****

9B17A032

PokÉmon Go: Virtual Invading Reality[[1]](#endnote-1)

Xiaoke Xu wrote this case under the supervision of Professor Neil Bendle solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

*This publication may not be transmitted, photocopied, digitized, or otherwise reproduced in any form or by any means without the permission of the copyright holder. Reproduction of this material is not covered under authorization by any reproduction rights organization. To order copies or request permission to reproduce materials, contact Ivey Publishing, Ivey Business School, Western University, London, Ontario, Canada, N6G 0N1; (t) 519.661.3208; (e)* [*cases@ivey.ca*](mailto:cases@ivey.ca)*;* [*www.iveycases.com*](http://www.iveycases.com)*.*

Copyright © 2017, Richard Ivey School of Business Foundation Version: 2017-06-08

The release of Pokémon GO on July 6, 2016, was an unexpected and unprecedented hit in the mobile game market. The game, which overlaid virtual items and creatures onto the physical world, allowed smartphone users to seek out and capture a variety of virtual monsters in real-world locations, with the ultimate goal of completing the collection of 151 Pokémon on the Pokédex (the official catalogue of monsters). The rocketing popularity of the game gave rise to large gatherings of players at hot PokéStops, where they hunted for monsters. Pictures of people playing Pokémon GO were widely circulated on social media, helping to create great buzz for the game. The impromptu gatherings also generated considerable unhappiness on the part of local residents whose communities were invaded by monster hunters. The ire of anti-Pokémon GO activists also led to further publicity. The great popularity—even notoriety—of the game put augmented reality (AR) under the spotlight and highlighted the opportunity of such technology to change the way we behave.

Gotta Catch ‘em All

Pokémon GO was jointly developed by the San Francisco-based firm Niantic Inc. (Niantic) and The Pokémon Company, based in Japan. Underwriting the enterprise was the Japanese video game giant Nintendo, which reportedly owned 32 per cent of Pokémon and 7 per cent of Niantic.[[2]](#endnote-2) Niantic, which was initially founded as an internal start-up within Google, left its parent company in 2015 to focus on examining how location services could be applied to gaming and entertainment. It had been working in the field since 2012, when it developed its first AR game, called Ingress.

Pokémon, short for the original Japanese title, “Pocket Monsters,” was originally a popular trading card game managed by The Pokémon Company. Over the years, Pokémon had spread to video games, animated television shows, movies, comic books, and toys. This activity ensured that Pokémon had established a strong presence in the North American market. Many potential customers were aware of Pokémon, and the franchise was even a source of considerable nostalgic pleasure for some.

Within the first few days of Pokémon GO’s release, the number of daily users on Android devices in the United States grew dramatically. On July 12, 13.2 million Android device owners were estimated to be using the application (app), which was almost double the number from just four days earlier, July 8 (see Exhibit 1). By the end of July, Pokémon GO had become the first mobile app to reach 10 million downloads within a week. (Later in 2016, Super Mario Run broke this record with 10 million downloads in one day.[[3]](#endnote-3)) In its second week, Pokémon GO had exceeded 40 million downloads worldwide.[[4]](#endnote-4) According to SimilarWeb, a data analytics firm, the total number of players was comparable with the number of Twitter users.[[5]](#endnote-5) Pokémon GO’s launch in the U.S. market was so popular that, when it finally entered the Japanese market 10 days later, the iOS and Android platforms crashed due to the unprecedented volume of downloads.[[6]](#endnote-6) The game also did well in maintaining players’ interest sufficiently to keep them playing the game; it was ranked second in terms of its 30-day retention rate, ahead of games that seemed to be relatively addictive, including Clash of Clans and Candy Crush.[[7]](#endnote-7)

Although the game was free to download, in-app purchases could occur when consumers bought special items in the game. To make in-app purchases, players bought “Poké coins,” which came in different pack sizes at prices ranging from $0.99 to $99.99.[[8]](#endnote-8) These purchases generated significant sums of money for the company. Pokémon GO surpassed $500 million in global consumer spending across the Google Play and iOS platforms in just 60 days. This achievement compared very favourably with the 200 days and 400 days, respectively, for Candy Crush and Clash of Clans to meet the same milestone.[[9]](#endnote-9) With an estimated average revenue of $2.3 million a day, the app was on track to reach $1.1 billion revenue per year.[[10]](#endnote-10)

