CASE 07

Fitbit, Inc.: Has the Company Outgrown Its Strategy?

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Fitbit revolutionized the personal fitness activity in 2009 with the introduction of its Tracker wearable activity monitor. By 2016 the company was a hit in the marketplace with Fitbit devices becoming nearly ubiquitous with fitness enthusiasts and health-conscious individuals wearing the devices and checking them throughout the day. The company's sales of activity monitors had increased from 5,000 units that year to 21.4 million connected health and fitness devices by year-end 2015. The company executed a successful IPO (initial public offering) in 2015 that boosted liquidity by $4.1 billion and recorded revenues of $1.86 billion by the conclusion of its first year as a public company. Fitbit's chief managers expected 2016 revenues in the range of $2.4 to $2.5 billion. However, on the last day of February 2016 the price of Fitbit stock plunged nearly 20 percent after the company announced that the sales and earnings in the first quarter would fall short of analysts' forecasts. The missed forecasted milestone created a dilemma for founders James Park and Eric Friedman, who were now faced with finding a strategy to turn things around at the now publicly traded company.

BACKGROUND ON FITBIT

Fitbit was founded in October 2007 by James Park (CEO) and Eric Friedman (CTO). The two men started the company after noticing the potential for using sensors in small wearable devices to track individuals' physical activities. Before they had a prototype, Park and Friedman took a circuit board in a wooden box around to venture capitalists to raise money. In 2008, Park and Friedman addressed the TechCrunch50 Conference drumming up preorders for their product. Neither man had any manufacturing experience, so they traveled to Asia and sought out suppliers and a company to produce the device for them.

Fitbit put its product named "Tracker" on the market at the end of 2009, and the company shipped approximately 5,000 units at that time. They had additional orders for 2,000 units on the books.

The product Park and Friedman developed was called an "activity monitor" which was a wireless-enabled wearable technology device (see Exhibit 1). The purpose of the Fitbit was to measure personal

EXHIBIT 1 Fitbit Ultra

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Source: Fitbit, Inc. website.

data such as number of steps walked, heart rate, quality of sleep, and steps climbed. The device could be clipped to one's clothing and worn all the time—even when the wearer was asleep. Included with the Tracker was a wireless base station that could receive data from the Tracker and charge its battery. The base station uploaded data to the Fitbit website when connected to a computer. This feature allowed the consumer to have an overview of physical activity, track goals, keep food logs, and interact with friends. The use of the website was free for the consumer.

Thereafter, the company developed a number of devices utilizing the Tracker technology. These devices are shown in Exhibit 2. Some of the later devices located the sensor technology in a watch that could be worn on the wrist (see Exhibit 3).

EXHIBIT 2 Activity Tracker Devices Developed by Fitbit

Name of Device	Capabilities and Options	Date First Unit Sold
Fitbit Tracker	Device with a clip to fit on clothing Sensed user movement Measured steps taken Distance walked, calories burned, floors climbed In black and teal only	2008
Fitbit Ultra	Digital clock Stopwatch Altimeter that measured slope of floors "Chatter" messages that occurred when Ultra moved New colors of plum and blue	2011
Fitbit Aria	Wi-Fi smart scale Recognized users wearing Fitbit trackers Measured weight, body mass index, and percentage of body fat	2012
Fitbit One	More vivid digital display Separate clip and charging cable Wireless sync dongle Used Bluetooth 4.0	September 2012
Fitbit Zip	Size of a quarter Tracked steps taken, distance traveled, and calories burned Included a disposable battery Lower price than other Fitbits	September 2012
Fitbit Flex	Worn on the wrist Tracked movement 24 hrs. a day including sleep patterns	May 2013
Fitbit Force	LED display showing time and daily activity Tracked activities in real time Vibrating alarm	October 2013
Fitbit Charge	Replacement for Fitbit Force Wristband displayed caller ID	October 2014
Fitbit Surge	Similar to a smart watch Monitored heart rate Tracked pace, distance, and elevation using GPS	October 2014
Fitbit Blaze	Similar to a smart watch Focused on fitness first Colored touchscreen Exchangeable strap and frame	2016

Source: Fitbit, Inc. website.

