



Samsung Wearables | Business Report

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Submitted To:
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December 10, 2019

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Background

Samsung is a leading electronics company from South Korea and it encompasses an array of electronics ranging. Today, the company has transformed into an international household name in the technology sector and contributes to nearly a fifth of the exports from South Korea.

Originally, Lee Byung-Chull founded Samsung as a grocery store, which traded and exported goods produced throughout South Korea to China. Following the Korean War, Lee further developed Samsung into textiles resulting in Korea's biggest mill from wool. Lee concentrated his attention on aiding with the redevelopment of Korea post-Korean War, primarily industrialization. Over time, Samsung was able to take advantage of the new regulations set by Korean lawmakers, so that domestic companies had security against competitors and allowing an easy method for financing.

Throughout the 70s, Samsung broadened its textile production operations to fully encompass all aspects of production to enhance its competitiveness in the textile industry. Subdivisions were created and the company began to devote money into the markets such as: chemical, and petrochemical.

Samsung joined the technology market in 1969 having four different sectors. In the 70s and early 80s, Samsung experienced drastic growth in the technology industry. Since then Samsung has developed different semiconductors and electronics, and aerospace divisions. Samsung's acquisitions and investments have greatly contributed to the company's information technology services.

In the 1990s, the company experienced steady growth in the electronics industries worldwide. Alongside the achievements, came the spotlight of various scandals that impacted the business ranging from bribery cases and patent-infringement suits. However, Samsung has managed to overcome its challenges and hold a place as a technology leader constantly developing new products.¹

Mission, Vision, & Values

Samsung is one of the top leading firms in the technology market. Its mission statement states the following, "We will devote our human resources and technology to create superior products and services, thereby contributing to a better global society." It was created in the 1990s, when the company was going through a fast expansion in semiconductors, electronics, and other

¹ Bondarenko, P. (2018, October 24). Samsung. Retrieved November 11, 2019, from <https://www.britannica.com/topic/Samsung-Electronics>.

markets related to technology. Looking at its business operation and industry positioning, they focus on human resources, superior range of products, technological advancements, and creating improvements for society.²

This statement describes the social and corporate responsibilities Samsung wants to follow as a company. Samsung is known for its quality, innovation, and inclusiveness. They offer a variety of products in different price ranges with different features that are equal or better to their respective competitors. This inclusiveness not only attracts more clients but it also keeps Samsung at a superior level than its competitors. For example, in the cellphone market, Samsung is not only competing with top firms like Apple but they also compete with lower level firms. Even though they have a large variety of competitors, they always manage to keep consistency with their products at each level and continue being a market leader.

Samsung is not only dedicated to serving its customers' needs but also the environment. They have implemented Eco-management solutions as one of their core foundations. They want to offer their customers products that comply with environmental laws to respect both nature and humanity. Due to these reasons, it is concluded that Samsung is following their mission statement because with their inclusiveness and sustainable solutions they are “contributing to a better global society.”³

Samsung's vision statement is the following, “To inspire the world with our innovative technologies, products, and design that enrich people's lives and contribute to social prosperity by creating a new future.” Samsung has managed to stay ahead of their competition by offering innovative products with technology not seen before to satisfy its customers' needs and inspire them to learn more about new technologies. They also offer scholarships and programs like the Girl Scout Tech Challenge, emPower Tomorrow, and Techbridge to encourage our younger generations to follow careers in STEM fields and inspire them to come up with new ideas to better our future.⁴ Samsung also creates products with features for people with disabilities to facilitate the usage of their technologies for them to enjoy as well. They offer cell phones compatible with hearing aids that provide a better quality of sound. Their Smart TV's have features such as the accessibility shortcut function, voice guide, and video description. For example, their voice guide reads information such as channel change, volume adjustments,

² Samsung. (n.d.). Vision 2020: Vision: Samsung US. Retrieved from <https://www.samsung.com/us/aboutsamsung/vision/vision2020/>

³ Samsung. (n.d.). Eco-management: Our Commitment: Environment: Sustainability. Retrieved from <https://www.samsung.com/us/aboutsamsung/sustainability/environment/our-commitment/eco-management/>

⁴ Samsung. (n.d.). CSR - Our Meaningful Contributions: Samsung Semiconductor Global Website. Retrieved from <https://www.samsung.com/semiconductor/about-us/csr/>

current programs, as well as other features to aid the visually impaired.⁵ Samsung's vision, to enrich the lives of its customers and offer them a better future is what inspires them to continue creating excellent products and helped shape the company into what it is today.

Samsung satisfies the needs of its different types of stakeholders in multiple ways. As mentioned before they offer scholarships and programs to give back to their community through education. They facilitate resources to students from 4th to 12th-grade who are interested in the sciences to learn how to develop their skills and create solutions to challenges their communities are encountering. They also educate communities about environmental challenges and how technology can help improve our planet. They maintain their relationship with their customers through surveys and special events to make sure they are providing the best service. Another very important group of stakeholders is its employees. They also conduct a variety of surveys to ensure they provide a good work environment and create a good company culture. Samsung promotes diversity and provides a variety of training and resources to their employees. Their goal is to create a significant impact on their lives and promote growth within the company. They satisfy their investors by having regular meetings with them to deliver any updates or issues the company may have at the time. They also work closely with government entities to ensure they are following all rules and regulations. They communicate with them through seminars and conferences.⁶

Stakeholder Analysis

When analyzing Samsung stakeholders it's important to understand that stakeholders can be both affected by Samsung and in turn affect Samsung's operations. Therefore we have a group of 9 major internal/external stakeholders of Samsung that are going to be vital to the company's long term success. First looking at Samsung's Internal Stakeholder like customers, future customers, and consumers of Samsung products can all pose a threat to Samsung's growth especially after their failure with Samsung's cellphone Galaxy 7 which ended with battery failure that caused phones to catch fire. As a consequence of this a large majority of consumers had reported injuries from their phones exploding which gave Samsung had no choice but to recall all 2.5 million of its Galaxy Note 7s⁷. Another internal stakeholders are the Employees of Samsung because are a vital piece to the what has made the company so successful within the company and outside with local communities. Without employee satisfaction Samsung corporation would be at fault to protest and media attention. Employees would not feel motivated to be creative or achieve great

⁵ Samsung. (n.d.). Accessibility For Everyone. Retrieved from http://design.samsung.com/global/contents/accessibility_design/

⁶ Samsung. (n.d.). Communication with Stakeholders | SAMSUNG Securities. Retrieved from <http://www.samsungsecurities.com/csr/engagement.do?cmd=list&MenuCode=M020102>

⁷ New York Post, Post Staff Report. (2017, January 20). Samsung finally figures out why its phones kept exploding. Retrieved from <https://nypost.com/2017/01/20/samsung-finally-figures-out-why-its-phones-kept-exploding/>

things which in turn would affect the growth and image of Samsung. Samsung make it their priority to try and keep their employees and communities happy by continually hosting “The Day of Service” that involves Samsung Electronics America employees working additional paid service hours to support local communities. During these events employees would help with basic needs such as providing meals for the homeless with the help from a non-profit organization called Rise Against Hunger. In addition, Samsung also has their employees pair up with non-profit organization Habitat for Humanity to help rebuild communities. Lastly Samsung also pairs up with GrowNYC to help clean up rivers and parks but as well as help among many other activities⁸.

External Stakeholders like Government agencies such as the Federal Aviation Administration were forced to take action against the possibility of Samsung exploding phone so they prohibited the device from flights⁹. The media feeds of these types of stories and is fueled by the failures of any company due to these reasons it is important for Samsung to ensure that their products and services have both the safest and highest quality products and experiences. In addition, the growth and acceptance of Samsung products also depends on the trust of local communities. If Samsung does not have their local communities backing them than Samsung will have a hard time expanding operations in the United States and in other countries like China and Europe.