In-app customer purchases were not the only source of income. Niantic also obtained additional revenue through partnerships with local retailers. For example, in September 2016, McDonald’s Japan and SoftBank Group Corp. (SoftBank) struck deals to categorize Japan’s McDonald’s restaurants and SoftBank’s branches as PokéStops or gyms, encouraging players to visit the locations.[[11]](#endnote-11) The advertising potential of Pokémon GO could be compared with that of the Super Bowl, a major annual U.S. sporting event. The Super Bowl reached 125 million television viewers per year, whereas Pokémon GO had 21 million active users daily. The advertising revenue generated by the Super Bowl was about $275 million for an average of 55 ads shown.[[12]](#endnote-12) With a much wider viewer base, the yearly ad revenue potential of Pokémon GO was enormous—potentially far exceeding the in-app spending revenue.

Pokémon’s copyright owner, Nintendo, also benefited substantially, as its market capitalization surged above $30 million due to the popularity of the game. Moreover, this success led the market to revise its expectations for upcoming games to be launched by Nintendo in March 2017.[[13]](#endnote-13) The chief executive officer (CEO) of The Pokémon Company, Tsunekazu Ishihara, suggested that sales of other Pokémon products had increased 30 per cent, to 50 per cent over predictions, due to the popularity of the AR game.[[14]](#endnote-14)

However, the wild optimism about Nintendo’s prospects did not necessarily mean massive profits. Only a short time after the launch in July 2016, Nintendo publicly stated that the success of Pokémon GO would not lead the company to increase its earnings forecast. In response to this statement, selling from domestic investors and hedge funds led the firm’s share price to plunge 17.2 per cent.[[15]](#endnote-15) However, some analysts still believed that the fall would be temporary and the excitement generated by the game would eventually bring bottom-line results for Nintendo, driven by increased product sales.[[16]](#endnote-16)

Niantic was also looking to expand its product offerings to further fasten its grip on the AR gaming market. The company introduced the Apple Watch version of Pokémon GO in September 2016. The new version utilized the fitness-tracking feature embedded in the Apple Watch to allow players to “hatch” monster eggs and track nearby Pokémon; however, this watch-based version still required players to switch to the mobile version to capture the monster.[[17]](#endnote-17) Meanwhile, Pokémon GO Plus, a wearable Bluetooth device, was released in the market as an accessory that performed a supplementary role similar to that of the Apple Watch, allowing players to track nearby Pokémon. The Pokémon GO Plus device reminded players to capture the monsters, but the players still needed a smartphone to accomplish the capture. The new device was priced at $34.99—considerably cheaper than a smartwatch—to appeal to players with tight budgets.[[18]](#endnote-18) As many had doubts about the potential reception of this new accessory, production was small, and the devices were sold out by November. This stock-out caused frustration and complaints from players, leading Nintendo’s president, Tatsumi Kimishima, to issue a statement of apology, in which he said, “Demand far exceeded our expectations, and production has not caught up, leading to product shortages.”[[19]](#endnote-19)

Who was Playing The Game?

Pokémon GO fever swept through the market at such an incredible pace that, in July 2016, 52 per cent of Americans surveyed and 75 per cent of Canadians surveyed remarked that they knew something about the app (see Exhibit 2). Google engineers confirmed that user traffic was 50 times higher than expected and had caused technical outages.[[20]](#endnote-20)

Although many suspected that the game would be most popular among the young, the actual demographics skewed a little older: 37 per cent of those 13 to 17 years old were reported to have downloaded the game, compared with 44 per cent of those between the ages of 18 and 34.[[21]](#endnote-21) Both groups spent considerable money on the app: 35 per cent of Pokémon GO in-app spending in the United States in July was by those 25 to 34 years old compared with 16 per cent by those aged 18 to 24 (see Exhibit 3). The game had a strong awareness among younger players; data from Canada showed that 63 per cent of those in the 18–34 age group were very aware of the game, while almost half of the population between the ages of 13 and 17 was very aware of it (see Exhibit 4). Indeed, up to August 2016, those between the ages of 18 and 34 spent an average of 2.1 hours every day and walked a total distance of 15.2 kilometres to play the game.[[22]](#endnote-22) Almost half of the respondents from Canada said they had spent more time with Pokémon GO than on social media in July 2016.[[23]](#endnote-23)

