# Strategic Management Analysis in the US Restaurant Industry: A Comparison between Domino's Pizza and Papa John's*

Myung Jun Kim** · Hyoung Ju Song*** ·
Jae-won Lee**** · Kyung Ho Kang*****

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## Abstract

This study aims to identify key factors for sustainable competitive advantage in the US restaurant industry (more specifically, US pizza industry). Two representative firms, Domino's Pizza and Papa John's (the 2nd and the 3rd largest US pizza firm, respectively) are selected and compared with each other for the study's purpose. This study employs the Five Forces model to analyze external environment and applies the VRIO framework to investigate firm's internal resources. And, finally, strategic choices adopted by two firms' are evaluated. According to the study's external

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** College of Hotel and Tourism Management Kyung Hee University(rla_2000@hanmail.net)
*** College of Hotel and Tourism Management Kyung Hee University(robot8500@gmail.com)
**** College of Hotel and Tourism Management Kyung Hee University (jin.lee@explorekorea.co.kr), First Author
***** College of Hotel and Tourism Management Kyung Hee University (khkang@khu.ac.kr), Corresponding author

analysis, the US pizza industry that can be considered a mature industry is not so much attractive especially due to high threats of new entrants and substitutes. Regarding the internal analysis, Domino's Pizza obtains sustainable competitive advantage contributed by the delivery system, logistics, and employee training system. On the other hand, Papa John's shows sustainable competitive advantage on R&D of products. This study suggests that Domino's Pizza invest more in R&D to develop product differentiation and Papa John's consider to devleop cost leadership strategy.

## Ⅰ. Introduction

According to the US Restaurant Industry Pocket Fact-book 2013 by National Restaurant Association, the restaurant industry's total revenue was more than $600 billion in 2012. Especially, the pizza industry is one of major industries in the US restaurant industry, occupying about 17% revenue of the whole restaurant industry. And, the Franchise Disclosure Document's statistics reveals that Americans eat pizza on average 100 acres and 350 slices per second, and about 90% of Americans enjoy pizza at least per 1month.

In the US pizza industry, three brands, Pizza Hut, Domino's Pizza, and Papa John's are known as the 'BIG 3'. While Pizza Hut, the first pizza brand, provides sit-down dining service, Domino's Pizza and Papa John's, the 2nd and the 3rd pizza brand, respectively, focus on delivery and carry-out system. Since Pizza Hut is not an individual firm (i.e., just a brand in YUM! Brands) and adopts a different business model (i.e., sit-down dining service), this study excludes Pizza Hut and selects Domino's Pizza and Papa John's to analyze the US pizza industry.

Domino's Pizza runs the world's second largest pizza chain following YUM!' Brands which operates Pizza Hut. Domino's Pizza focuses on providing great-tasting pizza and delivering to customer's door or available for carry-out. Its mission is to be the best pizza delivery company in the world, reflecting its key operating strategy. Domino's Pizza opened a single store in 1960 in Ypsilanti and has become a recognized world leader in the pizza industry with more than 10,300 delivery chains in about 70 coun-

tries worldwide, including about 5,000 stores in US. Also, there are about 385 owned and operated properties in the US, while all the rest are franchised. Its stores originally offer delivery only without any dine-in seating. Domino's is trying to increase the market share in the worldwide pizza industry with this relatively simple strategic management effort.

Papa John's operates and franchises pizza delivery and carryout restaurants. Papa John's is also a world-class brand, one of the largest pizza firms in the US behind Pizza hut and Domino's Pizza. Papa John's was founded in 1984 by John Schnatter. John knew that he could make a better pizza by using fresh dough and superior-quality ingredients, focusing on commitment to quality. By virtue of this insight, after opening the first Papa John's restaurant, Papa John's has been going strong ever since. Papa John's is now the third largest take-out and delivery pizza restaurant chain in the US. Also, Papa John's is the recognized leader of the pizza industry, owning or franchising approximately 4,200 restaurants in all 50 states and 35 countries.

These two companies operate in the same industry and show very similar aspects in terms of the level of performance, operations, and brand reputation. Also, geographically, they compete with each other in various US locations and international markets as well. Currently, Domino's Pizza reveals better performance than Papa john's in many areas. However, the Papa John's is catching up with Domino's drastically and attempts to overtake it in the near future. Hence, by analyzing and comparing those two dominant pizza firm's strategic management processes, this study attempts to identify the key success factors and provide appropriate strategic solutions for each company's sustainable competitive advantages.

