

A Study of Generic Strategy in Fast Food Company and The Effect of Covid-19 Pandemic: Case Study of Shake Shack's Competitive Strategy

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Abstract

This research paper has the main objective to study a generic strategy proposed by Porter. In addition, outlining the advantages and disadvantages of each of these strategies for the company. The analysis for the application of the strategy was carried out in the food industry sector, namely Shake Shack, Inc. The study was conducted based on secondary data obtained from articles, journals, research reports and company websites. Based on the results of the study, it was found that the Shake Shack implementation differentiation strategy rather than cost leadership and focus strategy. However, with the covid-19 pandemic this strategy will affect the sales results of the Shake Shack in 2020. Therefore, an increase in the cost leadership strategy needs to be considered as a shake shack strategy in the future.

Keywords:

Generic strategy, Competitive strategy, Shake Shack, Covid-19.

1. Introduction

In December 2019, the world was shocked by the phenomenon of a new outbreak called Covid-19 which started in Wuhan, China. Covid-19 rapidly spread to most countries around the world and on March 11, it has been declared a pandemic by the World Health Organization (WHO) (WHO, 2020). Many countries have implemented full or partial lockdown to reduce the rapid transmission of the virus. This policy has created massive impact on various industrial sectors in the world. One of them is the food industry.

Food industry is considered part of a nation's critical infrastructure along with healthcare, energy and communication sector. Therefore, normal operation should be maintained to feed the people during the pandemic (CISA, 2020). One of the companies in the food industry sector is Shake Shack.

As one of the fastest-growing food-chains, Shake Shack has its own strategy to maintain its success during this pandemic time. According to its 2019 annual report, it made significant investment in its digital platform; its kiosks, its app, its online ordering platform, and its third-party delivery partnerships. In 2020, these investments have been the reason it has been able to keep so many restaurants open. Investing in technologies includes in the cost leadership strategy in order to grow the business and keep it running (Stankevičiūtė et al., 2012).

Therefore, this study will take Shake Shack as an example to explore the competitive strategy. At the same time, the Covid-19 pandemic has brought great harm to all companies during 2020. Under such circumstances, whether the current strategy of enterprises can affect current strategy is also the focus of this paper.

The rest of this paper is organized as follows: Section 2 describes literature review about strategy and the effect of generic strategy on Firm Performance will be discussed. Section 3 presents the objective of this study. Then, Section 4 gives the method to carry out this study. Analysis and discussion will be given in Section 5. Finally, Section 6 will summarize all the finding that is given in this study.

1.1. Objectives of the Study

1. To identify business strategy adopted by Shake Shack
2. To assess internal and external business aspect of Shake Shack

3. To give recommendation based on research finding

2. Literature Review

2.1. Strategy as a Concept

Strategy is considered as a general set of direction for the company and all of its components to achieve a desired state in the future. It also can be viewed as a means of establishing the organizational purpose, in terms of its long-term objectives, action programs, and resource allocation priorities (Hax & Majluf, 1986).

A strategy is an executable plan of action that describes how an individual or organization will achieve a stated mission. A strategy is often perceived as being intangible, as there is nothing to touch and feel due to no physical attributes which associated with strategy (Ulwick, 1999).

According to Dobson, Starkey, and Richards (2004) a well-defined strategy should integrate an organization's major plans, objectives, policies and programs into one whole cohesive structure which marshals and allocates its limited resources in the best possible way in accordance with analysis of firm's unique strengths and weaknesses also the opportunities and threats of external environment.

In order to create a strategy which is beneficial for a firm, it must create a fit between company's activities which complement each other and that it must give added value to customer. Creating a strategy is about creating interrelated activities that result in the achievement of competitive advantage through being different. Thus, creating unique position of a firm in its industrial position (Porter, 1996).

2.2. Porter Generic Strategy

According to Porter (1998) there are three different strategies which can be used by company in its quest to outperform their competitor. Those are cost leadership strategy, differentiation, and focus. In order to successfully implement any of those strategy, complete commitment and synchronized supporting arrangements very much needed by the company.