As Samsung continues doing business in and with other countries, it must keep up with each country’s rules and regulations, which includes interpreting these rules and regulations correctly. For example, Samsung was found to be making its workers in its Chinese factories, perform in very poor working conditions, including violating China’s workplace laws regarding overtime¹⁰. Moving on to another example in the U.S., Samsung was charged for patent infringement by one of its major competitors, Apple. As a result of violating U.S. patent infringement laws, Samsung had to pay Apple millions of dollars.. This scandal with Apple further led to Samsung products such as the Galaxy smartphones to being banned in Europe. This leads us into how Non-Government Organizations (NGOs) can affect Samsung. Samsung has been trouble in the past with NGOs such as Sherpa and ActionAid-Peuples solidaires when they filed a complaint against Samsung stating that Samsung used deceptive marketing in countries like China and South Korea by hiring underage workers and does not respect laws that protect the health of employees. (Reuters, 2018) In addition, our shareholders have shown to they could also be a

⁸ Samsung U.S. Newsroom. (2019, June 18). Giving Back to the Communities We Serve. Retrieved from <https://news.samsung.com/us/giving-back-to-communities-we-serve-samsunggives>

⁹ Fried, I. (2016, September 9). Samsung is finally working with the U.S. government on a formal recall of the Galaxy Note 7. Retrieved from <https://www.vox.com/2016/9/9/12866952/samsung-cpsc-galaxy-note-7>

¹⁰ Rosemain, M., & Jarry, E. (2018, January 11). French NGOs file complaint against Samsung Electronics over deceptive marketing. Retrieved from <https://www.reuters.com/article/us-samsung-elec-france-rights/french-ngos-file-complaint-against-samsung-electronics-over-deceptive-marketing-idUSKBN1F00HN>

threat for Samsung for example the vice chairman of Samsung, Jay Y. Lee, was arrested for bribing the President of South Korea, Park Geun-hye, with billions of dollars in return for helping him with obtaining ownership of Samsung. Through this bribery scandal, it was also revealed that chairman Lee was making payments to president Park and her acquaintance “in exchange for a decision by the government-controlled National Pension Service to support a contentious 2015 merger of two Samsung affiliates”. Such actions of chairman Lee affected Samsung’s reputation in the industry as Samsung highly struggled in maintaining and earning the trust of it’s current and future investors.

Pestel Analysis

Political:

1. **Digital Tax Reporting:** A new global tax trend has emerged, requiring businesses to take part in digital tax reporting. Businesses will now have to use a new platform for reporting taxes and essentially maintain electronic records that are in sync with new reporting software(s). Not only will businesses have to train their employees on how to operate these new digital tax tools, but they will also have to invest in the technology that these newly developed tools require. Even though digital tax reporting will improve efficiency, including ensuring accuracy and avoiding commonly made errors, it will also in turn allow tax authorities to have more information on companies. This also means that tax authorities will be conducting audits more frequently.¹¹ Samsung is definitely going to be on the radar of tax officials considering that it’s chairman was recently involved in a tax evasion case with millions of dollars at stake.¹²

2. **Data Privacy & General Data Protection Regulation (GDPR):** As we all know, over the years, many big companies including Facebook and Apple have been involved in data privacy scandals. In fact, over time data privacy has become a huge political concern worldwide. In 2018, the European Union (EU) passed a significant privacy law, known as the General Data Protection Regulation (GDPR). It was seen as a huge step towards re-evaluating and ensuring data privacy for users of all sorts, putting many tech companies globally on the hot seat. The passing of GDPR also sparked a wakeup call among tech CEOs Mark Zuckerberg, Tim Cook, and Sundar Pichai, who are now demanding for a comprehensive privacy legislation similar to GDPR across the U.S. The

¹¹ Constantin, E. (2019). 4 global tax trends and how they impact operations; Retrieved from <https://www.tmf-group.com/en/news-insights/articles/2019/april/global-tax-trend-and-impact-your-operations/>

¹² Park, J., & Lee, J. (2018). Samsung chairman named as suspect in \$7.5 million tax evasion case. Retrieved from <https://www.reuters.com/article/us-samsung-lee-accounts/samsung-chairman-named-as-suspect-in-7-5-million-tax-evasion-case-idUSKBN1FS0CL>

EU hopes to influence not just the U.S. , but other nations around the world in creating stronger data privacy laws.¹³ As we continue to innovate, the tech industry will constantly face emerging privacy concerns and laws, especially in it's newer markets such as wearables. Reports reveal that wearables are not keeping up with the latest security concerns, putting it's user data at risk and in the hands of hackers.¹⁴ Companies including Samsung are expected to respond as are other big tech players in the market, the pressure is definitely on. However, it will be a while before we reach a global consensus on data privacy legislations.¹⁵

Economical:

1. World Wide Recession Predicted in the Year 2020 & Ongoing U.S. and China

Tradewar: Several credible economists from different parts of the globe have predicted a worldwide recession in the year 2020.¹⁶ A recession affects many key parts of a business including employment, operating costs, sales revenue, and/or profits. During a recession, consumer spending power decreases and typically consumers cut back on luxury spending. This impacts businesses who invest in the latest technology or take out products according to what is trending. A prime example would be the smartphone industry, which is reported to be suffering recently, with Samsung being affected the most. Companies like Samsung are facing major competition from foreign markets including India and China. If companies are losing business on their most popular products in fairly stable economic times, what would a recession indicate and that too in regards to emerging products like wearables.

In addition, if the ongoing U.S. & China trade war continues, the chances of a global recession in the year 2020 will be even higher. Several countries and industries share trade relations with both the U.S. and China, including South Korea (Samsung headquarters). South Korea relies heavily on Chinese exports and both China and the U.S. are it's largest trading partners. If the U.S. and China alliance is ultimately broken, the world economy will suffer tremendously in a strategic aspect as both of these

¹³ Schulze, E. (2019). The US wants to copy europe's strict data privacy law – but only some of it. Retrieved from <https://www.cnbc.com/2019/05/23/gdpr-one-year-on-ceos-politicians-push-for-us-federal-privacy-law.html>

¹⁴ Shepard, S. (2018). Wearables open door to many security vulnerabilities. Retrieved from <https://securitytoday.com/articles/2018/07/30/wearables-open-door-to-many-security-vulnerabilities.aspx>

¹⁵ Schulze, E. (2019). The US wants to copy europe's strict data privacy law – but only some of it. Retrieved from <https://www.cnbc.com/2019/05/23/gdpr-one-year-on-ceos-politicians-push-for-us-federal-privacy-law.html>

¹⁶ Vanbergen, G. (2018). The predicted 2020 global recession. Retrieved from <https://worldfinancialreview.com/the-predicted-2020-global-recession/>

countries combined account for a major portion of the world's technology and finance sectors.^{17 18}

Sociocultural:

1. **Health Conscious Society:** We live in a society today, where many unique trends are emerging and becoming the central focus of our lives. For example, people are increasingly becoming more health conscious. From watching their diets to exercising to purchasing the latest wearable technologies to help keep track of things like their daily steps or calorie consumption. Speaking of wearables, it is stated that by the year 2022, the wearables market will double in sales, meaning that there is opportunity for growth for the various companies investing in wearables such as Apple, Bragi, Jabra, Sony, and Samsung.¹⁹
2. **Sexual Harassment in The Workplace:** Another popular trend we've been seeing in our recent years is bringing attention to sexual harassment in the workplace, also known as the popular "Me too Movement". Many companies have been exposed in regards to the mismanagement of sexual harassment, including well known companies such as Google, Ford Motors, 21st Century Fox, and Bank of America.²⁰ The wearables industry took matters into their own hands by coming out with technology targeted towards detecting sexual assault. Such astonishing technological advancements grabbed the attention of consumers creating demand. However, whether or not consumer demand is high enough to meet sales demands as well is the question at hand, considering that the wearables market is fairly new with big players like Apple in the market already.²¹

Technological:

1. **5G Technology:** The technology runs on radio frequencies like 4G however, in a lot of higher frequency referred to as mm wave. With larger information measure, it provides

¹⁷ Rudd, K., Clark, H. & Bildt, C. (2019). Former world leaders: The trade war threatens the world's economy. Retrieved from <https://www.nytimes.com/2019/10/11/opinion/china-trade.html>

¹⁸ Holland, B., & Sam, C. (2019). A \$600 billion bill: Counting the global cost of the U.S.-china trade war. Retrieved from <https://www.bloomberg.com/graphics/2019-us-china-trade-war-economic-fallout/>