EXHIBIT 3 Fitbit Watch

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Source: Fitbit, Inc. website.

On May 17, 2015, Fitbit filed for an IPO with the Securities and Exchange Commission with an NYSE (New York Stock Exchange) listing. The IPO brought in $4.1 billion. The stock was initially priced at $20 but shortly thereafter the shares were trading for $35. By the end of February 2016 the shares had fallen to $14.

A study in 2015 by Diaz et al., published in the *International Journal of Cardiology,* investigated the Fitbit to see how reliable the device was, and whether it could be used to monitor patients' physical activity between clinic visits. The research indicated that the Fitbit One and Fitbit Flex reliably estimated step counts and energy expenditure during walking and running. These researchers also found that the hip-based Fitbit outperformed the Fitbit watch.[1]

Another study in 2015 by Cadmus-Bertram et al., published in the *American Journal of Preventative Medicine,* had essentially the same outcome as the Diaz study. Their study examined the Fitbit Tracker and website as a low-touch physical activity intervention. They were attempting to evaluate the feasibility of integrating the Fitbit Tracker and website into a physical activity intervention for postmenopausal women. Their conclusions were that the Fitbit was well accepted in their sample of women and was associated with increased physical activity at 16 weeks. In other words, merely wearing the Fitbit seemed to heighten the amount of physical exercise in which the women engaged.[2]

However, another study undertaken by Sasaki et al. in 2015 and reported in the *Journal of Physical Activity and Health* found that the Fitbit wireless activity tracker worn on the hip systematically underestimated the activity energy expended. These researchers suggested that the Fitbit management should consider refining the energy expenditure prediction algorithm to correct this consistent underestimation of activity in order to maximize the physical activity benefits for weight management and other health-related concerns.[3]

MISSION OF FITBIT

According to Fitbit, "The mission of Fitbit is to empower and inspire you to live a healthier, more active life. We design products and experiences that fit seamlessly into your life so that you can achieve your health and fitness goals, whatever they may be."[4]

THE ACTIVITY TRACKING INDUSTRY

There are a number of companies that would be considered competitors of Fitbit in the activity tracking—companies such as Garmin (originally producing GPS equipment for cars) and Under Armour (originally producing undergarments for men). There are also companies such as Apply who produce smart watches that perform many of the same tasks as Fitbit's devices.

Another company entering the market late was Jawbone. This company was formed in 1999, and its consumer devices were Bluetooth headphones and speakers initially and later fitness trackers. With the increased competition in the activity tracking industry in 2015, Jawbone dropped to seventh place in the second quarter from fifth place in the first quarter among makers of wearable tracking devices.

Xiaomi, a Chinese company, shipped 12 million wearable activity trackers in 2015. That gave the company a 15.5 percent global market share which was second to Fitbit with Apple, Garmin, and Samsung behind the two leaders. In 2014, Xiaomi had shipped 1.1 million units and garnered only 4 percent of the world market share.

The presence of Apple in the market had been almost as noteworthy as Xiaomi's. The Apple watch was first marketed in 2015, and in that year its

market share went to 14.9 percent. This was in spite of the fact that Apple's product was priced much higher than either Fitbit or Xiaomi.

For many years, neuroscientists had only the electroencephalogram, or EEG, to detect signals that carried different stages of sleep or brain power surges brought about by seizures. This was a very cumbersome process. Then, in 2007, Dr. Philip Low in San Diego invented the Sleep Parametric EEG Automated Recognition System (SPEARS) algorithm. This invention allowed physicians the ability to create a cluster map of brain activity with information that was gleaned from one electrode. This advancement caught the attention of Tan Le, CEO of Emotiv (a company that manufactured EEG rigs for consumers). Le believes wearable activity devices may be the appropriate venue for this new medical breakthrough. This would open up far-reaching new uses for wearable activity tracking devices.[5]

As more devices enter the market, Fitbit's dominance in the present market diminishes. However, additional uses of the Fitbit tracker could boost its share again (see Exhibit 4).