In brief explanation, company with cost leadership strategy intend to offer low-cost product to its customer (Valipour et al., 2012). If a company choose to pursue cost leadership strategy, it has to reach lower cost of product or service than its competitor by relying on technologies and doing business as efficient as possible with all resources that they have (Stankevičiūtė et al., 2012). To expand the market, Shake Shack has invested in technology for online retails. The online service is nowadays becoming popular in food industries and one of the most popular service is food delivery service (Cahyani, Z. et al, 2020).

Meanwhile, Product differentiation is a strategy that businesses use to distinguish a product from similar offerings on the market and focuses on the cost value of the product versus other similar products on the market (Karama and Linge, 2019). Differentiation strategy allow firm to charge premium price to capture market share by tailoring their product or service uniquely compared to their competitor. Differentiation strategy is best implemented when a company able to provide unique or superior value to customer through product, quality, feature, or after-sale programs (Obasi et al., 2006).

What sets focused strategy apart from the other two generic strategy is that focus strategy concentrate its attention in a small part of total market share. The target segment, or niche, can be in the form of geographical segment, customer segment, or product segment (Thompson, 2018). Company which pursue focus strategy will likely aims at growing market share in a niche market or market that either is not exciting or overlooked by competitor. Focus strategy is suitable to be applied on a narrow segment and within that segment attempt to achieve either cost leadership or differentiation (Akintokunbo, 2018). One of the key elements to survive in this competitive market is quality (Nugroho, T. W. & Nurcahyo, R., 2018).

Companies may choose to pursue one of the three generic strategies or more than one depends on the organizational arrangements and systems. Commonly, Larger firms with greater access to resources will compete on a cost leadership or differentiation strategy, whereas smaller firms may compete on a focus strategy (David, 2011).

2.3. The Effect of Generic Strategy on Firm Performance

There are numerous studies that relate the implementation of Porter's generic strategy with company performance (Spanos et al., 2004; Asdemir et al., 2012; Banker et al., 2014). Furthermore, Allen & Helms (2006) have presented relation between strategic practices with each of Porter's generic strategy.

In prior studies (Kiprotich et al., 2018; Valipour et al., 2012) find that there is significant relation between cost leadership strategy and performance of companies. Meanwhile, Knight et al. (2020) argued that differentiation strategy put a company in a sustainable competitive edge moving forward because it makes harder for rival to replicate a company's success. Furthermore, differentiation has positive impact on brand positioning of a company (Della &

Araibi, 2016). Separately, Akintokunbo (2018) make a case for focus strategy in his research by saying that focus strategy significantly influences organizational profitability, market share and firm efficiency.

Although the effectiveness and suitability of the strategy is debatable and remain an interesting topic to be discussed, however many studies suggest companies with no clear strategy are defined as stuck in the middle and may face some difficulties to gain competitive advantage (Brenes et al., 2013; Porter, 1998).

3. Methodology

This research is an exploratory based on secondary data including academic journals, websites, case studies, research, annual reports, and books. This research aim to identify competitive strategy that is used by Shake Shack and then evaluate it based on research finding.

4. Analysis and Discussion

4.1. Background of the Company

Shake Shack is a modern day “roadside” burger stand serving a classic American menu of premium burgers, chicken sandwiches, hot dogs, crinkle cuts fries, frozen custard, beer and wine. It was originally founded in 2001 by Danny Meyer’s Union Square Hospitality Group (USHG), before finally formed Shake Shack Inc. which is a Delaware corporation for the purpose of facilitating an initial public offering and other related transactions to carry on the business of SSE Holdings in September 23, 2014. Currently, Shake Shack is listed in New York Stock Exchange under the symbol “SHAK”. Since its founding, Shake Shack has grown rapidly with 311 system-wide Shacks in 15 countries and 30 States as of December 30, 2020 (Shake Shack, 2020).