¹⁹ Lamkin, P. (2018). Smart wearables market to double by 2022: \$27 billion industry forecast. Retrieved from <https://www.forbes.com/sites/paullamkin/2018/10/23/smart-wearables-market-to-double-by-2022-27-billion-industry-forecast/#19e184a02656>

²⁰ Fenton K, M. (2018). 4 high-profile companies dealing with sexual harassment at work. Retrieved from <https://www.wenzelfenton.com/blog/2018/03/05/companies-dealing-sexual-harassment-work/>

²¹ Greene C, S. (2017). This new wearable tech aims to detect sexual assault. Retrieved from <https://www.usatoday.com/story/tech/nation-now/2017/07/26/wearable-technology-aims-detect-sexual-assault/511938001/>

quicker speeds and additional capability. It offers a major reduction to congestion, because the network can modify the flexibility to attach and handle additional devices promptly. It'll be the start of a brand-new era for shoppers, sensible cities, companies, IoT devices, and mobile communications. Most telecommunication corporations like AT&T, Verizon, Sprint are testing the new technology and hoping to push it by 2020. This can have an affect on hardware suppliers like Samsung to include 5G technology to any or all their future product. The importance of this technology affects several aspects of life even on a worldwide scale, therefore countries ought to keep current with the 5G technological deployments. The technological developments are to boost potency within the lives of their voters, produce sensible cities, and still evolve within International economy.²² Six countries that are leaders in adapting 5G technology: U.S , Asian country, Scandinavian nation and the Republic of Estonia, Turkey, Japan and China(Wills).²³ If smartwatches were considerably fifty times quicker in exchanging knowledge, perpetually connected to 5G network, World Health Organization the service are going to be used for in steering an automotive, piloting a drone, and the rest that demands a time period electric circuit for device.²⁴ Moreover, within the smartwatch ability to trace, however way user run and taking one's pulse, with a military of nano sensors and 5G showcase wearer's precise GPS position in time period with way higher accuracy than at this time. Thus, network responds on demand at its greatest potential permit the wearable to interact and connect in several ways.

2. **Longer Battery Life from Smart2Go project:** Recently, there has been stagnant on wearable innovations revolves around power provides. Corporations are operating towards to reinforce wearable devices with substantial power while not making larger battery packs. A corporation known as Smart2Go is functioning on a project to longer battery life in IOT devices. This technology can have associate degree energy gather system which will regenerate energy into the device. However, wearable device utilize this might be changing wearer's motions and body heat into power energy. If this project with success deployed, it'll result in additional competitors getting into the wearable market.²⁵

²² Jessica Hulett. (2019). 5G makes big promises, but it may take a while to deliver on them. Retrieved from <https://www.dealnews.com/features/Should-You-Switch-to-a-5-G-Network/2208760.html>

²³Jennifer Wills. (2019). 5G Technology: Which Country Will Be the First to Adapt?. Retrieved from <https://www.investopedia.com/articles/markets-economy/090916/5g-technology-which-country-will-be-first-adapt.asp>

²⁴ Arthur Firstenberg.(2019) Telecommunications companies worldwide, with the support of governments, are poised within the next two years to roll out the fifth-generation wireless network (5G). <https://www.globalresearch.ca/wireless-radiation-stop-the-5g-network-on-earth-and-in-space-devastating-impacts-on-health-and-the-environment/5665066>

²⁵ Smart2GO (2019). Project creation of an autonomous energy-supply platform. Retrieved from <http://smart2go-project.eu/>

3. **AI Platforms in Manufacturing:** The AI platforms market can grow considerably over the forecast time span. The increasing want for custom AI solutions within the producing trade is promoting the utilization of AI platforms. These AI platforms offer pre-built algorithms with oversimplified workflows alongside options, like drag & drop modelling and visual interfaces, that simply connect necessary knowledge to the tip resolution. The most usage of AI would improve potency in prediction in maintenance, machine examination, production design, and internal control. This decrease period prices of makers, less payment on superfluous things, fewer stockouts, and shorter lead times, and increase exactitude in creating wearable.

Ecological: In order for companies to ensure competitiveness and relevance in today's world, supply chain management must pivot based on the current environment status to prepare for the unknown.

1. Weather and natural disasters are unpredictable, climate change has made it even more challenging to predict the timing of these events. Managing supply chains are becoming more difficult for corporations. It creates more infrastructure risks, damage to raw materials and natural resources. Recently, the Northern Midwest of the United States got hit by a record-breaking of flood, affecting Nebraska particularly harder after a huge drop of cyclone storm and significant amounts of snow left the country in a harsh winter. The flooding has caused the infrastructure damage cost estimated to be \$439 million.²⁶ Events like this *affect the warehouses, railroads, power plants, roads and other critical facilities which are being utilized by businesses.*
2. Recently, more companies are implementing solutions to address industry's role in alleviating climate change. This pushes companies to start using recyclable or biodegradable materials in their packaging. May cause slow down on wearable upgrades. Instead of shipping out new wearables yearly, mobile companies may have to push back the regularity of their product launch. As consumers are becoming more aware of the current environmental issues, they're hanging on to their smartphones longer. In the article, "People are holding on to their iPhones for a lot longer, spelling trouble for Apple, says analyst" Haselton mentioned about the slowing in consumers upgrading their phone from every 4 years in fiscal 2019 compared to 3 years in fiscal 2018.²⁷ With the ecological impact, business may have to push back on unit productions with fewer

²⁶ Historic flood losses faced by Nebraska farmers "will impact food on your table".(2019). Retrieved data from <https://newfoodeconomy.org/nebraska-south-dakota-wisconsin-flooding-historic-loss-farmers-emergency/>

²⁷ People are holding on to their iPhones for a lot longer, spelling trouble for Apple, says analyst <https://www.cnbc.com/2019/02/08/apple-iphone-replacement-cycle-slowing-toni-sacconaghi-says.html>

demands or else their earnings will drop. Samsung will have to analyze their units shipped and slow down on ordering materials for these devices.

Legal:

1. The number of regulations on data privacy continues to rise significantly. Companies that have cloud-based services must comply with these rules or they'll risk losing business due to potential fines and other customer issues. The GDPR and CCPA requires companies to address a wide range of components which includes cookie consent, assessments to privacy and request access subject data. Some of the recent data privacy regulations are the General Data Protection Regulation, which was effective in 2018 across the EEA, data breach notification laws are applicable to all 50 U.S states, Turkey also has its own data protection law, etc... Samsung will have to due diligence in its risk assessment in how they determine their customer personal data is processed and to where. They'll have to push out more legal research on this matter to meet

2. Trade barriers are skyrocketing whereas beneath the Trump administration. as an example, the recent solar battery tariffs have caused a rise for panel installations. This heavily affects Samsung's business operations, because the company plans to supply renewable energy for 100 percent of the energy used for all of its factories, workplace buildings, and operational facilities within the u.s., Europe and China by 2020. There has been a shift within the locations wherever corporations conduct their producing, leading several to transfer their production to be primarily based within the USA because of their belief of the future ROI. In return, the increasing plants gap within the USA can result in a lot of jobs and better economic prosperity. With corporations moving production to the USA, the value for star panels become cheaper. Thus, with higher economic prosperity and cheaper costs for star panels, Samsung will benefit of this chance for capitalizing bigger revenue.²⁸

Porter's Five Forces Analysis

Threat of New Entrants (1): As society continues to take a deeper dive into their lifestyles in terms of health and fitness, the threat of new entrants in the wearables market will remain moderate to high. Current players in the market, both small and large, will face competition from new entrants who are centered around medical, health, and fitness applications. The current

²⁸ How much damage are Trump's Tariffs Doing to the U.S Industry?. 2018. Retrieved from <https://insideclimatenews.org/news/20082018/trump-solar-panels-tariffs-clean-energy-economy-jobs-united-states-market>

market consists of startups like Pebble and well known established brands like Nike. Over time, the wearables market has been slowly expanding with the development of the calculator watch back in the 1980s. As our society continues to innovate, demand in this market will also increase, attracting any entrants who have the financial means to make investments in technology. The ability of these wearable devices to sync with smartphones and other gadgets is just another plus point.²⁹

Bargaining Power of Suppliers (2): Samsung's supply chain consists of roughly 2,500 suppliers, who come from a variety of countries around the world.³⁰ Samsung's suppliers vary according to product type, ranging from general part suppliers to specialized part suppliers.³¹ Since Samsung orders in large quantities with high costs, they account for a significant source of revenue for many of their suppliers, making the bargaining power of suppliers relatively low. In addition, switching costs in most cases is not an issue for companies like Samsung.

