

Lotte Group (South Korea)

Embracing “Open Innovation” in E-Commerce for the Post Corona Era

January 2021



Extraordinary Endeavors in Turbulent Times: Asian Innovation, Inclusion, and Impact during COVID-19

A Joint Report by the Asia Business Council and the
Hong Kong University of Science and Technology

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Letter from the Directors

Dear Reader,

As the directors of this joint project by the Asia Business Council and the Hong Kong University of Science and Technology (HKUST), we are delighted to present the results of our study on the extraordinary endeavors of Asian companies in the turbulent times of COVID-19, as companies embrace innovation, promote inclusion, and drive social and economic impact across the region.

We hope that this series of eight case studies will illustrate the silver linings of the pandemic – in these trying times companies are more than ever realizing the importance of social responsibility, reimagining and reinventing traditional forms of philanthropy, and leveraging technology as a force for good in ways that will likely last well beyond the crisis.

While the articles are written with business leaders and business students in mind, the stories we tell have relevance for a wider audience as they show how Asian corporates took the lead in engaging a broad eco-system, including governments, academic institutions, religious groups, and the public health sector, in addition to start-ups, small and medium enterprises, and even competitor companies within the private sector.

True to the times of COVID-19, the smooth collaboration between our two organizations took place without any face-to-face meetings; all the research and interviews were conducted virtually and across multiple time zones. We are especially grateful to Asia Business Council Chairman Lim Boon Heng and Vice-chairman Daniel Tsai whose companies Temasek and Fubon Group were the first two companies to take part in the study. We would also like to thank the unfailing support of Mark Clifford, Executive Director of the Asia Business Council, and Roger King, Senior Advisor and Founding Director of the Tanoto Center at HKUST, without whom we could not have completed the project.

Amidst the continued risk and uncertainty surrounding the pandemic, we hope that this report will contribute to the ongoing discussions on stakeholder capitalism and the debates on the role of companies in the local and international community, in times of crisis as well as times of relative normalcy. Above all, we hope that you will enjoy reading the articles as much as we enjoyed writing them, and that the report will be a source of positivity and inspiration for audiences around the world.



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Pauline Yeung

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Lotte Group (South Korea)

Embracing “Open Innovation” in E-Commerce for the Post Corona Era

By Winnie Peng, Pauline Yeung, and Chun Hei Hung

Lotte Group

Region

South Korea

Year of Founding

1967

Headquarters

Seoul

Type of Company

Listed Company, Family Business

Number of Employees

119,000 (South Korea 71,000,
Overseas 48,000) as of June 2020

Total Revenues in 2019 (KRW)

74 trillion

Total Revenues in 2019 (USD)

63.8 billion

Major Businesses

Retail, Food and Beverage, Chemicals,
Construction, Manufacturing,
Tourism, Finance

COVID-19 Initiatives in a Nutshell

Launch of E-Commerce App Lotte On; Support Programs for Small and Medium Sized Business Partners; Donation of COVID-19 Diagnostic Kits; Aid for Underprivileged Children, Elder Citizens and Healthcare Workers

The following case study is based on written correspondence with Lotte Group in September 2020 and November 2020, and an interview with Tina Youhyun Choi, Team Leader of the Future Strategic Planning Team at Lotte Shopping, on October 6, 2020.

Introduction

“Since the launch of Lotte On, it has been evolving every day, every minute, every second,” exclaimed Tina Choi, Team Leader of Lotte Shopping’s Future Strategic Planning Team, six months after the e-commerce app was launched as a key component of Lotte’s “preparation for rebound in the post corona era.”¹

While Lotte Group is currently the fifth-largest conglomerate in South Korea involved in industries such as retail, food and beverage, chemicals, construction, and tourism, the success of the Lotte On app, Choi continued, “has become a matter of our business’ survival.”

Indeed, as much as Lotte Group has engaged in traditional philanthropy in response to the coronavirus crisis, notably by donating 1 billion won (just under \$1 million) to welfare facilities, providing food supplies to vulnerable children, delaying rents for small and medium enterprises, supporting local farmers in agriculture and fisheries, and providing support to countries like Indonesia and Pakistan,² the *chaebol* is very much focused on its business strategy for the post COVID-19 world.