## Ⅱ. External Analysis

The purpose of external analysis is to identify threats and opportunities in the business environment where the firm operates. To identify each firm's threats this study analyzes overall threats of the US pizza industry by employing the Porter's Five Forces model. And then, this study evaluates generic industry structure of the

US pizza industry to find opportunities that are available in a specific kind of industry.

### 2.1 Threat of new entrants

In terms of economies of scale, a barrier to entry in pizza industry is comparatively low since the initial fixed cost to launch a new pizza store is relatively low comparing to other large scale businesses, such as mobile communication and oil refining. Thus, from the perspective of new entrants, it is not burdensome to enter the US pizza industry. And, incumbent firms' level of product differentiation is not so much high. Customers do not perceive a big difference in a taste of pizza and service provided by pizza store. Thus, incumbent firms do not have a high degree of brand identification and customer loyalty and potential new entrants may not bear high costs to overcome product differentiation advantage incumbents possess. Also, although big pizza companies such as Pizza Hut, Domino's pizza, and Papa John's have proprietary technology to reduce costs and managerial know-how, it is not necessary to obtain specific technology or know-how when people decide to open a new pizza store. Similarly, since pizza industry is not affected much by a government's regulation, a barrier to entry in pizza industry is low in terms of government policy. Hence, threat of new entrants is high considering all these things synthetically.

### 2.2 Treat of rivalry

Although there are more than 70,000 pizza stores in US according to CHD Expert in 2012, in terms of US pizza sales, 4 main leaders of pizza industry, Pizza Hut, Domino's Pizza, Papa John's, and Little Caesars account for about 34% of whole pizza sales in the US. That is a large proportion considering all the number of pizza stores in the US, which implies that the degree of concentration is the US pizza industry is high and accordingly, the level of rivalry is low. However, the pizza industry already has been in mature and saturated stage, which leads to the slow industry growth. According to the survey of US pizza market, data gathered from all sources last year shows the industry continues to grow at a rate of just about 1.6%. The low growth of pizza market has continued consecutive 3 years, which makes firms to have to ac-

quire market shares from other competitors. That will lead to high threat of rivalry in the US pizza market. A low level of rivalry by virtue of the high concentration is offset by the slow industry growth. Thus, it would be reasonable to conclude that the threat of rivalry in the US pizza industry is at the middle level.

### 2.3 Threat of substitutes

All various products offered by other restaurants can be substitutes of pizza. The restaurant industry in the US comprises such as American food, Italian-American food, Sea food, Breakfast food, Specialty burgers, and Asian cuisine. That is, all those food products can meet the same customers' needs in different ways. And, given relatively low prices, switching costs of choosing other substitutes are also low. As a result, the threat of substitutes in the US pizza industry is high.

### 2.4 Threat of powerful buyers

The number of customers who consider pizza an affordable meal for low budget is increasing more and more. According to the Packaged Facts survey in 2012, 97 percent of the US adults eat pizza, and 93 percent have bought foods from pizza restaurants in the past 12 months. That implies that Americans eat pizza very often as a daily food and the demand for pizza by a large number of buyers mitigates the threat of powerful buyers. Moreover, since the price of pizza is not a significant percentage of a buyer's final costs, buyers are not concerned about costs and do not lookout for cheaper alternatives. Also, these days, since pizza stores offer differentiated, customized menus with high quality, the threat of buyers decreases. On the other hand, according to the annual report in 2012 of Domino's and Papa John's, consumers are getting more fickle and frequent changes in consumer preference and tastes can be a risk factor in the pizza industry. Moreover, a low switching cost and the prevalence of pizza firms' coupon systems and special offerings may enlarge the threat of powerful buyers. All things considered, the threat of powerful buyers is at the middle level.

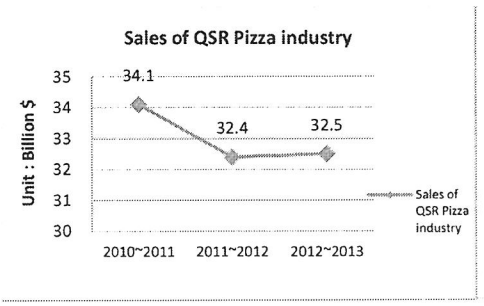
## 2.5 Threat of powerful suppliers

The importance of ingredients for pizza is increasing as cheese and other ingredients from suppliers occupy a high portion of costs when making pizza. Specifically, the cost of cheese accounts for 40 % of the cost of making pizza. That means that pizza firms tend to be very sensitive to the price of cheese and other ingredients, which can be a threat to the pizza industry. However, suppliers of ingredients do not sell unique, differentiated products and there are a large number of suppliers that produce and supplies ingredients including cheese. At the same time, pizza firms ally with third-party entities of ingredients suppliers. Therefore, they are able to purchase ingredients from suppliers at a fixed price. Those two factors offset each other, leading to the middle level of the threat of suppliers.