In modern society, restaurant business is one of highly competitive and fierce business sectors with new competitors in the field on fast casual restaurants and quick service restaurants keeps on coming up. To compete with the competition, Shake Shack stay on its unique culture with “We Stand for Something Good” campaign and “Enlightened Hospitality” which originally brought up by its founder Danny Meyer. This strategy, put forward the importance of communities, internal growths, partners, and guests (Shake Shack, 2020).

4.2. Strategies of Shake Shack

Since its founding, Shake Shack always put customer experience as their number one priority. They embrace it as their unique culture by starting “Enlightened Hospitality” campaign, through this Shake Shack always try to maximize guest’s experience digitally by creating convenience and easy accessibility. With digital experience Shake Shack also always try to get to know their guest better and keep evolving by building and refining their data platform. This culture also carried away on their site selection. Shake Shack always engaging the community by creating convenience physical design to support people safely gather and get the best guest experience. Shake Shack also try their customer stay loyal by innovating on their menu by committed to source only premium ingredients and change the menu occasionally to deliver new culinary experience for their customer.

Operational-wise, Shake Shack always try to keep it efficient and nimble without sacrifice their quality and guest’s experience. In 2019, Shake Shack made significant impact on their digital platform to response and preparing life post Covid-19 outbreak (Shake Shack, 2019). Shake Shack also try to keep value-for-cost balanced by creating efficient value chain management. Furthermore, it also keeps on doing discount and promotions by partnering with other well-established platform such as “Coachella” and “Uber” to gain market share.

During 2015 – 2019 this strategy create a massive success for Shake Shack with steady increase of their worldwide operation, sales, cash flow, and total revenue with increased profit of 13.4% in 2019 compared to 2018. Although in 2020 this number dipped due to the pandemic with sales decreased by 27.8%, Shake Shack still managed to make a few bright points such as grew of company-operated Shacks and their app/web purchaser. This could be proved as a huge advantage come post-pandemic life.

4.3. Internal and External Business Aspects of Shake Shack

Here we will examine the strengths and weaknesses of the Shake Shack as an analysis of internal business aspects, as well opportunities and threats as an analysis of business aspects externally. We need to identify what strengths does Shake Shack have as well as the weakness. The opportunities that this company has or might and the threats that it might face have also need to be determined. This analysis can be seen in the following Table 1.

4.4. Shake Shack Operational under Covid-19 Pandemic

By the end of fiscal year 2019, Shake Shack found themselves in a good position business-wise with record-breaking achievement of newly opened 39 domestic company-operated Shacks and 34 international-licensed Shacks. Fueled by steady improvement of total revenue since 2015 (Figure 1) which saw their total revenue at an all-time high \$595 million, increased 29.4% from the year before. This global expansion saw Shake Shack’s system wide sales soar to an all-time high \$895 million (Figure 2), increased by 33% from the year before (Shake Shack, 2019). This record-breaking performance set a high expectation for Shake Shack to face the challenge that was in front of them. Although at the end of fiscal year 2019 the world has started to learn about new global respiratory pandemic called Covid-19, this has not appeared to hinder the performance of Shake Shack in general and the company remain positive and optimistic to face next fiscal year.

Table 1. SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> ✓ Well known/awareness ✓ Excel in food quality ✓ Great customer experience ✓ Appealing and modern look and feel ✓ Trailblazers in fine casual dining within the burger industry ✓ Green community oriented 	<ul style="list-style-type: none"> ✓ Fast food associations are negative ✓ Quality control/consistency ✓ Consumer price complaints ✓ Not much different from other fast food restaurants ✓ Queuing too long and seating issues to little
Opportunities	Threats
<ul style="list-style-type: none"> ✓ Healthier offerings ✓ Leverage social media/WOM (earned content growth) ✓ Low barriers to entry 	<ul style="list-style-type: none"> ✓ Crowded market ✓ Fast casual and health fast food focused competition growing ✓ Commodities pricing increase leads to consumer paying the price. ✓ Predicted slow annual market growth