Recently, Samsung began to look for new suppliers for technology used in foldable displays, which were previously coming from Japan. Due to rising trade tensions between Japan and South Korea, along with stricter regulations on imports from Japan, Samsung decided to replace their Japanese suppliers, proving that it does indeed have the ability to do so.³²

Bargaining Power of Buyers (3): The bargaining power of an individual consumer is low as an individual consumer does not really have the ability to negotiate prices. However, larger organizations such as corporations have moderate to high bargaining power because they can easily switch to other competitors in the market selling similar products and / or services. In the case of Samsung wearables, especially smartwatches, the competition is high. A list of 2019's leading smartwatches includes the Samsung Galaxy Watch, Apple Watch, Samsung Galaxy Watch Active 2, Fossil Sport, TicWatch E2, TicWatch Pro, Fitbit Versa 2, Apple Watch 4, Fitbit Ionic, and Apple Watch 3.³³ According to this list, Samsung is at the top, but at the same time, there are many similar watches right behind in line.

Additionally, with the amount of information readily available on the internet today, consumers have access to all kinds of things such as product reviews, which greatly influence consumer

²⁹ Industry analysis: Wearable technology six forces of competition. (2019). Retrieved from <http://ininet.org/industry-analysis-wearable-technology.html?page=4>

³⁰ Responsible Management of Supply Chain. (2019). Retrieved from <https://www.samsung.com/uk/aboutsamsung/sustainability/supply-chain/>

³¹ Ibid.

³² Donkin, C. (2019). Samsung hunts for new suppliers as trade row rolls on Retrieved from <https://www.mobileworldlive.com/devices/news-devices/samsung-hunts-for-new-suppliers-as-trade-row-rolls-on/>

³³ Peckham, J. (2019). Best smartwatch 2019: The top wearables you can buy today. Retrieved from <https://www.techradar.com/news/wearables/best-smart-watches-what-s-the-best-wearable-tech-for-you-115407>

decisions. Ultimately, marketing strategies tend to work well in influencing consumer decisions as well.

Intensity of Rivalries (4): The intensity of rivalry is high as the technology or wearables market has many players, ranging in location, size, value, capabilities, etc. Samsung's biggest rival is Apple, who reported to be leading the wearables market with its smartwatch up until the second quarter of 2019.³⁴ Reports and data reveal that "Apple shipped 5.7 million units, accounting for nearly half of smartwatch shipments" in the second quarter.³⁵ Right behind Apple were Samsung and Fitbit, with Samsung shipping 2 million wearables and Fitbit shipping 1.2 million wearables in the same quarter. The rivalry intensifies as there are many affordable brands, who offer the same or similar products as Samsung and the other dominating brands. Examples include Xiaomi and Huawei, both of which are Chinese electronic tech brands.³⁶

Threat of Substitutes (5) : It is key to acknowledge that wearables are a form of very advanced technology that originated from previously established technological concepts and devices. The features and functions of wearables are provided in the form of applications in smartphones and many other devices, which can be seen as the biggest threat in terms of substitutes. The huge debate centers around what exactly wearable technology really entails and is it more of a fashion statement or is it indeed functionality?³⁷ Some also debate on the accuracy of smartphone applications versus wearables in areas such as fitness.³⁸ In reality, a lot of it simply comes down to user preference and affordability indicating that the threat of substitutes at this point is moderate and yet to be fully determined.

Organizational Capabilities

Samsung possesses great opportunity recognition and entrepreneurial insight. For instance, the decision made by Samsung to take part in the semiconductor industry is viewed as a critical moment in the advancement of Samsung. Lee Byung-Chul regarded the semiconductor industry to be the "rice" of technology markets and the foundation for Samsung's resume.

Another aspect of Samsung's organizational capabilities is technology acquisition and learning. The power of acquiring external technology is a crucial aspect of Samsung. For example,

³⁴ Zepeda, D. (2019). The apple watch continues to dominate wearables with 5.7 million units shipped in Q2 2019. Retrieved from

<https://www.imore.com/apple-watch-continues-dominate-wearables-57-million-units-shipped-q2-2019>

³⁵ Ibid.

³⁶ Sawh, M. (2019). Best budget fitness trackers: Xiaomi, fitbit, huawei and more. Retrieved from

<https://www.wearable.com/fitness-trackers/best-budget-fitness-trackers-under-gbp-50>

³⁷ Solomon R., M. (2018). Fashion or functionality? consumers try to make sense of wearable technology. Retrieved from

<https://www.forbes.com/sites/michaelsolomon/2018/06/21/how-will-consumers-make-sense-of-wearable-technology/#16a337636e9b>

³⁸ Ibid.

Samsung was able to successfully establish its place in the semiconductor industry employing external acquisitions. Ever since Samsung has incorporated an array of channels including joint ventures, acquisitions, technology licensing, overseas R&D centers, equipment suppliers, and part-time consultants to quickly access and incorporate the technologies.

Samsung possesses exceptional ability in developing product and process innovation. The life of technological advancements via innovation is an active part of the company's organizational capabilities. Samsung incorporates an array of tactics to decrease production time for new product development and mass production. Samsung aims to accomplish the goals in less than half the regular time frame for completion. Furthermore, Samsung made two teams for product development which in turn encourages competition.³⁹

Competitive Analysis and Advantages

Advantages:

One of the advantages of Samsung wearables over other wearables companies is their relationships they have with other businesses and the versatility of customizations their watches have. Many businesses such as hotels, manufacturing companies, law enforcement, logistics companies and airports have partnered with Samsung to use their wearables due to the variety of benefits they offer. Samsung wearables offer high levels of security, customization features to customize it for your business needs, and they are currently working on their battery life. For example in the hotel industry, the wearables can be used to keep track of tasks that need to be completed such as cleaning the rooms and guests' requests, therefore increasing the hotel's productivity. The manufacturing industry also benefits by increasing productivity but it also helps them keep track of their employees' health such as fatigue or lack of sleep to avoid any accidents. They also allow the employees to call emergency services at any place or time. They are especially useful for law enforcement because it helps them coordinate with their team in case they need back up. It also keeps track of their whereabouts and their vital signs and it can send alerts if they are in danger.⁴⁰ In the transportation logistics industry their wearables have been very useful because they can be used as scanners when receiving and shipping products, this technology has allowed this industry to become more efficient, which is one of their main goals.⁴¹

The Samsung Galaxy Watch is known to have a strong battery life compared with its strongest competitor, Apple. Samsung wearables battery lasts up to "4 days and Apple's lasts only 18

³⁹ Lee, S.-J. (2011). Dynamic Capabilities at Samsung Electronics: Analysis of its Growth Strategy in Semiconductors. *SSRN Electronic Journal*. doi: 10.2139/ssrn.1914116 vbn

⁴⁰ Samsung.(n.d.). Wearable Technology for Business: Wearables at Work: Samsung Business. Retrieved from <https://www.samsung.com/us/business/solutions/topics/wearables/>

⁴¹ Wollenhaupt, G. (2015). Wearable Barcode Scanner Delivers Transportation Efficiency. Retrieved from <https://insights.samsung.com/2015/09/30/wearable-barcode-scanner-delivers-transportation-efficiency/>

hours.” This is one of their main advantages that not most wearables carry and are a concern for consumers. Their LTE connectivity and long lasting-battery provides a distinct experience to customers from other wearables in the market.⁴²

Another advantage of Samsung in the wearables industry is the variety of prices they offer. Their products range from \$99.99 to \$449.99. This allows them to reach a higher number of customers. Many people prefer to buy Samsung products due to their diverse prices. Customers are able to buy a high-quality product at a reasonable price.

Disadvantages:

One of the disadvantages Samsung wearables have is the device getting too warm while in use. Many customers have complained about the device getting too hot which makes it very uncomfortable to wear. They have to take it off for a period of time during the day to let it cool off, which is unacceptable due to the purpose of the device. Samsung has taken these complaints very seriously and has taken steps towards improving its devices to be able to stay ahead of the competition⁴³

Another disadvantage of Samsung is that they do not have their own Software and OS system. This affects them because they are not able to create that brand loyalty like their competitor Apple has with their customers. This disadvantage can affect them tremendously because they can easily lose customers to other companies.