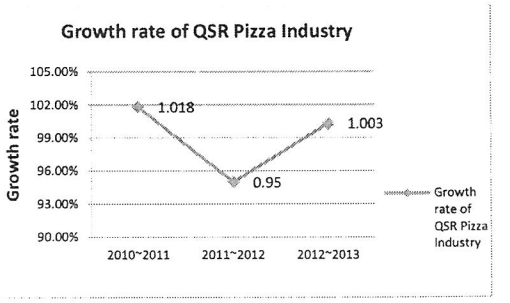
## 2.6 Generic industrial structure - mature industry

The pizza industry can be classified as a mature industry because of the following reasons. The pizza industry is growing slowly in demand. Many US pizza firms concentrate on delivery and carry-out services, competing with other firms in price, service, menu, and taste. Also, they are competing on price and the introduction of new products is not prevailing.

In last 10 years, this industry has grown from $30.1 billion to $32.6 billion. It is the third largest category in the US QSR sector. The industry shows sales of approximately $34.1 billion in 2010, $32.4 billion dollars in 2011, and $32.5 billion in 2012.




2010-2013 sales of pizza industry




2010~2013 growth rate of pizza industry

The sales flow moves downward during these years and the growth rate does not show a big change. During 2010-2011, the growth rate increased by just 1.8% point and for the period of 2011-2012 the growth rate decreased by 6.8%. During the last period, 2012 -2013, the growth rate increased by 5.3%.

The three major pizza companies, Pizza Hut, Domino's, and Papa John's pizza, account for approximately 53% of U.S. pizza delivery, with the remaining 47% attributable to regional chains and individual shops. For these reasons, this study defines the pizza industry as a mature industry and major opportunities should be refining products, emphasizing service, and process innovation for gaining competitive advantage.

## Ⅲ. Internal Analysis

To identify a firm's internal strengths and weaknesses, based on the resource-based-view (RBV), this study analyzes resources and capabilities of Domino's Pizza and Papa John's using the VRIO framework. This study excludes common resources and capabilities of Domino's Pizza and Papa John's to conduct a comparison effectively.

### 3.1 VRIO analysis of Domino's Pizza

| Resources & Capabilities | Valuable? | Rare? | Costly to imitate? | Organized? | Competitive Implications | S or W |
|---|---|---|---|---|---|---|
| R&D of products | Yes | No | - | - | Parity | S |
| Logistics system | Yes | Yes | Yes | Yes | Sustained Advantage | S |
| Delivery system | Yes | Yes | Yes | Yes | Sustained Advantage | S |
| Employee training program | Yes | Yes | Yes | Yes | Sustained Advantage | S |

(1) R&D of products

Since 2009, motivated by a bad result from US pizza Market Consumer Survey (ranked 6th in taste section), Domino's, with sophisticated research and development

technology, has tried to develop new products and improve quality to attract customer's tastes. Now Domino's operates research and product development facilities at World Resource Center in Ann Arbor, Michigan. Although Domino's research and product development facilities are well-structured to create new menus and improve pizza recipe, it is not rare because other competitors also make an effort in improving their products and Domino's pizzas are not considered to have outstanding value in taste. When it comes to competitive implications, it causes just parity.

(2) Logistics system

Domino's has maintained strong relationships for more than 20 years with more than half of its major suppliers with well-organized supply chain management system. Also, its third-party suppliers are required to meet strict quality standards to ensure food safety according to the increase of food safety and quality concerns.

Also, distribution system of raw materials for product is well organized. In the US, a network of 16 domestic distribution centers and Supply Chain Services (SCS) supply 240 products to more than 5,000 US pizza stores. Thanks to strong relationship with its suppliers for a long time and the nationwide distribution channels, logistics system of Domino's pizza is valuable and there are few competitors that can secure similar system. In addition, because maintaining a strong relationship is socially complex and path-dependent, the logistics system of Domino's is costly to duplicate. Thus, this logistics system of Domino's can generate a sustained competitive advantage.

(3) Delivery system

Efforts on developing delivery system for a long time such as Domino's Tracker and Pizza Builder and its technology for better delivery such as Domino's Heat Wave hot bags are valuable and rare comparing other competitors. That system may contribute to increasing revenue and profit and maximizing opportunities. Also Domino's Pizza has tried to improve delivery system for the first time in pizza industry, it is costly to imitate because of first-mover advantage protected by patent right, unique historical condition, and complex networks of organizational relationship. This system appa-

rently leads to a sustained competitive advantage.

