147-176. DOI:10.22629/kabh.2013.28.3.006.
- Lim, O. S. (2019). The study on longevity factors and the organizational life-cycle pattern of Japanese longevity companies. *The Review of Eurasian Studies*, 16(4), 241-261. DOI:10.31203/aepa.2019.16.4.012.
- Maeil Business Newspaper, Pantech Declares War in Gangnam... 'Vega R3' is scheduled to be released on the 24th, 2012.09.19. <https://www.mk.co.kr/news/business/view/2012/09/604542/>.
- Miler, D. (1990). *Icarus Paradox*, Harper Business.
- Min, J. H., Yoo, J. W. & Kim, C. Y. (2019). Relationship between network intensity of top managers and R&D investment — Focus on moderating effects of the corporate division type and system. *Management & Information Systems Review*, 38(1), 1-21. DOI:10.29214/damis.2019.38.1.001.
- Minju News. Pantech, the 'Myth of Ventures' that Disappeared to the Back Ally of the History. 2019.10.14. <https://www.iminju.net/news/articleView.html?idxno=49680>.
- Monthly Chosun. The Pantech myth that collapsed after 24 years. 2015.06. <http://monthly.chosun.com/Client/news/viw.asp?ctcd=B&nNewsNumb=201506100019>.
- Moneytoday, Pantech at the end of the cliff, what's the future? 006.12.11. <https://news.mt.co.kr/mtview.php?no=2006121115363235063&outlink=1&ref=https%3A%2F%2Fse.arch.naver.com>.
- Moneytoday, The highest offering price ever 'venture myth' → Open sale...Pantech's "The Rise and the Fall". 2014.09.25. <https://news.mt.co.kr/mtview.php?no=2014092417062151645&outlink=1&ref=https%3A%2F%2Fse.arch.naver.com>.
- Moon, Y. R. & Choi, M.S. (2021). A study on capabilities and performance of technological innovation of knowledge-service firms based on the upper echelons theory. *The e-Business Studies*, 22(6), 47-65. DOI:10.20462/tebs.2021.12.22.6.47.

- Nam, H. J., Lee, Y. T. & Ngwogu, O. O. (2018). An empirical study on board diversity and corporate bankruptcy of Korean listed firms. *Journal of Industrial Economics and Business*, 31(4), 1351-1373. DOI:10.22558/jieb.2018.08.31.4.1351.
- Newspim. Pantech's workout. Shall Pantech set the stage for a comeback, 2014.02.25. <https://www.newspim.com/news/view/20140225000417>.
- Newsis. Pantech, from establishment to rehabilitation decision, 2016.12.28. [https://newsis.com/ar\\_detail/view.html?ar\\_id=NISX20151016\\_0010353895&cID=10401&pID=10400](https://newsis.com/ar_detail/view.html?ar_id=NISX20151016_0010353895&cID=10401&pID=10400).
- News1. Pantech, the "symbol of venture success," until the second ordeal., 2014.08.12. <https://www.news1.kr/articles/?1811510>.
- Next Daily. [2013 IT settlement] Smartphone manufacturer's report card: Pantech. <http://www.nextdaily.co.kr/news/article.html?id=20131224800002>.
- Park, D. H. & Hong, J. H. (2015). The industry life cycle of PDA industry in Korea. *The Review of Business History*, 73, 183-201. DOI:10.22629/kabh.2015.30.1.008.
- Park, J. H. & Kim, Y. M. (2015). The effects of CEO and TMT characteristics on the research and development (R&D) investments. DOI:10.17786/jsm.2010.13.1.002.
- Park, S. H. & Park, S. Y. (2019). Analysis of characteristics of high tech SMEs: Comparison between growing and declining enterprises. *Conferences of the Korean Entrepreneurship Society*, 2019(1), 298-311.
- Qumer, C. M. and Estrella, G. (2021). A Study on advertising strategy based on the impact of a business reputation on the market. *International Journal of Smart Business and Technology*, 9(2), 107-118, DOI:10.21742/IJSBT.2021.9.2.09.
- Rindova, V. P. & Kotha, S. (2001). Continuous "morphing": competing through dynamic capabilities, form, and function. *Academy of Management Journal*, 44(6), 1263-1280. DOI:10.2307/3069400.
- Ryu, K. H. & Jeong, J. S. (2020). Designing method of the Korean military organization structure in the post unification: Applying resource mobilization theory and strategic choice. *Korean Journal of Military Arts and Science*, 76(1), 221-248. DOI:10.31066/kjmas.2020.76.1.009.
- Seouleconomics., [IT would break through the 2012 crisis.] Pantech, makes another myth., 2011.12.09. <https://news.naver.com/main/read.nhn?mode=LSD&mid=sec&sid1=105&oid=011&aid=0002202193>.
- Seo, J. I. & Jang, H. W. (2010). CEO characteristics and firm R&D investment: The moderating role of TMT characteristics and ownership structure. *Journal of Strategic Management*, 13(1), 29-49. DOI:10.17786/jsm.2015.18.2.003.
- Seoul Economic Daily. [Compete with IT R&D] Cellphones continue evolving. 2004.02.15 <https://www.sedaily.com/NewsView/1HP1GAAH1F>.
- Song, S. G. & Won, J. Y. (2015). Major influential factors of strategic changes in turnaround companies. *Journal of Industrial Economics and Business*, 28(1), 337-357.
- Seong, M. J., Seong, D. C., Kim, K. E. & Moon, Y. H. (2008). An exploratory case study on the failure factors of a Korean local venture company. *Advancing Small Enterprise Innovation Research*, 11(4), 91-113. DOI:1738-2599.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and micro-foundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350. DOI:10.2307/20141992.

The Korea Economic Daily. [Interview] Heung-guk Kim, chairman of the Regulatory Reform Committee of the Korea Federation of Middle Market Enterprises of Korea, said, "The regulations on cutting off the growth ladder will be lifted to increase mid-sized and large companies, 2014.04.25. <https://www.hankyung.com/news/article/201404250529g>.

Weitzel W. & Jonsson E. (1989). Decline in organizations: A literature integration and extension. *Administrative Science Quarterly*, 34(1), 91-109. DOI:10.2307/2392987.

Wips. Return of Pantech, a Professional Firm of Patent Management. 2020.07.15. <https://blog.naver.com/wipsmaster/222031606278>.

Yonhapnews, Pantech C&I Allocated KRW 8.3 billion to CEO Park Byung-yup (final), 2014.04.01. <https://www.yna.co.kr/view/AKR20140401140751017>.