Another disadvantage is the high number of industries they are involved in. The high amounts of products they offer puts the company at risk of affecting their quality control. Samsung has to keep a close look and hire an excellent management team to ensure they create all their products with the highest quality they can offer and the same consistency.

Market Share/ Financial Analysis

There are currently 3 main companies that hold majority majority market shares worldwide in 2019 which are Apple, Samsung, and fitbit. Samsung holds second in market share with smartwatch as of right now trailing Apple who has been leading since their emergence in 2015 introducing the very first apple watch. According to Statista, in the 2nd quarter of 2019 samsung has accounted for 15.9% of unit shipments by vendor while Apple holds a strong 46.4% and fitbit a 9.8% of market share⁴⁴. Although Apple seems to have a secure grip on the global

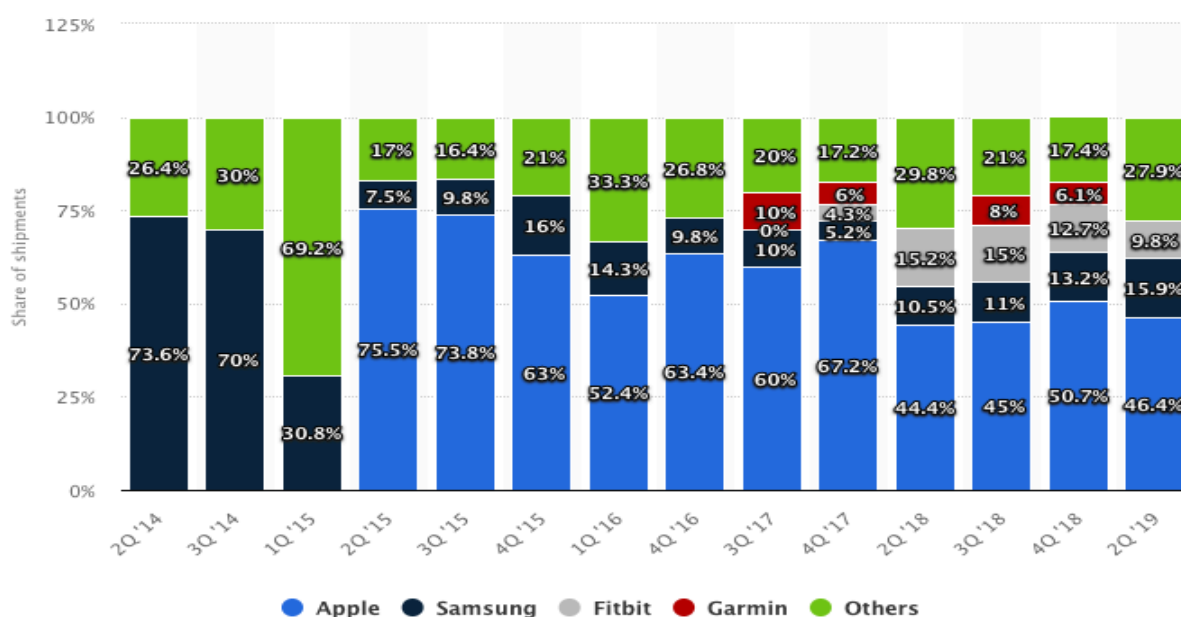
⁴² McGarry, C. (2019). Apple Watch vs. Samsung Galaxy Watch: Which Smartwatch Is Best. Retrieved from <https://www.tomsguide.com/us/apple-watch-vs-galaxy-watch,review-5676.html>

⁴³ Samsung.(n.d.).Gear sport overheating. Retrieved from <https://us.community.samsung.com/t5/Galaxy-Watch/Gear-sport-overheating/td-p/739515>

⁴⁴ Liu, S. (2019, November 12). Global smartwatch market share by vendor 2014-2019. Retrieved from <https://www.statista.com/statistics/524830/global-smartwatch-vendors-market-share/>

smartwatch market, Apple has experienced a decline in market share dropping from 67.2% in 2017 to 50.7% in 2018 down to Apple's current market share of 46.4%. During those same years Samsung's market share has steadily increased 3 years in a row from a 5.2% in 2017 to 13.2% in 2018 and currently 15.9% in 2019.

Focusing on single regions, the wearable band market specifically in the US has reached a record of \$2 bn in Q2 2019 according to the Canalys report⁴⁵. In North America, Apple has accounted for 37.9% of the market selling 2.9 million units while on the other hand Samsung experienced a huge growth of 121% when they sold 800,000 units and taking a 10.6% market share in Q2 2019, as compared to just 400,000 units with a 6.7% market share a year ago (FirstPost, 2019)⁴⁶. Samsung's recent growth in the market has largely come from Fitbit's reduction in market share in the North Americas.




Samsung's promise to deliver quality smartwatches at affordable prices compared to Apple's smartwatches is what has made the difference in Samsung's ability to gain market share globally 3 years in a row and a growth of 121% in the North Americas. The price of a 5 Series Apple

⁴⁵ Canalys. (n.d.). Canalys: North American wearables market hits US\$2.0 billion in Q2 2019. Retrieved from <https://www.canalys.com/newsroom/north-america-wearables-q2-2019>

⁴⁶ First Post. (2019, August 16). Apple leads with 38% share; Samsung shows massive 121% growth in US wearables market: Canalys. Retrieved from <https://www.firstpost.com/tech/news-analysis/apple-leads-the-market-samsung-shows-maximum-growth-in-us-wearables-market-canalys-7174631.html>

smartwatch ranges from a \$399 to as high as \$699 with steel frames whereas the price for Samsung's smart watches range from as low as \$279.77 to as high as \$329.99. In short, Samsung's best quality smartwatch is remarkably lower than that of Apple's basic version of their 5 series.

North America wearable band shipments and annual growth					
Canalys Wearable Band Market Pulse: Q2 2019					
Vendor	Q2 2019 shipments (million)	Q2 2019 market share	Q2 2018 shipments (million)	Q2 2018 market share	Annual growth
Apple	2.9	37.9%	2.2	39.5%	+32%
Fitbit	1.9	24.1%	1.6	28.3%	+18%
Samsung	0.8	10.6%	0.4	6.7%	+121%
Garmin	0.5	7.0%	0.5	8.4%	+15%
Fossil Group	0.3	4.1%	0.2	4.3%	+34%
Others	1.3	16.3%	0.7	13.0%	+73%
Total	7.7	100.0%	5.6	100.0%	+38%

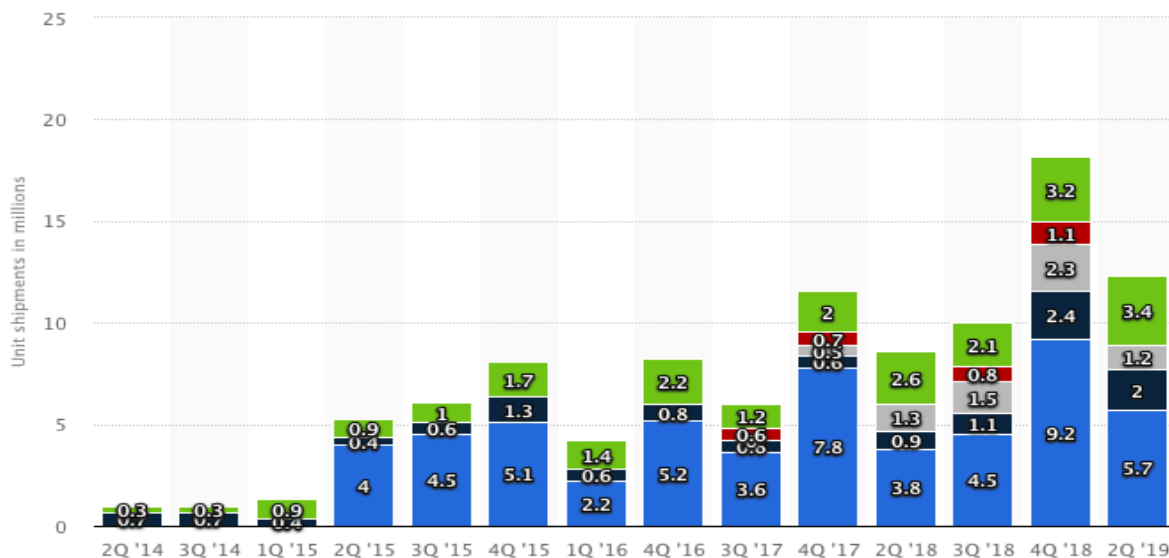


Since Apple first entered the wearables market in 2014 by introducing the first Apple watch the global sales has mostly favored Apple by a large margin compared to competitors. In most recent years, total sales from smartwatches sold in U.S. from different vendors have rose 51 percent from 2017-2018 adding up to 5 billion sales dollars. Of the 5 billion dollars smartwatch sales Samsung, Fitbit, and Apple has accounted for about 88 percent of unit smartwatch sales according to the 2019 NPD report⁴⁷. Currently this year in 2019 after the 2nd quarter Samsung has 2 million unit shipments globally while Apple and Fitbit so far 5.7 million and 1.2 million unit shipments.