(4) Employee training program

Domino's pizza is operating Pizza Prep School, HR development program, and DPZ University to rear well-trained core employees. Since Domino's develop various employ training programs for a long time with well-structured system, this socially complex resource is costly to imitate. This training program can be a source of a sustained competitive advantage in pizza industry.

### 3.2 VRIO analysis of Papa John's

| Resources & Capabilities | Valuable? | Rare? | Costly to imitate? | Organized? | Competitive Implications | S or W |
|---|---|---|---|---|---|---|
| R&D of products | Yes | Yes | Yes | Yes | Sustained Advantage | S |
| Logistics system | Yes | Yes | Yes | Yes | Sustained Advantage | S |
| Delivery system | Yes | NO | - | - | Parity | S |
| Employee training program | Yes | NO | - | - | Parity | S |

(1) R&D of products

Papa John's only offers a few menu items compared to competitors, focusing on high-quality pizzas along with some side items. Also, with R&D of improved products, the Papa John's can make better quality pizzas to attract customer, aligning with its mission, 'better ingredients, better pizza'. Successively, Papa John's ranked $1_{st}$ in the taste section in US pizza Market Consumer Survey in 2009. R&D of improving products in Papa John's is embedded in a whole organization with a unique culture, it is not only valuable and rare but also costly to duplicate. Thus, this R&D is a source of a sustained competitive advantage in the highly competitive US pizza industry.

(2) Logistics system

Papa John's employs strong supply chain to controlling product quality and costs. Papa John's QC Center system, comprised of ten regional production and distribution centers, supplies pizza dough, food products, paper products, and cleaning supplies twice weekly to each restaurants with strict standards. In terms of distribution of raw materials, as a vertical integration, Papa John's owns and operates its dough making facilities and commissaries and all restaurants are required to order from them directly to control its product's quality. This well-structured logistics system with a long history of Papa John's is very valuable and costly to imitate for their competitors since it requires a unique history and know-how to manage complex relationships. Thus this logistics system generates a sustained competitive advantage.

(3) Delivery system

As consumers order through an e-mail which enables them to know the amount of the order and the estimated delivery time, Papa John's can guarantee high satisfaction in delivery. This delivery system is valuable since controlling the time estimates is impossible in individual stores, which causes customer dissatisfaction. However, comparing to other pizza companies' delivery systems, there is no huge difference and it may be a source of just competitive parity.

(4) Employee training program

Papa John's continuously offers training programs at regional training centers around the US to assist team members in learning skills needed to make better pizzas and run profitable stores. By controlling the training of employees, Papa John's can provide its customers with the same experience at each and every store with consistency. However, this training system has no idiosyncratic path dependence or relationship and Papa John's competitors conduct store managers' training as well. Thus, this is common training program and not rare. This resource of Papa John's leads to only a competitive parity.

# Ⅳ. Strategic Choice

## 4.1 Strategic choice of Domino's Pizza

Domino's pizza has operated business during over 50 years and accumulated valuable experiences in solving problems faced with them. In these days, Domino's Pizza continuously tries to mitigate its weaknesses and threats and at the same time endeavors to utilize their strengths and opportunities. Those efforts can be actualized by strategic choices. So in this part, this study introduces and analyzes its strategic choices adopted to improve revenue and profit while reducing threats and weaknesses.

(1) Cost leadership.

The cost leadership implies reducing a firm's costs through several ways to below those of competitors. Domino's Pizza is reducing its costs by utilizing its experiences and resources in many ways.

According to learning curve, a firm can reduce its costs of production by utilizing its experiences in all facets of business operations. Domino's Pizza has accumulated valuable experiences for operating its business and successively reduced its costs in purchasing raw materials, distribution, and service.

Domino's Pizza designs and constructs its pizza stores as places for making pizzas and other menus for delivery and carry out. Additionally with a high level of franchising, Domino's does not need to invest big money in its store sites. Domino's only needs space for making pizza and parking lot for delivery motorcycles and customers' cars. So it can reduce real estate costs and labor costs need for hall servers as well.

Domino's operates its own supply chain system. In the US, Domino's operates 16 supply chain centers that provide raw materials including unfrozen dough, fresh cheeses and other ingredients. By establishing its own supply chain system Domino's can successively reduce its transaction costs that should be imposed in dealing with supplies.

Domino's developed mobile ordering applications for Android, IOS and Windows. And it implements many promotions for customer who using and ordering with this application. Recently, many customers use their smart phone apps because of con-

venience and many other advantages. Simultaneously, these apps also generate advantages of reducing labor costs otherwise need for operators. In the past, many operators worked at operation centers for receiving customer orders but these days more than a half of customers use their smart phone apps. These efforts substantially contribute to achieving cost leadership.