The game was so intriguing that its fans admitted that playing it had severely interfered with their regular routines. Research revealed that the game was consuming time outside of the “mobile time” pool, which meant that instead of taking time off from other apps, players were using time that they would previously not have spent on mobile phones to play Pokémon GO.[[24]](#endnote-24) About one-third of those surveyed believed that Pokémon GO had taken over their life to the extent that they had skipped some of their daily activities; two out of 10 players had missed classes or work because of the game.[[25]](#endnote-25) The popularity seemed to still be spreading in September, as 20 per cent of those who had not yet joined the hunt indicated their intention to do so.[[26]](#endnote-26)

A Social App without Social Interaction

Pokémon GO’s success story was bewildering to some. The app itself seemed quite different from other traditionally popular apps, even disregarding the AR factor. Unlike many other mobile apps, Pokémon GO did not include a social function—that is, the app did not enable players to connect or communicate with each other within the game. This characteristic meant that players were enjoying the experience on their own; nevertheless, the game drove people out of their homes, and they inevitably met other players in real locations. The physical encounters created unique bonds between players and thus formed a new type of community in (non-augmented) reality. “If someone’s at a PokéStop and they have their phone out, you can just assume they’re playing,” a software engineer in Baltimore commented about the phenomenon.[[27]](#endnote-27) The very lack of social features in Pokémon GO was promoting in-person interactions, while many other popular apps that allowed people to connect online kept users at home, staring at tiny screens.

The modern mobile lifestyle had been cited as a key cause of people becoming less active; however, Pokémon GO seemed to counter that idea. A recent study showed that avid users saw their step counts jump to more than 15,000 a day. (A common health recommendation suggested taking 10,000 steps every day to keep fit.) In some ways, Pokémon GO was working miraculously—even better than some fitness apps—to drive people outside and help them become more active. John Hanke, the CEO of Niantic, was optimistic about the possible benefits of the game as he spoke about it as an alternative way to encourage people to go out and visit places: “The sad thing is we have a lot of great parks that people just don’t use. . . . We want to pull people back out into public spaces.”[[28]](#endnote-28)

Make the Stop

Some of the key features of Pokémon GO were PokéStops and Pokémon gyms. Both were physical locations where players could find items to help them lure or capture monsters or could join teams to fight other teams with monsters. One of the main reasons that Pokémon GO became a social phenomenon was that the monster hunters became very visible when they gathered by the hundreds or thousands at PokéStops.

Given the excitement of the PokéStops, the developer of Pokémon GO was also exploring the potential to monetize that factor of the game. One obvious option was for the game to sell advertising to retail stores or other special locations, where players could be driven. Another idea was to sell special access to players to enter a specific location to play. Before the developers turned any concept into reality, retailers were already leveraging the game’s popularity to attract traffic to their stores. For instance, the Australian supermarket group Woolworths Limited used its Facebook page to post a list of tips for gamers to catch Pokémon in its stores.[[29]](#endnote-29)

In addition to generating income, the game’s developer also wanted to create more social impact by utilizing the widespread player network it recruited. In January 2017, Pokémon GO announced a partnership with Global Goals, a global initiative dedicated to sustainable development, which involved 193 countries, through which it would set up 17 PokéStops around the site of the World Economic Forum in Davos, Switzerland.[[30]](#endnote-30) It was the first time that AR technology had been used to raise awareness and inspire participation in social causes. It also provided an example of how technology could create a bridge between entertainment and social impact and, more importantly, of how technology could change the way people interacted with each other and society.