The pandemic brought forward the digital transformation of Lotte Group, as it has done for businesses globally. In April 2020, the Group’s retail arm, Lotte Shopping, launched Lotte On to integrate the online businesses of seven Lotte affiliates, namely Lotte Department Store, Lotte Mart, Lotte Super, LOHB’s (Love, Health & Beauty Store), LOTTE.com, Lotte Hi-Mart, and Lotte Home Shopping.³

Previously, Lotte's e-commerce apps and their customers' data were not centralized: There was a Lotte Department Store app, a Lotte Mart app, and so on, and collating all the data from these separate apps was very difficult. While Lotte Shopping had always planned to resolve these issues, the timing of the rollout of Lotte On coincided with COVID-19, which was in many ways a wake-up call for Lotte. Although Lotte On had been two years in the making, it was the surge in online shopping during the pandemic that made Lotte Shopping accelerate its launch.

This was also consistent with Lotte Shopping's plans to close down some of its brick-and-mortar shops, which had been facing fierce competition from other e-commerce players for some time. Lotte Shopping, which had 17.6 trillion won (\$416 billion) in sales in 2019, suffered a net loss of 840 billion won (\$772 million) the same year,⁴ and the pandemic sped up its restructuring and downsizing.⁵ In fact, Lotte Shopping planned to close 244 physical stores during the 2020 to 2022 fiscal years.⁶

The Initial Launch of Lotte On

Predictably, sales activity on Lotte On was somewhat tied to the severity of the COVID-19 situation in South Korea. As one example, during the enforcement of social distancing level 2.5 in the Seoul Capital Region in the last weekend of August, sales of "Lotte On" increased by 37.2 percent compared to the previous month.⁷ (The government-mandated social distancing levels in South Korea are based on a scale of 1 to 3, where 1 is the most relaxed and 3 is the most stringent.⁸)

Lotte On also came up with promotions that were directly related to the pandemic. Since people were spending more time at home, Lotte On held a special exhibition in August, "The God of Tidying Up the House" ('정리의 신 기획전'), to offer discounts on home and living products.⁹ Lotte On also offered e-coupons as gifts for the Chuseok harvest festival that began in late September, as social gatherings were cancelled and digital presents became more popular.¹⁰

Apart from online promotions, Lotte On also conducts big data analysis on spending patterns in collaboration with Lotte Members, a membership service that allows Lotte customers to save and use points during purchases. Lotte Members boasts 39 million registered members, or 76 percent of the total population of South Korea. Through "hyper-personalization" services, Lotte On hopes to reduce the amount of time its consumers need to locate suitable products and services, and to improve the recommendations it provides to its customers.

As of October 2020, Lotte On had around 35 million user sessions per month and 13.5 million monthly active users. Customers in their 30s comprised 38 percent of all customers, followed by customers in their 40s who comprised 34 percent of the customer base, making these the two largest segments by age group.

“Open Innovation” in a Large Conglomerate

But beyond the sheer reach of the app, one of the most interesting aspects of Lotte On is arguably its belief in “open innovation,” or the practice of sourcing ideas and solutions from internal as well as external organizations. While the app was launched less than a year ago, an eco-system is already emerging in which Lotte On collaborates with start-ups and innovators in South Korea’s digital economy.

One of the key enablers of “open innovation” in Lotte On and the Lotte Group in general is Lotte Accelerator, the conglomerate’s venture capital arm. Like similar programs at other Korean *chaebols*, Lotte Accelerator leverages Lotte’s business infrastructure and partnerships with government organizations to support entrepreneurs and help their companies grow on a national and global scale. Since its establishment in 2015, Lotte Accelerator has invested in more than 50 startups in fintech, logistics, A.I., robotics, and other areas that could have synergies with the wider Lotte group.

Lotte On is currently collaborating with a number of Lotte Accelerator’s portfolio companies, including online convenience store Nowpick, quick delivery company PLZ, beauty marketing start-up LYCL, seller management tool provider Seller Hub, live commerce solution Mobidoo, F&B co-working space Wecook, and daily discounted products company Last Order.