(2) Product differentiation.

Domino's also conducts product differentiation strategy. This strategy can create competitive advantage by increasing perceived value of their products. These days, since customer's preferences and tastes are so fickle, many competitors try to make new pizzas, other menus and provide a good customer service. Those efforts can reduce the threats of rivalry, substitutes, and buyers.

Domino's offer many menus like pastas, oven-baked sandwiches, and cheese besides many kinds of pizzas. These side items, combined with pizzas provide differentiated experience and service to customers. And, Domino's also offers customized pizzas. In the online web page and application in smart phone, customers can find a tab of ordering customized pizza. Customers can choose their own pizza dough, meat, some vegetables, and cheeses so that they can design and order their own pizzas fitting their tastes.

Recently, Domino's changed their store interiors. This project is called Pizza Theater. Since Domino's concentrates on just delivery and carry out, reducing time for waiting is critical. To reduce this recognized waiting time Domino's implemented open-kitchen interior and show the step of making pizza. Customers who come to store for carry out feel enjoyment this interior, and accordingly, customers' recognized waiting time can be reduced.

### 4.2 Strategic choice of Papa John's

Papa john's is the third largest pizza company following Pizza Hut and Domino's. Papa john's also employs many strategic choices to catch up with and surpass its rivlas.

(1) Cost leadership.

Papa John's concentrates on few menus. Unlike other competitors that offer numerous items to meet diverse of consumer tastes, Papa john's Pizza's strategy is 'concentrate on basic'. Accordingly, Papa John's reduces useless costs including raw material costs and marketing costs for new menus. Its strategy affects consumers by providing perception that Papa john's is trustworthy because they don't use its resources for useless things, just focusing on taste. But the overall level of cost leadership is not so much high as Domino's

(2) Product differentiation.

Papa john's conducts product differentiation strategy through a unique way. As aforementioned, Papa John's focuses on making pizzas using fresh and healthy ingredients for customer, based on its mission, 'Better ingredients, Better Pizza'. And, this effort leads to product differentiation. Papa John's spends its assets in securing high quality ingredients by investing in R&D system, supply chain named QC, and effective distribution channel for ingredient's freshness. This strategy is highly influential in terms of differentiation and customers choose Papa john's mainly because of food's taste. This consumer's perception may be a source of sustained competitive advantage generated by product differentiation.

## V. Conclusion

This study analyses the US pizza industry and compares two pizza company's internal resources and strategic choices. According to the analysis, the pizza industry is not so much attractive because of the high level threats of new entrants and substitutes and middle level threats of rivalry, suppliers, and buyers. So this industry's profit making ability may be normal at most. And this industry's current status is at mature industry because of the large number of same size companies exist. Firms in the US pizza industry compete each other very strongly to take other competitors' market shares.

To find two company's internal strengths and weaknesses this study employs VRIO framework that classifies a firm's resources into valuable, rare, and costly to imitate ones and guides to identify resources for sustainable competitive advantage. According to the analysis, Domino's flaw locates in R&D of product. Domino's has many superior resources but product's taste level is normal compared to rivals so the taste can't be purchasing reason for Domino's pizzas.

For Papa John's the areas needed to be improved are delivery and employee training system. Papa John's operates those systems but they are at just average level in the pizza industry, not especially distinguished. Papa John's mainly concentrates on product differentiation to utilize its strengths and opportunities and mitigate weaknesses and threats. Papa John's establishes and operates its own logistics system and supply chain for gaining and distributing its resources. Also, Papa John's invests in R&D technology to make better, differentiated pizzas for customers.

In addition to the analysis, this study suggests some solutions to each company for gaining sustainable competitive advantage. Domino's needs to invest more heavily in R&D to offer high quality pizzas. From its main strategy, cost leadership, Domino's has gained profits enough to invest in R&D for improving product quality. Besides the tendency that taste is a critical factor for selecting pizzas by customers, investing for product differentiation utilizing profits from cost leadership can make a virtuous cycle in business-level strategic choices.

For Papa John's, it needs to strengthen cost leadership. Papa John's R&D is well-functioning, which enables it to maintain its product's quality. However, compared to rivals, its delivery and employee training system are at the normal. Investing in rationalizing delivery process requires substantial initial costs but in the end establishing its special ordering channel reduces other costs including labor costs enough to compensate for initial investment. Also, to improve the employee training system, Papa John's needs to improve in educating its managers especially. Ultimately, well-educated managers can reduces store operation costs substantially and sustainably.

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