All 3 of these companies are on track to increase their total shipments by at least 80% compared to the year before in 2018. Today Apple smart watches continues to dominate the market financially, but since 2017 Samsung and Fitbit has continued to increase their sales each year. For example, in 2017 unit shipments for Samsung were around 600,000 and 500,000 for Fitbit but leading into the next years both companies would increase their shipments by 300%. The overall growth and popularity of smartwatches has favored Apple, Samsung, and Fitbit but it is worth noting that Samsung continues to benefit financially from Fitbits recent decline in market

⁴⁷ Dollar Sales of Smartwatches in the U.S. Are Up 51 Percent, Totaling Nearly \$5 Billion. (n.d.). Retrieved from <https://www.npd.com/wps/portal/npd/us/news/press-releases/2019/us-smartwatch-sales-see-strong-gains-according-to-new-npd-report>

share globally. In addition to the overall growth of smartwatches in the U.S., smartwatch unit sales grew by 61% in 2018 according to the new NPD report of 2019.



SWOT Analysis

Strengths

Research and Development - Ever since the beginning, leading research and development has been the groundwork for Samsung. Investments in these areas have led to the company's vast array of product lines amid its competitors

Award Winning Brand - Samsung is positioned as a technology leader of innovation support with credibility. Samsung regularly receives notoriety for its products, which include the Consumer Electronics Show (CES) for over a decade. Besides, Samsung has garnered hundreds of other awards in merely 14 years and 36 bestowed by CES.

Ecologically Friendly Innovations - Samsung has made it one of its highest priorities to enhance the company's brand presence via the creation of eco-friendly technology. Samsung has been regarded as one of the top green companies, placing on various lists such as the Top 30 Tech and Telecom companies for the EPA's Green Power Partner list. Besides, the company has acquired the ENERGY STAR Partner of the Year Excellence

Award by the Environmental Protection Agency (EPA) for five years. Samsung showcasing these achievements and thus enhances the company's attraction.

Stronghold in the Asian Markets - Samsung maintains a large market share in Asia, especially in India and China, in which both have flourishing commerce markets.

Weaknesses

Heavily dependent on the American Markets - Although Samsung has made achievements in differentiating resources and increased its operations throughout Asia, it still relies largely on the American markets. It has been made known that Samsung sold around 71% of smartphones in the USA alone. The US economy can be unstable and in the event of another economic recession could place Samsung's revenues at risk and harm its operational capital. As a result, Samsung must increase its involvement in the Asian and European industries to guarantee the company's viability and bypass probable failures if the American economy were to fall.

Opportunities

HR Management - Samsung can greatly benefit from developing transformational with investing in the company's HR management. Aside from the increased sales, it would enable Samsung to maintain competitive leverage among its rivals. Through enhanced HR management, Samsung can take advantage of its brand reputation and employ skillful and competent human capital to better employee efficiency.

Diversification and Acquisitions - Samsung must refrain from being restricted to solely one marketplace. Aside from the ease of economic risk, it may allow drawing the attention of political diffusion and unwanted media attention. Samsung must continuously expand its customer reach, which is only accomplished by the means of diversification and acquisitions of businesses.

Threats

Controversies - In recent years, Samsung has been associated with various controversies of which have put its business in jeopardy. For instance, Apple filed a lawsuit in which it claimed Samsung had committed patent infringement. Following the case, the court ultimately ruled that Samsung carried out patent infringement. As a result, Samsung's brand image was negatively affected which lead to a decrease in sales.

Increased Competition - Rivalry between opponents in technological industries has come to an all-time high. Regardless of the competitor, all technological opponents are trying their best to establish themselves as the superior technological company, thus intensifies the rivalry for Samsung concerning competitors and finance.

Legal and Regulatory Threats - As society increasingly transforms into an international economy and digitally connected, policymakers have enacted upon establishing regulations. As a result, companies including Samsung with multinational operations must abide by these new laws country by country. In the event Samsung doesn't abide by the rules, they can be in danger of their operations being closed in a market that can have detrimental effects on Samsung.⁴⁸

Business Model

Samsung operates on a wholesale business model as it sells its products to distributors and/or retailers in large volumes and at low prices. Best Buy, Walmart, and Costco are all examples of distributors who carry Samsung products in their stores and sell them to individual consumers whether it be appliances, mobile devices, or wearables.

Wholesalers usually sell their products to retailers at a somewhat higher price in order to cover their production costs and gain a profit as does Samsung. Retailers then resort to the same method when selling to individual consumers.⁴⁹

Overall, retailers benefit from wholesale purchases because they end up paying a lower per product cost. Wholesalers on the other end also benefit from operating on such business models because they don't have to open individual stores in different areas to sell their products, saving them money and time.

Business Strategy

Samsung's strategy centered around these aspects:

1. **Investment in Centralized R&D:** Samsung main competitive strategy is putting constant investments in its centralized research and development facilities. In the ideatovalue article shows the top 1000 companies spendings on R&D with Samsung

⁴⁸ Samsung SWOT Analysis 2019: SWOT Analysis of Samsung. (2019, November 28).

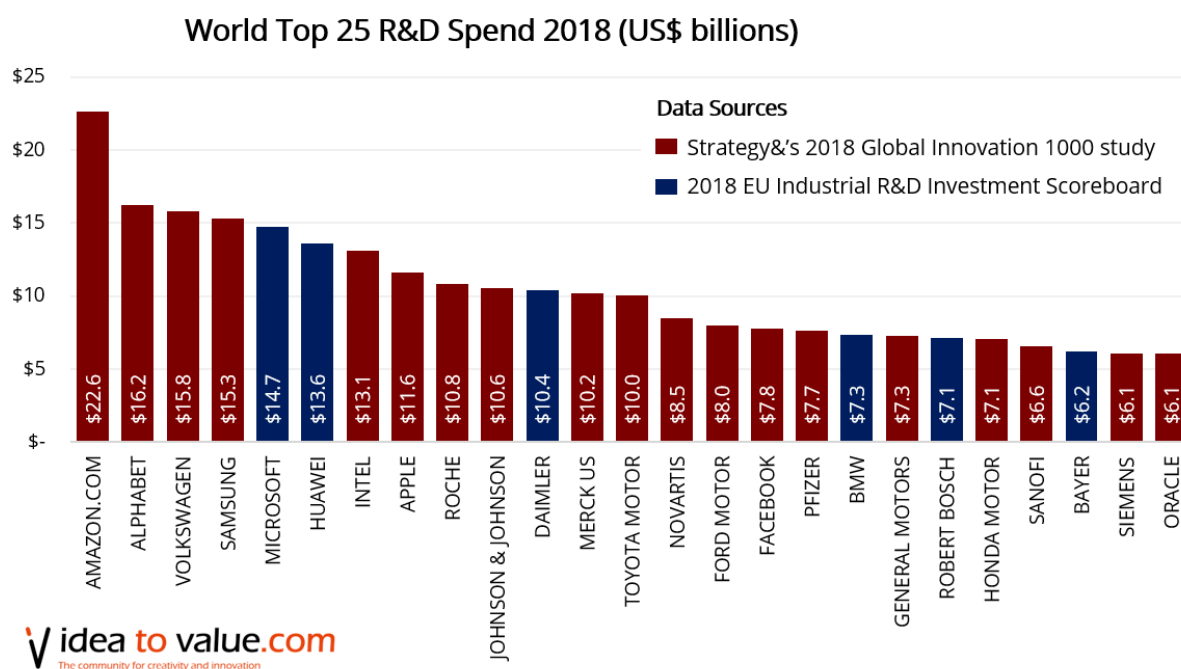
Retrieved from

<https://bstrategyhub.com/swot-analysis-of-samsung-2019-samsung-swot-analysis/>.