However, as the pandemic began to spread on the first quarter of 2020, numerous governments started “stay at home” campaign which hit hard at many food dining industry. Consequently, Shake Shack began to close all its dining rooms and shifted to a “to-go” concept restaurants. It also happened on worldwide Shack which in April closed down 61 of its 120 licensed Shacks including venue in airports which at that time travel ban has just been started. During the first quarter of 2020 Shake Shack began to experience some decreased in their customer traffic due to Covid-19. It eventually force Shake Shack to laid off or furloughed around 20% of its staff and abandoning its initial 2020 outlook as the company main concern is to recover from its loss as much as possible.

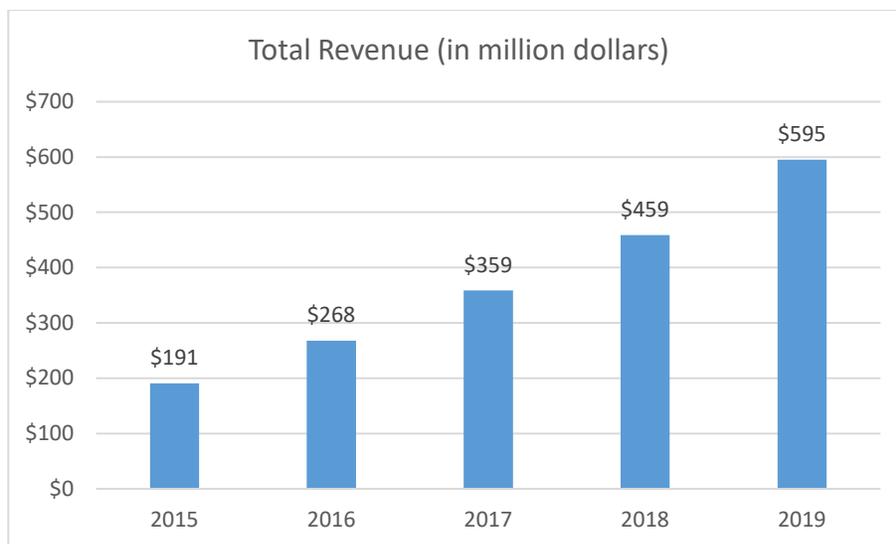


Figure 1. Increased Total Revenue of Shake Shack 2015 – 2019

The biggest impact of Covid-19 to its operation probably can be seen in the company second quarter of 2020 report. According to Shake Shack (2020) on its report, total revenue experienced loss of 39.1% compared to previous year second quarter due to lost sales in regards to impact of Covid-19, while the sales itself decreased 39.5% compared to previous year second quarter achievement. Over the rest of 2020, Shake Shack did well to recover from its sales growth by losses only 3% at the end of fiscal year 2020 (Table 2), with the help of digital sales channel which contributed to more than 50% of sales since second quarter of fiscal year 2020 (Figure 3).