From “One Hour Delivery” to Beauty Marketing



Lotte On’s pilot “one hour delivery” service in the Jamsil neighborhood in Seoul is a good example of a win-win collaboration between the e-commerce app and Lotte Accelerator’s portfolio companies. Introduced over a summer of social distancing, the Jamsil service allows customers to order about 600 daily necessity products online, including home cooking products offered by Lotte Mart, and beauty and health products offered by LOHB’s.¹¹

As long as the product is purchased between 11:00 a.m. and 1:00 a.m., consumers are eligible for the service and can expect orders to be delivered within one hour.¹² Products are stored at warehouses operated by Nowpick, which is also

responsible for product selection and packaging.¹³ On the other hand, delivery is handled by PLZ.¹⁴

Another good example is Lotte On's collaboration with beauty marketing start-up LYCL. According to an agreement signed in August 2020, LYCL will promote products sold on Lotte On's live commerce channel on unpa.me, LYCL's review and content platform for K-beauty products which boasts more than 1 million users.¹⁵ Lotte On will also conduct marketing on LYCL's Instagram influencer marketing platform palette.me.¹⁶ The goal is to strengthen social network service (SNS) viral marketing,¹⁷ which has only become more important during the pandemic.

deMonZ x Cheetah

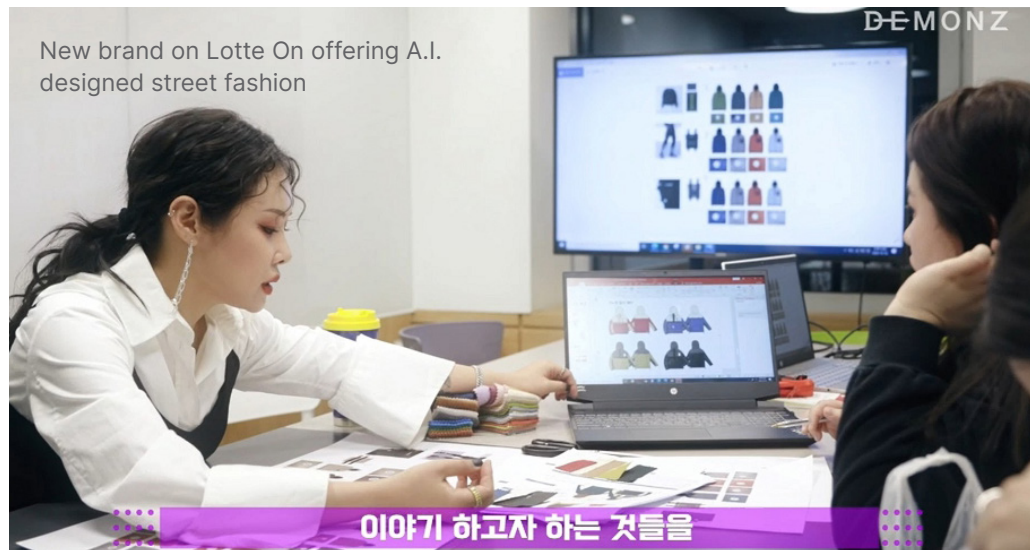
But Lotte On's efforts to embrace "open innovation" are not limited to working with start-ups invested by Lotte Accelerator. With executives like Choi who are focused on opportunities arising from the Fourth Industrial Revolution, perhaps it should come as no surprise that Lotte On announced a new fashion brand *deMonZ* on November 3, 2020, in collaboration with A.I. start-up Designovel, and with rapper Cheetah as the "project muse."¹⁸ This was an experiment in online transformation in the post-coronavirus era.

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While "de" comes from design, the "M" and "Z" in the brand's name represent Millennials and Generation Z, referring to young people born from the early 1980s to mid-to-late 1990s, and from the mid-to-late 1990s to early 2010s respectively. According to Choi, Lotte On hopes the brand will turn "on" the inspiration for the "MZ" generation.

The team at Lotte On found a partner in Shin Ki-young, the CEO of Designovel and a Millennial himself, who founded a series of failed start-ups before launching the data-based fashion technology company.¹⁹ In the collaboration with Lotte On, Designovel designed sweatshirts, hoodies, and jackets²⁰ by analyzing the global trends of street fashion with its A.I. engine, picking up products that sell

well, inputting designs, and creating clothes for sale exclusively on Lotte On's digital platform. According to media reports, the A.I. technology allows for up to 10,000 designs to be completed in just one second and is a better predictor of the popularity of the sales items than a merchandiser with 10 years of experience.²¹



Digital Marketing Campaign

While traditional marketing relies on advertisements at physical retail outlets like department stores, social media channels such as blogs, YouTube, and Instagram have become more important with the shift toward online shopping since

the onset of COVID-19. To that end, rapper Cheetah was invited to be the brand ambassador for deMonZ, and Lotte On created a series of videos that identified three insight keywords for the entire fashion A.I. project.