⁴⁹ What is wholesale price? (2019). Retrieved from

<http://www.businessdictionary.com/definition/wholesale-price.html>

being Top 4. In 2018, 6.83% of \$224.27 billion in revenue was spent on R&D.⁵⁰ These facilities allow them to exploit newer and higher quality technologies as well as enhancement for current technology. Having that ability allows them to stay ahead of their competitors and have incremental innovation to further develop their horizontal integration. In Samsung “Who Are We? | Research,” their core theme revolves around on artificial intelligence, Tizen, security, communication and visual technology, data intelligence to expand its scope in creating a new lifestyle for its consumer based on AI technologies. These technologies are accessible however very costly. However, the company is outsourcing with 12 countries around the world, 14 overseas R&D facilities, and 7 AI centers.⁵¹ With their known global presence and strong leader title in technologies allow them to have pricing control over a large scale and many companies would want to work with them.



- Product Differentiation:** They are driven to increase costs and profit margins by upscaling, commercialism merchandise and gaining good reputation through this. It's not solely place a stress on new technology however additionally on style. Samsung wearables use the “classic circular style of a traditional timepiece” to provide that authenticity looks. They patent the technology in creating a “hybrid smartwatch design.”

⁵⁰ Top 100 Companies by R&D Spend in the World (2018 known data). (2018). Retrieved from <https://www.ideatovalue.com/inno/nickskillicorn/2019/08/top-1000-companies-that-spend-the-most-on-research-development-charts-and-analysis/>

⁵¹Who are we?(2019). <https://research.samsung.com/whoweare>

What this means is that the watch can be used just as a touchscreen smartwatch by allowing the customer to use the applications such as calls, texts, health tracking, etc.. But the customer can also turn the screen off and just use it as “an analog watch.”⁵²

3. **Cross Platform:** Samsung differentiates from their competition by their compatibility and large range application features. The galaxy watch works with IOS and Android mobiles. Thus, with its cross-platform compatibility, iPhone users are able to buy the watch but Samsung phone users will not be able to use Apple’s watch. The watch offers a large range of health tracking features, one of them include stress management that detects the rising of heart rate and reminds the user to do breathing exercises to lower heart rate. Along with that the device is able to track 39 exercises, activities, sleep and stress management features. The overall powerful smartwatch keeps consumers motivated and focused on their health and wellness goals. Moreover, Samsung recently deployed a new FDA approved digital diabetes management platform that is accessible for samsung users. The program is 12 weeks of duration designed to improve Type 2 diabetes patients by managing their condition and unhealthy habits. They also partnered with Philips bringing out a strategic partnership to integrate Samsung ARTIK IoT platform with the Philips HealthSuite digital platform. This collaboration brings an ecosystem to connected appliances for a more accessible and shared information with Philips’ cloud platform. .⁵³

4. **Global Technological Leader:** In November 8, 2018, the company won the CES 2019 award which accumulate 30 of its recent product innovations. This distinguished program goes through a prestiges examination of devices and services that show excellent design and with incorporated latest advanced technology. The range of products includes: “Visual Display, Fitness, Sports and Biotech, Wireless Handset Accessories, Smart Home, Virtual and Augmented Reality, Computer Hardware, Components and Peripherals, In-Vehicle Audio/Video and Sustainability and Eco-Design.”⁵⁴

5. **Large Price Range:** The wearables industry has three top competitors; Apple, Fitbit, and Samsung. Samsung offers a variety of prices that people in different socioeconomic groups can afford, this positions them in the middle between Fitbit and Apple.

⁵² Reisinger, D. (2018). Samsung Patent Teases Wild Hybrid Smartwatch. Retrieved from <https://www.tomsguide.com/us/samsung-hybrid-smartwatch-patent,news-28432.html>

⁵³The Future of Digital Health On Display at HIMSS. (2018). <https://www.samsung.com/us/ssic/the-future-of-digital-health-himss-2018/>

⁵⁴ Samsung U.S. Newsroom. (2018). Samsung Wins 30 CES 2019 Innovation Awards for Outstanding Design and Engineering. Retrieved from <https://news.samsung.com/us/samsung-wins-30-ces2019-innovation-awards/>

FitBit	Samsung	Apple
\$69.95-\$279.95	\$99.99-\$449.99	\$199.00-\$1,399.00

Samsung aims to be the global market leader by using the low cost and product differentiation strategy. In order to maintain their competitive advantage; they have to strategize ways to utilize their resources and maintain good partnerships to successfully deploy good end products. Thus, being a known global leader give them the advantage to make deals with suppliers at the lowest cost possible without sacrificing quality. With their ability to cut cost has allowed them to create a board range of products to cover various market segments. This enables them to have diversity in withholding their title as global market leader.

Industry Life Cycle

When analyzing the industry life cycle of smartwatches it is clear that the big 3 market leaders like Apple, Samsung, and Fitbit are just getting started. The smartwatch industry that we know today had first got started when Samsung and Fitbit first released their first version of a smartwatch in 2013. The emergence of Samsung and Fitbit smartwatches led to Apple's release of their first smartwatch in 2015 which has continued to dominate the smartwatch market today. Between 2013-2015 is what is considered the Introduction phase to the smartwatch industry but now as we move into 2020 the smartwatch industry is in a growth stage. Smartwatches like the Samsung galaxy , Apple series 5, and the Fitbit versa 2 are gaining a lot of market share ground these days with the recent health monitoring and staying fit trend.

For example, in 2017 the market for smartwatches was valued at \$9,264.9 million dollars and is expected to grow to \$31,070.6 million by 2025 according to Allied Market Research⁵⁵. In addition the smartwatch industry will experience a compound annual growth rate of 14.5% between 2019-2024. In particular, Samsung has been able to increase their growth rate in the past couple years by offering a much lower price than a smartwatch from Apple. The price for a samsung smartwatch is \$259.99 for the top tier model while Apple sells their watches for as cheap as \$384 as a base price for the basic model. Low priced smartwatches and an increased demand for wireless sports and fitness devices is how samsung has been able to compete with market leaders such as Apple and Fitbit. Samsung smartwatches are continuing to thrive under the growth stage because of the use among different athletes like for example cyclists, runners,

⁵⁵ Smartwatch Market to Reach \$31,070.6 Million by 2025. (n.d.). Retrieved from <https://www.alliedmarketresearch.com/press-release/smartwatch-market-is-expected-to-reach-32-9-billion-by-2020-allied-market-research.html>

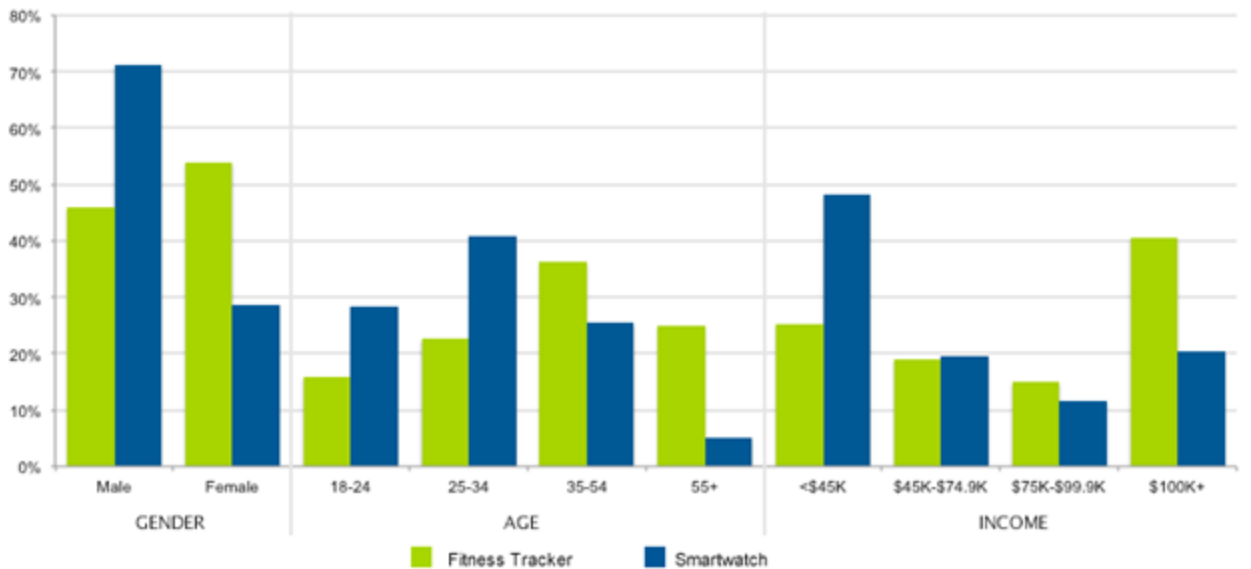
gym-goers, swimmers, and just regular athletes that are trying to monitor their health and dailying activities/capabilities.⁵⁶