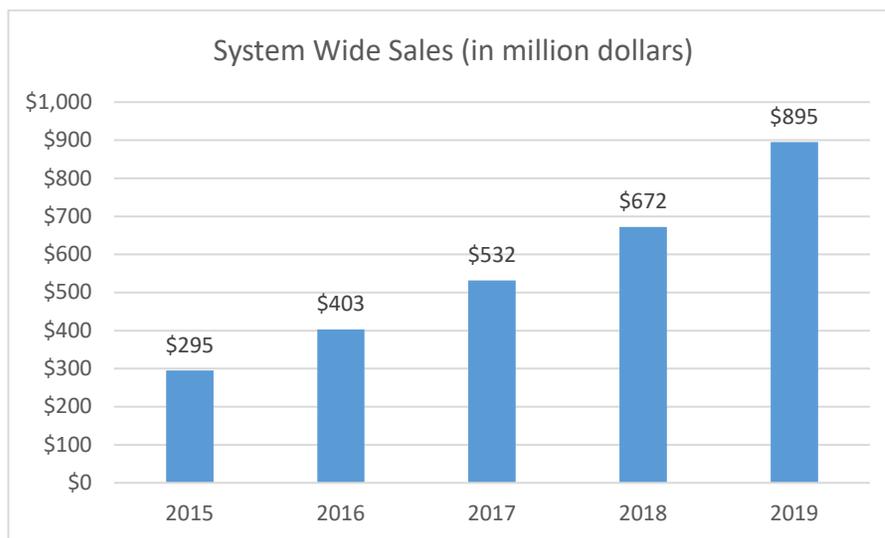


Figure 2. Increased System Wide Sales of Shake Shack 2015 – 2019

Table 2. Sales Recovery during Fiscal Year 2020

	Fiscal 2020									
	First Quarter		Second Quarter			Third Quarter		Fourth Quarter		
	25-Mar	22-Apr	20-May	24-Jun	22-Jul	19-Aug	23-Sep	21-Oct	18-Nov	30-Dec
Average Weekly Sales (in thousand of dollars)	\$56	\$32	\$50	\$52	\$56	\$59	\$61	\$62	\$62	\$62
Total year-over-year sales growth	-11%	-56%	-32%	-32%	-23%	-20%	-10%	-5%	-3%	18%

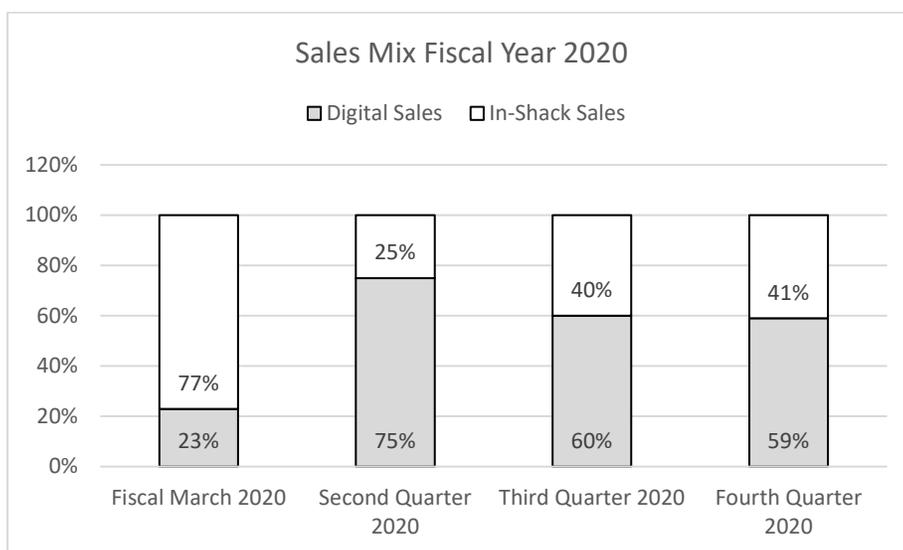


Figure 3. Sales Source during Fiscal Year 2020

By the end of fiscal year 2020, Shake Shack reported that total revenue and system-wide sales has been decreased 12.1% to \$523 million and 13% to \$779 million respectively compared to last year number (Figure 4). Covid-19 pandemic also take its toll on the operating cost of Shake Shack with the loss of \$43.9 million compared to last fiscal year which saw operating profit of \$25.7 million. This largely, due to reduction in sales caused by the pandemic all year long which saw many Shacks to be temporarily closed or open with certain restrictions and also due to upward trend of food delivery which saw increased of delivery commission and packaging cost.