Hurdles on the Hunt

Despite its popularity in North America, Pokémon GO was not welcome everywhere in the world. In Gujarat, India, a petition was made to the high court to ban the game because the images of eggs displayed in some worship locations were considered to be inappropriate for religious reasons.[[31]](#endnote-31) This controversy occurred even before the game was officially launched in India, as many people had used workarounds to play versions of the game available from other countries, where it had been released earlier than in India. This sort of challenge—the game treading on sensitive locations—was not exclusive to India. In the United States, gamers had to contend with certain places, such as Arlington National Cemetery, the military cemetery near Washington D.C., being considered inappropriate as game locations. It turned out that avid players were willing to go to almost any length to catch pocket monsters, often disregarding normal social constraints regarding where people could trespass. As a response, the game developer promised to keep sensitive areas off limits to avoid controversy.[[32]](#endnote-32)

The game’s release in China, an attractive target market for many mobile apps, also encountered obstacles, as Google Maps services were not accessible in the area. Nevertheless, Nintendo expressed its desire to solve the problem and unlock the Chinese market.[[33]](#endnote-33)

Technical barriers and the lack of official permission from governments were only some of the problems Pokémon GO encountered. By encouraging large numbers of people to descend on certain areas, the game’s passionate hunters disturbed residents near PokéStops. Photos on social networks generated buzz by showing huge gatherings in particular locations. It was not difficult to find notices from angry citizens forbidding Pokémon GO players to enter their community park or municipal officials talking about the damage caused by hunters. As upsetting as it was, such free advertising lured people who were not familiar with the game to find out more about it. Some probably joined the hunt eventually after learning of the game through protesters.

The Augmented Future of Reality

The obsessive interest in Pokémon GO seemed like it could spark another round of investment in AR technology. The possibilities presented by Niantic’s game had shown that the industry had considerable promise. AR developers and investors were also excited about the buzz that their technology was creating. An executive of an AR start-up commented, “We love what they’re doing. We think it is a gateway to the whole new future we’re building.”[[34]](#endnote-34) The optimism was not universally shared. There were concerns about the practical potential of the current technology, which was partly reflected in an apparently decreasing enthusiasm for the game after the initial excitement faded. By September 2016, the number of people making in-app purchases in Pokémon GO had fallen 79 per cent from its mid-July peak.[[35]](#endnote-35)

Nevertheless, excitement about the future of AR remained high in many places. The fact that retail brands could utilize the technology to increase footfalls in stores provided an exciting alternative to traditional advertising and promotions. Such inventive marketing might help bricks-and-mortar stores fend off competition from online sellers. Major companies also started to explore the idea of leveraging AR technology to support different functions of their businesses. Microsoft launched several projects, including virtual car showrooms that allowed consumers to preview the visual effects of their customizations and a video-messaging app that let people work remotely on the same object.[[36]](#endnote-36) The development of next-level AR devices would involve much greater technical complexity, as the devices would need to instantly understand the physical environment and provide relevant information or feedback to users. This process could require substantive calculation and computation, which could lead to heavy and less user-friendly device prototypes. Despite this possibility, some were confident that such technological barriers were there simply to be broken.

Niantic CEO Hanke was optimistic about the future of technology in general. He insisted that the solution to technological overload was more technology. Technology had been blamed for keeping people indoors, but there was also a potential for mobile technology to lure people out of their houses. He almost believed that his game delivered a therapeutic experience to people as it helped “take your mind off other things.” The “active” aspect of the app would become the philosophy for running Niantic: “I’m not going to go out and say that we’ve changed the world in a grand way, but we are going to try to change it at a very incremental level across a whole bunch of people.” Speaking about the future of AR technology, Hanke said, “We’ll just see what, ultimately, we can achieve with that.”[[37]](#endnote-37)

Exhibit 1: Number of Pokémon GO daily users on android devices in the United States, July 6–16, 2016 (in millions)

Note: Based on a Verto Analytics survey of users in the United States, 18 years and older, July 6–16, 2016; Android devices only.

Source: “Number of Pokémon Go Daily Users on Android Devices in the United States as of July 16, 2016 (in Millions),” Statista, accessed February 1, 2017, www.statista.com/statistics/589330/number-android-Pokémon-go-users-us/.

Exhibit 2: Level of awareness of Pokémon GO in the United States as of July 18, 2016

Note: Based on 1,005 respondents in the United States, 18 years and older, July 17–18, 2016.

Source: “Level of Awareness of Pokémon Go in the United States as of July 18, 2016,” Statista, accessed February 1, 2017, www.statista.com/statistics/589951/Pokémon-go-awareness-usa/.