PROBLEMS FOR FITBIT

Antenna

There were early problems with the design of Fitbit. For one thing, the antenna did not work properly. In regard to the antenna problems, CEO James Park said, "In my hotel room I was thinking this is it. We literally took a piece of foam and put it on the circuit board to fix an antenna problem."[6]

Design Flaw

The Fitbit Ultra had a permanently curved shape that allowed it to be clipped onto a piece of clothing. However, the plastic in the unit could not handle the strain at the looped end and would continually break. When this occurred, Fitbit offered the consumer replacement or repair of the unit.

Allergic Reactions

From the beginning of the company, Fitbit was plagued by problems. When Fitbit added Fitbit Flex and Fitbit Force to its list of products, the company began receiving complaints that the watchband was irritating the skin of consumers. The irritation was discovered to be caused by allergic reactions to nickel, and the products were recalled in early 2014. As many as 9,000 customers were reportedly affected, and the Force was replaced by a new model named Fitbit Charge which was believed to be allergen free. Unfortunately, customers continued to complain about allergic reactions to the new device as well.

Too Much Information

One of the greatest strengths of Fitbit from the very beginning was its website. By utilizing Bluetooth technology, information from the Fitbit could be uploaded to the web in order to track energy expended and compare one's performance with other Fitbit users. However, the company discovered in 2011 that users who recorded their sexual activity (time spent, not activity) were sharing their information with the world unknowingly. Therefore, Fitbit

EXHIBIT 4 Top Five Wearables Vendors by Shipments, Market Share, and Year-over-Year Growth 2014–2015 (units in millions)

Vendor	2014 Unit Shipments	2014 Market Share	2015 Unit Shipments	2015 Market Share	Year-over-Year Growth
Fitbit	10.9	37.9%	21.0	26.9%	93.2%
Xiaomi	1.1	4.0%	12.0	15.4%	951.8%
Apple	0.0	0.0%	11.6	14.9%	NA
Garmin	2.0	7.1%	3.3	4.2%	60.9%
Samsung	2.7	9.2%	3.1	4.0%	18.5%
Others	12.0	41.9%	27.0	34.5%	124.0%
Total	28.8	100.0%	78.1	100.0%	171.6%

Source: IDC Worldwide Quarterly Wearable Device Tracker, February 23, 2016.

realized that sharing all of a customer's information with the world was not a good idea, and the company changed the website so that information posted by the users was private by default.

Privacy Issues

U.S. Senator "Chuck" Schumer declared in August 2014 that Fitbit was a "privacy nightmare." He further stated that users' movements and health data were being tracked by the company and sold to third parties without their knowledge.[7] Schumer asked that the U.S. Federal Trade Commission undertake the regulation of fitness trackers. In response to this charge, Fitbit suggested that it did not sell data to third parties and would be glad to have the opportunity to work with Senator Schumer on this issue.

Cost of Launching New Products

In Fitbit's Form 8-K filing on February 22, 2016, the company warned that the costs that were related to two new products would negatively affect their first quarter earnings in 2016. They further stated that research and development would hurt operating margins in 2016. The two new products that Fitbit suggested it would launch in 2016 were Fitbit Blaze and Fitbit Alpha, and these two products would incur very large manufacturing costs. In addition, Fitbit's full-year research and development budget included the company's Digital Health strategy.[8]

FINANCIAL PERFORMANCE

On February 22, 2016, Fitbit reported revenue of $1.86 billion, diluted net income per share of $0.75, and adjusted EBITDA (earnings before interest, taxes, depreciation, and amortization) of $389.9 million—see Exhibit 5. The company's balance sheets for 2014 and 2015 are presented in Exhibit 6.[9]

Full-year 2015 Financial Highlights were shown in the filing as follows:

- Sold 21.4 million connected health and fitness devices.
- FY15 revenue increased 149 percent year-over-year, adjusted EBITDA increased 104 percent.
- U.S. comprised 74 percent of FY15 revenue; Europe, Middle East, and Africa, 11 percent; Asian Pacific, 10 percent; Americas, excluding the United States, 5 percent.
- Cash, cash equivalents, and marketable securities totaled $664.5 million at December 31, 2015, compared to $195.6 million at December 31, 2014, and $573.5 million at September 30, 2015.