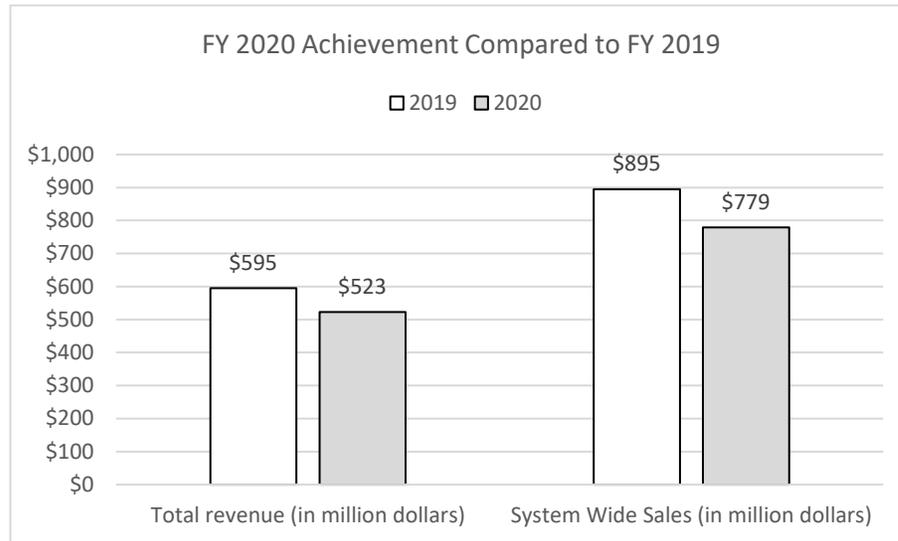


Figure 4. Comparison of Total Revenue and System Wide Sales

4.5. Recommendation

Since dining experience is one of the most deciding factor for almost all fast food or casual dining restaurant, accommodating open space dining experience might be helping to get around various restriction during pandemic. If not possible, to stay competitive during the pandemic, Shake Shack and other fast food restaurants needs to more embrace operating with minimum contact. Then, it needs to accommodate it into their cost strategy to avoid any increased in their operational cost. This can be reached by utilizing creative idea on their digital platform to keep it user friendly thus creating easy ordering experience for customer and while keep pushing through plan for creating drive thru experience. This also can be proved as a useful investment to prepare the competition after the pandemic end. Adopting a hybrid strategy with cost leadership and differentiation can improved Shake Shack’s performance compared to just chasing one competitive strategy. By adopting dual strategy, it can create sustainable advantage and create cost synergy at the same time (Heracleous and Wirtz, 2009). Furthermore, we recommend Shake Shack to more embrace cost leadership strategy to create sustainable operation by controlling their overhead expenses and try to source more supplier with tight quality management system to still give the best guest’s experience.

5. Research Finding and Conclusion

After analyzing the strategies applied by Shake Shack and reviewing the previous regulations, it can be concluded that the strategies used have an effect on the ongoing activities of a company, especially when calculating the profit. In addition, Shake Shack need to consider the internal and external business aspects of the company. With the existence of strengths and opportunities, it is expected that the company can increase the growth and broad market, and with weaknesses and threats, it is hoped that the company will pay more attention and improve the things that exist in this section. The strategy implemented by Shake Shack at this time focuses more on differentiation strategy. This can be seen by the company’s commitment to using premium ingredients for their products, having a unique culture with the “We Stand for Something Good” and “Enlightened Hospitality”, and also conducting campaigns discounts and promotions by partnering with other established platforms such as "Coachella". and "Uber" to gain market share.

In 2015-2019 this strategy created great success for Shake Shack, it can be seen from Figure 1. (Increased Total Revenue of Shake Shack 2015–2019) total revenue increased from year to year and broke the record in 2019 by opening 39 internationally licensed Shacks and getting revenue was \$ 595 million, an increase of 29.4% from a

year earlier. However, following the pandemic and the government requiring “stay at home” it had such a significant impact on Shacks that in April they had to close 61 of the 120 licensed Shacks. In addition, the impact of Covid-19 forced Shake Shack to lay off or revoke around 20% of its staff in early 2020. It can be seen in Table 2. (Sales Recovery during Fiscal Year 2020) reports that total revenue and sales throughout the system have decreased.