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The first insight keyword is “contain” (담다) and refers to containing A.I. In the first video, Cheetah recalls her interest in fashion from a young age, and her experiences of not being able to find what she wanted when she had an interest in a certain type of clothing.²² When an engine “containing” A.I. is able to come up with new products based on the photos that she provides, she reflects that technology has truly become very advanced, which is, in her view, a positive development.²³

The second insight keyword is “protect” (지키다) and refers to protecting the environment. Instead of manufacturing clothes that might not be sold, deMonZ only produces products for consumers who have purchased it. Indeed, in the second video, Cheetah says that she wants to “protect all the people who are precious to me, the earth that I live in, as well as the dogs and cats,” and that the eco-friendly element of the project was an important factor in convincing her to be its “muse.”²⁴

The third insight keyword is “change” (바꾸다) and refers to new ways of doing things. In Cheetah’s words, “It is time to move and change. Not changing to match the changing world but changing myself on my own initiative.”²⁵ To be sure, as a final keyword, “change” seems to be a fitting theme. Choi and the Future Strategic Planning Team at Lotte Shopping emphasize that it is time to move beyond price competition to build a new eco-system for e-commerce –

an eco-system that leverages A.I. platforms and other solutions in information technology. This is particularly true with the sustained shift toward digital consumption during the pandemic, and the team seems intent on meeting this challenge, starting with online fashion.

Future Outlook

Having said that, fashion is not the only area that Lotte On is focused on. In fact, Choi's current focus is on something quite different. "COVID-19 has led to a surge in our fresh food and beverage retail business, which grew from 20 percent of sales last year to just under 30 percent this year. In fact, the online grocery market is estimated to grow almost 40 percent year-on-year in 2020," Choi said. "But online sales penetration in the food category is still under 25 percent, even after COVID-19. This compares to the average penetration of 37 percent for online retail sales in general in South Korea, which is also among the highest in the world. The fresh food category thus offers exceptionally high growth potential," she continued.

Indeed, the "untact economy" is a popular term in South Korea, where the word "untact" comes from a combination of the prefix "un" with the word "contact." The concept is that of a contact-free economy. As consumers prefer to eat at home and minimize their trips to the market in light of the virus situation, Lotte On appears keen to leverage on its existing supply chains and delivery services to offer "untact" solutions.

According to Choi, Lotte On ran a pilot test for the delivery of groceries within two hours and will expand this service, where products are sent through an automated



Lotte Auto Fresh Center is an automated logistics center equipped with 19 robots

rail to the packing zone in stores before being picked up and delivered to the customer. Lotte On will also utilize its fully automated warehouse located in Gimpo and try to expand online grocery services for overnight delivery to rural areas.

In addition, Lotte's Auto Fresh Center, which opened in Gyeonggi Prefecture in March 2019, is equipped with 19 robots that can pick up 3,000 items of products stored at room temperature and place them into 7,200 designated baskets, which are then moved to a conveyor belt line for the addition of frozen food and fresh food.²⁶ With less than seven minutes needed from order to packing, the automated logistics center is expected to play a bigger role in the post-coronavirus era.²⁷

And while fresh food and grocery may be the top priority for now, Choi notes that Lotte On will continue to improve and optimize its various functions for different products and services.

Conclusion

To be fair, as much as Lotte On takes center stage for Lotte as the group seeks to rebound from the coronavirus crisis, the South Korean conglomerate is a corporate giant with many other businesses, affiliates, and employees in multiple sectors and industries globally.

For a glimpse into how Lotte's top executives might be thinking about the pandemic, it may be worthwhile to read "BC and AC," or "Before Corona and After Corona," a booklet published in May 2020 by the group's research institutes, Lotte Academy and Lotte Institute of Economy and Business Strategy.²⁸ Distributed to all C-suite executives at Lotte Group,²⁹ the booklet analyzes the pandemic from historical, economic, political, technological, and social angles, in addition to offering a public health perspective.³⁰

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While Lotte On exemplifies the type of digital transformation taking place across many companies in various economies, the authors of the booklet opine that for South Korea this is an acceleration of pre-COVID-19 trends – rather than a "revolution" – given that the country already had one of the most sophisticated

technological infrastructures in the world.³¹

Indeed, South Korea could well be one of the countries that is more prepared for the "new normal" in the post-coronavirus era, in which there is what "BC and AC" calls the rapid strengthening of the "untact phenomenon."³² The challenge for Lotte is whether it too can adapt, transform, and emerge as a "winner" from a crisis that is unlike any it has previously seen.