EXHIBIT 5 Fitbit's Consolidated Statements of Operations, 2014–2015 (in thousands)

	2015	2014
Revenue	$1,857,998	$ 745,433
Cost of revenue	956,935	387,776
Gross profit	901,063	357,657
Operating expenses:		
Research and development	150,035	54,167
Sales and marketing	332,741	112,005
General and administrative	77,793	33,556
Change in contingent consideration	(7,704)	—
Total operating expenses	552,865	199,728
Operating income	348,198	157,929
Interest income (expense), net	(1,019)	(2,222)
Other expense, net	(59,230)	(15,934)
Income before income taxes	287,949	139,773
Income tax expense	112,272	7,996
Net income	$ 175,677	$ 131,777

Source: U.S. Securities and Exchange Commission, Form 8-K, Fitbit, Inc. for fiscal 2015.

EXHIBIT 6 Condensed Consolidated Balance Sheets, 2014–2015

	2015	2014
Assets		
Current assets		
Cash and cash equivalents	$ 535,846	$195,626
Marketable securities	128,632	—
Accounts receivable, net	469,200	238,859
Inventories	178,146	115,072
Prepaid expenses & other current assets	43,530	13,614
Total current assets	1,355,414	563,171
Property and equipment, net	44,501	26,435
Goodwill	22,157	—
Intangible assets, net	12,216	—
Deferred tax assets	83,020	42,001
Other assets	1,758	1,444
Total assets	$1,519,066	$633,051
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Equity		
Current liabilities		
Fitbit Force recall reserve	$ 5,122	$ 22,476
Accounts payable	260,842	195,666
Accrued liabilities	194,977	70,940
Deferred revenue	44,448	9,009
Income taxes payable	2,868	30,631
Long-term debt, current portion	—	132,589
Total current liabilities	508,257	461,311
Redeemable convertible preferred stock		
Warrant liability	—	15,797
Other liabilities	29,358	12,867
Total liabilities	537,615	489,975
Redeemable convertible preferred stock	—	67,814
Stockholders' equity		
Common stock & paid-in capital	737,841	7,983
Accumulated other comprehensive income	691	37
Retained earnings	242,919	67,242
Total stockholders' equity	981,451	75,262
Total liabilities and stockholders' equity	$1,519,066	$633,051

Source: U.S. Securities and Exchange Commission, Fitbit, Inc. 2015 Form 8-K.

Fitbit announced in the filing that it expected full-year 2016 revenue to be in the range of $2.4 to $2.5 billion which would be driven by the introduction of new products and expansion into new geographic territories. In addition, the company stated that it expected gross margins to range from 48.5 to 49.0 percent. Fitbit also expected adjusted EBITDA to range from $400 to $480 million.

ANALYSTS' ASSESSMENTS

After the 20 percent drop in the price of Fitbit stock late in February 2016, a number of Wall Street analysts gave their assessments of future movements of the company's stock. An analyst with Global Equities Research, Trip Chowdry, suggested that he believed the stock could fall another 50 percent. He speculated, "Gradually the market for single-purpose devices (fitness tracker) is heading toward zero, and there is nothing FIT can do to reverse the trend."[10] In addition, Chowdry commented that unlike Apple, Inc., Fitbit doesn't have a group of developers or a way of generating income as the App Store does. Even though the Fitbit tracker products were much cheaper than Apple's ($129 as compared to $349 for the cheapest Apple Watch Sport), Apple had an inventory of more products than Fitbit. Activity tracking is just a feature used by Fitbit, and this feature was being used in many other devices by a variety of companies.