Therefore, it is necessary to update the strategy implemented by the shake shack to overcome losses caused by the impact of the Covid-19 pandemic. From the results of the above discussion, it was suggested that the shake shack should use a hybrid strategy by combining cost leadership and differentiation strategy in order to improve the performance of the Shake Shack during this pandemic, in order to create sustainable benefits and create cost synergy at the same time.

References

- Allen, R.S., & Helms, M.M. (2006). Linking strategic practices and organizational performance to Porter’s generic strategies. *Business Process Management Journal*. 12(4), 433-454.
- Akintokunbo. (2018). Market Focus Strategy And Organizational Performance Of Telecommunication Companies In Port Harcourt. *International Journal of Innovative Research and Advanced Studies (IJIRAS)*, Vol. 5 Issue 3, March 2018. ISSN: 2394-4404.
- Asdemir, O., Fernando, G.D., & Tripathy, A. (2013). Market perception of firm strategy. *Managerial Finance*. 39(2), 90-115.
- Banker, R.D., Mashruwala, R., & Tripathy, A. (2014). Does a differentiation strategy lead to more sustainable financial performance than a cost leadership strategy?. *Management Decision*. 52(5), 872-896.
- Brenes, E.R., Montoya, D., & Ciravegna, L. (2014). Differentiation strategies in emerging markets: The case of Latin American agribusinesses. *Journal of Business Research*, 67, 847–855.
- CISA. (2020). Guidance on the essential critical infrastructure workforce. 19 March. Available at: <https://www.cisa.gov/publication/guidance-essential-critical-infrastructure-workforce> (Accessed: 09 May 2021)
- David, F.R., (2011). *Strategic Management: Concepts and Cases*. 13th Ed. Upper Saddle River, NJ: Pearson Education, Inc.
- Della, H., Araibi, L.M. (2016). The Effect of Product Differentiation on Local Brand Positioning: A Case Study of “Venus” Brand Shampoos in the Algerian Market. *European Journal of Business and Management*, Vol.8, No.21.
- Dobson, P., Starkey, K., Richards, J. (2004). *Strategic Management: Issues and Cases*. 2nd Ed. Padstow, Cornwall: TJ International.
- Hax, A., & Majluf, N. (1986). Strategy and the Strategy Formation Process.
- Heraclous, L., Wirtz, J. (2009). Strategy and Organization at Singapore Airlines: Achieving Sustainable Advantage Through Dual Strategy. *Journal of Air Transport Management*, Vol.15, pp. 274-279. Available from: doi:10.1016/j.jairtraman.2008.11.011
- Karama B., F. & Linge K. (2019) Strategic Factors Influencing Market Share of Telecommunications in Kenya. *Journal of Marketing and Communication*, Vol 2(1) pp. 80-91.
- Kiprotich, E., Gachunga, H., & Bonuke, R. (2018). Influence of Cost Leadership Procurement Strategy on Performance of Manufacturing Firms in Kenya. *European Journal of Business Management*, Vol.3, Issue 1, No.3, pp 32 - 51.
- Knight, G., Moen, Ø., & Madsen, T., K. (2020). Antecedents to Differentiation Strategy in the Exporting SME. *International Business Review*, Vol.29. Available from: <https://doi.org/10.1016/j.ibusrev.2020.101740>
- Obasi Akan Richard S. Allen Marilyn M. Helms Samuel A. Spralls III, (2006), "Critical tactics for implementing Porter's generic strategies", *Journal of Business Strategy*, Vol. 27 Iss 1 pp. 43 – 53 Available from: <http://dx.doi.org/10.1108/02756660610640173>
- Porter, M. (1996). *What is strategy?*. Harvard Business Review, November/December, pp. 61-78.
- Porter, M.E. (1998). *Competitive Strategy: Technique for Analyzing Industries and Competitors*. New York, NY: Free Press.
- Porter, M.E. (1998). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York, NY: Free Press.
- Shake Shack. 2021. COVID-19 Updates. 08 February. Available at: <https://www.shakeshack.com/updates/> (Accessed: 10 May 2021)
- Shake Shack. 2020. *Shake Shack Announces Fourth Quarter and Fiscal Year 2019 Financial Results* (Press Release). 24 February. Available at: <https://investor.shakeshack.com/investors-overview/news/press-release-details/2020/Shake-Shack-Announces-Fourth-Quarter-and-Fiscal-Year-2019-Financial-Results/default.aspx> (Accessed: 10 May 2021)