Endnotes

- 1 “Lotte’s Preparation for Rebound in the Post Corona Era.” *Lotte Group*. June 4, 2020. <https://www.lotte.co.kr/global/en/pr/newsView.do?pageNo=1&srchNewsSeq=1416&srchField=title&srchKey=>
- 2 “Supporting People Around the World to Overcome the Crisis.” *Lotte Group*. June 4, 2020. <https://www.lotte.co.kr/global/en/pr/newsView.do?pageNo=1&srchNewsSeq=1415&srchField=title&srchKey=>
- 3 “Lotte’s Preparation for Rebound in the Post Corona Era.” *Lotte Group*. June 4, 2020. <https://www.lotte.co.kr/global/en/pr/newsView.do?pageNo=1&srchNewsSeq=1416&srchField=title&srchKey=>
- 4 “Lotte Shopping: Financial Highlights.” http://www.lotteshoppingir.com/eng/financial/financial_index.jsp
- 5 “Lotte Shopping to Sell Stores.” *Retail in Asia*. May 27, 2020. <https://retailinasia.com/in-markets/lotte-shopping-to-sell-stores/>
- 6 Cho, Christine and Im, Jiun. “South Korea Retail: Prefer Names with Higher Growth Visibility and Valuation Metrics.” *Goldman Sachs Research*. Nov. 18, 2020.
- 7 “Lotte On First Monday Event.” (in Korean) *Chosun Biz*. Sept. 3, 2020. https://biz.chosun.com/site/data/html_dir/2020/09/03/2020090302746.html
- 8 Government of the Republic of Korea. “All about Korea’s Response to COVID-19.” Oct. 7, 2020.
- 9 “Lotte On Holds Exhibition ‘The God of Tidying Up the House’ – Up to 18% Off.” (in Korean) *Edaily*. Aug. 23, 2020. <https://www.edaily.co.kr/news/read?newsId=01134886625870272&mediaCodeNo=257>
- 10 “E-coupons gaining popularity for Chuseok holidays.” *Korea JoongAng Daily*. Aug. 23, 2020. <https://koreajoongangdaily.joins.com/2020/08/23/business/industry/chuseok-gift-mobile-coupons/20200823180100321.html>
- 11 “Expansion of Lotte On’s One Hour Delivery Service.” (in Korean) *Donga.com*. Aug. 26, 2020. <https://www.donga.com/news/Culture/article/all/20200826/102665929/1>
- 12 Ibid.
- 13 Ibid.
- 14 Ibid.
- 15 “Lotte On Collaborates with Beauty Start-up Lycle.” (in Korean) *Hankyung.com*. Aug. 11, 2020. <https://www.hankyung.com/life/article/202008116465g>
- 16 Ibid.
- 17 Ibid.
- 18 deMonZ. <https://www.demonz.co.kr/>
- 19 Park, Ji-won. “Startup uses A.I. for fashion design.” *The Korea Times*. July 24, 2019. http://www.koreatimes.co.kr/www/tech/2019/07/129_272808.html
- 20 deMonZ. <https://www.demonz.co.kr/>
- 21 Jin, Min-Ji. “Lotte On offers computer-designed clothing.” *Korea JoongAng Daily*. Nov. 3, 2020. <https://koreajoongangdaily.joins.com/2020/11/03/business/industry/lotte-lotte-shopping-lotte-on/20201103175006724.html>
- 22 deMonZ. <https://www.demonz.co.kr/>
- 23 Ibid.
- 24 Ibid.
- 25 Ibid.
- 26 “Lotte’s Preparation for Rebound in the Post Corona Era.” *Lotte Group*. June 4, 2020. <https://www.lotte.co.kr/global/en/pr/newsView.do?pageNo=1&srchNewsSeq=1416&srchField=title&srchKey=>
- 27 Ibid.
- 28 Ibid.
- 29 Ibid.
- 30 Lotte Academy. “Before Corona and After Corona.” (in Korean) May 1, 2020.
- 31 Ibid.
- 32 Ibid.