Pacific Coast analysts downgraded the company's stock to sector weight from overweight because of expected weakness in sales in the coming year, and the limitation it has in differentiating its products. The Pacific Coast analysts suggested, "We do not expect any incrementally competitive product announcements from Apple in the next year, but we have to assume those will come at some point in 2017 or 2018."[11] Therefore, these analysts believe Apple remains a serious threat to Fitbit in the future.

Leerink analysts downgraded Fitbit's stock to market perform from outperform and also reduced the target price to buy the stock from $33 to $18. These analysts suggest that the company's new products are unproven, so they don't know how much they will add to sales.[12]

DECISION TIME

James Park and Eric Friedman were facing a decision about a strategy to improve the analysts' assessments of Fitbit. One comment that many people had made about Fitbit was that it needed to be more than a one-product company. Since the activity tracking feature was being used in many other devices by a variety of companies, Fitbit had to think of new uses of the tracker as well as new devices. As one journalist suggested, "Stand-alone fitness trackers are iPod in a world that's moving to iPhones."[13]

After all, Park had recently commented, "The next big leap will come when we tie into more detailed clinical research and create devices that can make lightweight medical diagnoses. You look at blood glucose meters today, I wouldn't necessarily say that those are the most attractive or consumer friendly devices. I would say consumer focused companies, whether it's us or Apple, probably have an inherent advantage in the future."[14] One possibility for the company was to become a platform—rather than just a product. That would entail moving into niche markets with devices that are designed for very specific and unique purposes. Some of the possibilities would be moving further into health care and corporate health care.[15]

ENDNOTES

[1] Keith M. Diaz, David J. Krupka, Melinda J. Chang, James Peacock, Yao Ma, Jeff Goldsmith, Joseph E. Schwartz, and Karina W. Davidson, "Fitbit: An Accurate and Reliable Device for Wireless Physical Activity Tracking," *International Journal of Cardiology,* no. 185 (2015), pp. 138–140.
[2] Lisa A. Cadmus-Bertram, Bess H. Marcus, Ruth E. Patterson, Barbara A. Parker, and Brittany L. Morey, "Randomized Trial of a Fitbit-Based Physical Activity Intervention for Women," *American Journal of Preventive Medicine* 49, no. 3 (2015), pp. 414–418.
[3] Jeffer Eidi Sasaki, Amanda Hickey, Marianna Mavilia, Jacquelynne Tedesco, Denish John, Sarah Kozey Keadle, and Patty S. Freedson, "Validation of the Fitbit Wireless Activity Tracker for Prediction of Energy Expenditure," *Journal of Physical Activity and Health* 12 (2015), pp. 149–154.
[4] Fitbit home page, **www.fitbit.com/about** (accessed March 3, 2016).
[5] Betsy Isaacson, "A Fitbit for Your Brain Is Around the Corner," *Newsweek.com,* April 13, 2016, **www.newsweek.com/human-brain-eeg-technology-neuroscience-443368**.
[6] Gary Marshall, "The Story of Fitbit: How a Wooden Box Became a $4 Billion Company," December 30, 2015, **www.wareable.com/fitbit/youre-fitbit-and-you-know-it-how-a-wooden-box-became-a-dollar-4-billion-company** (accessed March 2, 2016).
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[8] U.S. Securities and Exchange Commission, Form 8-K Filing for fiscal year 2015 for Fitbit, Inc.
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[10] Caitlin Huston, "Fitbit's Stock Is Tanking and It May Have More to Drop," *MarketWatch,* February 23, 2016, **www.marketwatch.com/story/fitbits-stock-is-tanking-and-it-may-have-more-to-drop/** (accessed March 11, 2016).
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[12] Ibid., p. 3.
[13] James Stables, "Fitbit Charge HR Review, *Fitbit Review,* December 15, 2015, **www.wareable.com/fitbit/fitbit-charge-hr-review/** (accessed March 1, 2016).
[14] Ibid., p. 6.
[15] Ibid., p. 7.