Exhibit 3: Share of Pokémon GO in-app spenders in the United States as of July 2016, by age group

Notes: Based on a SliceIntelligence panel of more than 4 million online shoppers in the United States, July 2016; broader industry metrics may vary.

Source: Adapted from “Distribution of Pokémon GO In-App Spenders in the United States as of July 2016, by Age Group,” Statista, accessed February 1, 2017, www.statista.com/statistics/589598/share-Pokémon-go-in-app-spenders-us-age/.

Exhibit 4: Level of awareness of Pokémon GO in Canada as of July 2016,  
by age group

Note: Based on a survey of 1,100 respondents in Canada, 13 years and older, July 20–25, 2016.

Source: “Level of Awareness of Pokémon GO in Canada as of July 2016, by Age Group,” Statista, accessed February 1, 2017, www.statista.com/statistics/590348/Pokémon-go-awareness-by-age-group-canada/.

Endnotes

1. This case has been written on the basis of published sources only. Consequently, the interpretation and perspectives presented in this case are not necessarily those of The Pokémon Company or any of its employees. [↑](#endnote-ref-1)
2. Leo Lewis, “Nintendo Hit after Playing Down Pokémon Go Effect,” *Financial Times*, July 25, 2016, accessed February 1, 2017, www.ft.com/content/4cb1092a-523a-11e6-befd-2fc0c26b3c60. [↑](#endnote-ref-2)
3. “Fastest Mobile Games to Reach 10 Million Downloads Worldwide as of December 2016,” Statista, accessed February 1, 2017, www.statista.com/statistics/589405/fastest-mobile-games-reach-10-million-downloads-worldwide/. [↑](#endnote-ref-3)
4. Christopher Mims, “‘Pokémon Go’ Surged by Building Community,” *Wall Street Journal*, July 25, 2016, accessed February 1, 2017, www.wsj.com/articles/pokemon-go-surged-by-building-community-1469419260. [↑](#endnote-ref-4)
5. Kurt Wagner, “How Many People Are Actually Playing Pokémon Go? Here’s Our Best Guess So Far,” Recode, July 13, 2016, accessed February 1, 2017, www.recode.net/2016/7/13/12181614/Pokémon-go-number-active-users. [↑](#endnote-ref-5)
6. Lewis, op. cit. [↑](#endnote-ref-6)
7. Kate Donahue, “In an Industry First, Pokémon GO Hits $500M in 60 Days,” App Annie, September 8, 2016, accessed February 1, 2017, www.appannie.com/insights/top-trending-apps/industry-first-pokemon-go-hits-500m/. [↑](#endnote-ref-7)
8. All currency amounts are shown in U.S. dollars. [↑](#endnote-ref-8)
9. Donahue, op. cit. [↑](#endnote-ref-9)
10. Tom Gerencer, “Pokémon GO Money: A Game Worth $29 Billion,” Money Nation, August 1, 2016, accessed February 1, 2017, http://moneynation.com/pokemon-go-money/. [↑](#endnote-ref-10)
11. [Donahue,](https://www.appannie.com/insights/top-trending-apps/industry-first-pokemon-go-hits-500m/) op. cit. [↑](#endnote-ref-11)
12. Gerencer, op. cit. [↑](#endnote-ref-12)
13. Leo Lewis, “‘Pokémon Go’ Shows Nintendo the Promise of Mobile,” *Financial Times*, July 11, 2016, accessed April 4, 2017, www.ft.com/content/237ab9e6-4724-11e6-b387-64ab0a67014c. [↑](#endnote-ref-13)
14. Takashi Mochizuki, “Pokémon to Create Games for Next Platform,” *Wall Street Journal*, September 20, 2016, accessed February 1, 2017, www.wsj.com/articles/pokemon-to-create-games-for-nintendos-next-system-1474371834. [↑](#endnote-ref-14)
15. Leo Lewis, “Nintendo Hit After Playing Down Pokémon Go Effect,” *Financial Times*, July 25, 2016, accessed February 1, 2017, www.ft.com/content/4cb1092a-523a-11e6-befd-2fc0c26b3c60. [↑](#endnote-ref-15)