- Shake Shack. 2020. *Shake Shack Announces First Quarter 2020 Financial Results* (Press Release). 04 May. Available at: <https://investor.shakeshack.com/investors-overview/news/press-release-details/2020/Shake-Shack-Announces-First-Quarter-2020-Financial-Results/default.aspx> (Accessed: 10 May 2021)
- Shake Shack. 2020. *Shake Shack Announces Second Quarter Financial Results* (Press Release). 30 July. Available at: <https://investor.shakeshack.com/investors-overview/news/press-release-details/2020/Shake-Shack-Announces-Second-Quarter-2020-Financial-Results/default.aspx> (Accessed: 10 May 2021)
- Shake Shack. 2020. *Shake Shack Announces Third Quarter Financial Results* (Press Release). 29 October. Available at: <https://investor.shakeshack.com/investors-overview/news/press-release-details/2020/Shake-Shack-Announces-Third-Quarter-2020-Financial-Results/default.aspx> (Accessed: 10 May 2021)
- Shake Shack. 2021. *Shake Shack Announces Fourth Quarter and Fiscal Year 2020 Financial Results* (Press Release). 25 February. Available at: <https://investor.shakeshack.com/investors-overview/news/press-release-details/2021/Shake-Shack-Announces-Fourth-Quarter-and-Fiscal-Year-2020-Financial-Results/default.aspx> (Accessed: 10 May 2021)
- Spanos, Y.E., Zalis, G., & Lioukas, S. (2004). Strategy and Industry Effects on Profitability: Evidence from Greece. *Strategic Management Journal*. 25, 139-165. Available from: 10.1002/smj.369.
- Stankevičiūtė, E., Grunda, R., & Bartkus, E.V. (2012). Pursuing a Cost Leadership Strategy and Business Sustainability Objectives: Walmart Case Study. *Economic and Management*. 17(3), 1200-1206.
- Stonehouse, G., Campbell, D., Hamill, J., & Purdie, T. (2004). *Global and Transnational Business: Strategy and Management*. England: John Wiley & Sons Ltd.
- Thompson, A.A., Peteraf, M.A., Gamble, J.A., & Stickland, A.J. (2018). *Crafting and Executing Strategy*. New York: Mc Graw-Hill Education.
- Ulwick, Anthony W. (1999). *Business Strategy Formulation: Theory, process, and the intellectual revolution*. Westport, CT: Quorum Books.
- Valipour, H., Birjandi, H., & Honarbakhsh, S. (2012). The Effects of Cost Leadership Strategy and Product Differentiation Strategy on the Performance of Firms. *Journal of Asian Business Strategy*. 2(1), 14-23.
- Ward, K., Bowman, C., & Kakabadse, A. (2005) *Designing World Class Corporate Strategies: Value-Creating Roles for Corporate Centres*. Oxford: Linacre House.
- WHO. (2020). WHO timeline - COVID-19. April 27, 2020 <https://www.who.int/news-room/detail/27-04-2020-who-timeline-covid-19>.
- 2019 annual report on U.S. SECURITIES AND EXCHANGE COMMISSION, [online] Available: <https://sec.report/Document/0001620533-20-000006/>.
- 2020 annual report on U.S. SECURITIES AND EXCHANGE COMMISSION, [online] Available: <https://sec.report/Document/0001620533-20-000006/>
- Nugroho, T.W., Nurcahyo, R. (2018). Analysis of Total Quality Management (TQM) implementation in small medium industries
- Cahyani, Z., Nurcahyo, R., Farizal (2020). Popularity Analysis of Mobile Food Ordering Apps in Indonesia

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