16. Megumi Fujikawa, “Nintendo Shares Sink 18% on Warning on ‘Pokémon Go’ Earnings,” *Wall Street Journal*, July 25, 2016, accessed April 4, 2017, www.wsj.com/articles/nintendo-shares-take-hit-from-notice-on-pokemon-go-earnings-1469424667. [↑](#endnote-ref-16)
17. Paul Tassi, “‘Pokémon GO’ Is Coming to Apple Watch, and Has Big Implications for the Game,” *Forbes*, September 7, 2016, accessed April 4, 2017, www.forbes.com/sites/insertcoin/2016/09/07/pokemon-go-is-coming-to-apple-watch-and-has-big-implications-for-the-game/#7215f2f2105c. [↑](#endnote-ref-17)
18. [Ibid.](http://www.forbes.com/sites/insertcoin/2016/09/07/pokemon-go-is-coming-to-apple-watch-and-has-big-implications-for-the-game/#7f05b233531a) [↑](#endnote-ref-18)
19. Aman Jain, “Pokémon Go Plus Accessory Sold Out, Players Frustrated,” ValueWalk, November 18, 2016, accessed February 1, 2017, www.valuewalk.com/2016/11/pokemon-go-plus-sold-players-frustrated/. [↑](#endnote-ref-19)
20. Tim Bradshaw, “Lunch with the FT: Pokémon Go Creator John Hanke,” *Financial Times*, November 25, 2016, accessed April 4, 2017, www.ft.com/content/596ec790-afe8-11e6-9c37-5787335499a0. [↑](#endnote-ref-20)
21. “Is Pokémon GO Taking over People’s Lives in Canada?,” Ipsos, August 22, 2016, accessed April 4, 2017, www.ipsos.com/en/pokemon-go-taking-over-peoples-lives-canada?language\_content\_entity=en. [↑](#endnote-ref-21)
22. Ibid. [↑](#endnote-ref-22)
23. “Percentage of Consumers Who Spend More Time with Pokémon GO Than Social Media in Canada as of July 2016,” Statista, accessed February 1, 2017, www.statista.com/statistics/590448/spending-more-time-with-Pokémon-go-than-social-media-canada/. [↑](#endnote-ref-23)
24. [Donahue,](https://www.appannie.com/insights/top-trending-apps/industry-first-pokemon-go-hits-500m/) op. cit. [↑](#endnote-ref-24)
25. Ibid. [↑](#endnote-ref-25)
26. Ibid. [↑](#endnote-ref-26)
27. Mims, op. cit. [↑](#endnote-ref-27)
28. Bradshaw, op. cit. [↑](#endnote-ref-28)
29. David Ricketts, “Pokémon Is a Go Card for Traditional Retailers,” *Financial Times*, July 11, 2016, accessed April 4, 2017, www.ft.com/content/af221a10-4775-11e6-8d68-72e9211e86ab. [↑](#endnote-ref-29)
30. Kyle Wong, “Davos, PokémonGo and a New Era of Augmented Awareness,” *Forbes*, January 19, 2017, accessed April 4, 2017, www.forbes.com/sites/kylewong/2017/01/19/davos-pokemongo-and-a-new-era-of-augmented-awareness/#76d710e95af5. [↑](#endnote-ref-30)
31. “Pokémon Go in Indian Court for ‘Hurting Religious Sentiments,’” BBC, September 7, 2016, accessed February 1, 2017, www.bbc.com/news/world-asia-india-37294286. [↑](#endnote-ref-31)
32. James Crabtree, “Pokémon Go Backlash Reflects Privacy Fears,” *Financial Times*, July 19, 2016, accessed April 4, 2017, www.ft.com/content/dc5e2104-4d88-11e6-88c5-db83e98a590a. [↑](#endnote-ref-32)
33. Mochizuki, op. cit. [↑](#endnote-ref-33)
34. Jack Nicas and Cat Zakrzewski, “Augmented Reality Gets Boost from Success of ‘Pokémon Go,’” *Wall Street Journal*, July 13, 2016, accessed April 4, 2017, www.wsj.com/articles/augmented-reality-gets-boost-from-success-of-pokemon-go-1468402203. [↑](#endnote-ref-34)
35. Bradshaw, op. cit. [↑](#endnote-ref-35)
36. Nicas and Zakrzewski, op. cit. [↑](#endnote-ref-36)
37. Bradshaw, op. cit. [↑](#endnote-ref-37)