Customer Segments



Framework, wearable’s customers fall in the “early adopters” stage. The early adopters stage makes up roughly 13.5% of the market potential and is characterized by customers who appreciate and recognize the possibilities that new technology can bring into their everyday lives. For example, wearables are definitely not a necessity, therefore they mostly appeal to customers who truly recognize their value and can afford them.⁵⁷

U.S. Wearable Ownership by Demographics



The graph above takes a deeper dive into wearables customers, specifically in the U.S., and analyzes the demographics of customers who purchase fitness trackers and smartwatches, which essentially are the two biggest forms of wearables technology. Samsung, like many other wholesale businesses, uses business to consumer marketing which typically targets customers based on demographics (gender, age, and income in this case).

When comparing gender ownership among smartwatches and fitness trackers in the graph above:

- 70% of smartwatch owners are males
- 30% of smartwatch owners are females
- 45% of fitness tracker owners are males
- 55% of fitness tracker owners are females

Based on this data, the male population dominates the smartwatch consumer base and the female population dominates the fitness tracker consumer base in the U.S.

When looking at the different age groups and incomes, the data from the NPD report above reveals:

- In the U.S., more than 69% of smartwatch owners fall in the 18 - 34 years old age group with 48% of them having an income below \$45,000.

On the other hand, when looking at fitness tracker owners in the U.S., 36% of them fall in the 35 - 54 years old age group, and 41% of them have a median income of greater than \$100,000.

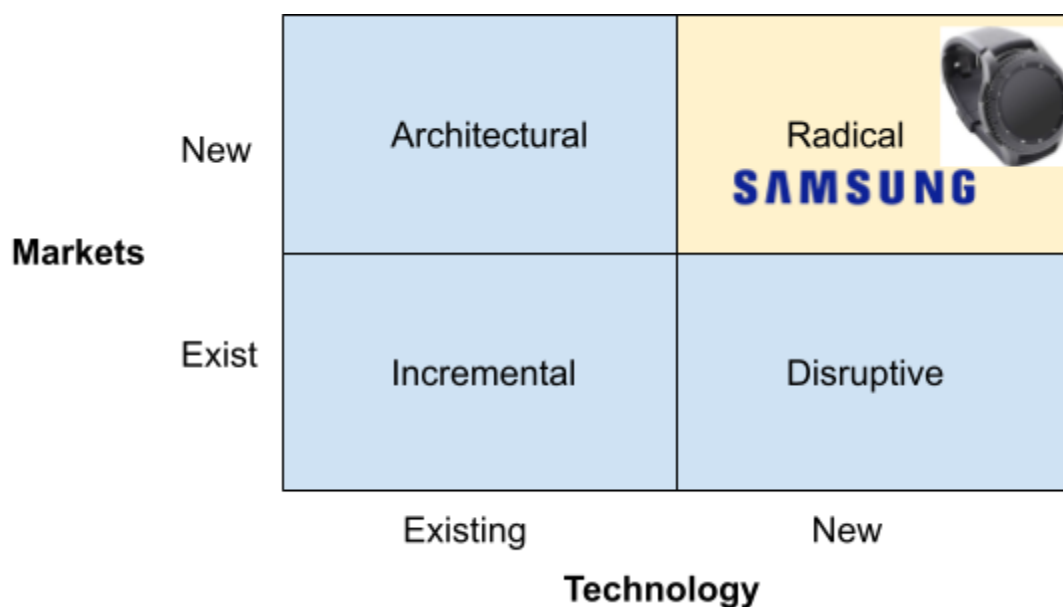
This data suggests that smartwatches are more in demand compared to fitness trackers, specifically among younger people, despite having low incomes. This makes sense as Samsung's most popular form of wearables technology is their smart watches.⁵⁸

Innovation Types

Samsung smart watches are being placed under radical for innovation types. Due to the increase in health awareness among the consumers, smart watches are being utilized differently amongst consumers and doctors. With the new technologies in smartwatches, it enables users to track their health and take precautions in advance before making a visit to the doctor. Moreover, the doctors can use these long term data collected to track patient health status remotely with more

⁵⁸ The demographic divide: Fitness trackers and smartwatches attracting very different segments of the market, according to the NPD group. (2015). Retrieved from <https://www.npd.com/wps/portal/npd/us/news/press-releases/2015/the-demographic-divide-fitness-trackers-and-smartwatches-attracting-very-different-segments-of-the-market-according-to-the-npd-group/>

accuracy in their suggestions and treatments. The smartwatches are entering into the new market at an enterprise level, clinics. There are also some new integration in devices including sensors, display, and apps. Thus, although smartwatches has been around for a while, the integrated technologies are still being revamped and newly created day by day. features an integral graphical record feature and fall detection. Samsung's newest smartwatch for the patron market options exercise, sleep, stress and health chase options further as a forthcoming pressure level chase feature. In a Samsung release, beginning March 2015, users will transfer MY BP science laboratory, the analysis app together developed with the University of American state, San Francisco, on to the Galaxy Watch Active to watch pressure level. My BP laboratory app that's already offered uses AN optical device, camera, to record measurements, however a standard force per unit area cuff continues to be required to "calibrate" the device. The app solely tracks changes data over time without calibration.⁵⁹



Corporate Strategy

Vertical Integration:

Samsung uses vertical integration as one of their strategies for its wearables division, which means they utilize outsourcing and insourcing methods to create its products. The stages of the supply chain were they do R&D and design in house. This method is utilized for the watches to

⁵⁹ More wearables shift from fitness to clinical use with new Samsung and AT&T smartwatches
<https://www.fiercehealthcare.com/tech/wearables-shift-from-fitness-to-clinical-use-samsung-smart-watch-can-monitor-blood-pressure>

ensure the protection of their intellectual property from their rivals. Samsung is in a unique position in the market as one of their other core industries is semiconductor and SMT component fabrication; which happens to be the second-largest microprocessor manufacturer in the world. They outsource their raw materials, manufacturing, and distribution. This is beneficial for the company because by outsourcing they have a lower cost of production, which allows them to lower the price of the product. Both insourcing and outsourcing are used in their marketing and sales because they have both Samsung stores and also sell their products to retailers such as Target.

Horizontal Integration:

Samsung exhibits horizontal integration in their respective markets as they are involved in many different industries such as appliances, televisions, cellphones, and now wearables. Samsung is starting to create an ecosystem, even though they do not make their own OS. They are doing this by allowing their products from their different industries to connect to one another, such as their cell phones and appliances. Even though they are starting to do this connection, their products can still be paired with others from different companies.

Different Geographic Markets

Samsung targets different geographical markets by offering a range of products that satisfy different needs as well as different price ranges. Their products and software are tailored to regional needs and interests. They also run promotions with the popular characters or events in each different country they are selling their products.

Build, Borrow, & Buy

For the development of Samsung's wearables, the company incorporates both build and buy strategies. Entering the market, Samsung began with making a deal with a local startup that had the smartwatch technology. Resulting from the final decision, Samsung bought the local seller and developer and renamed it under Samsung smartwatches. Samsung's wearables run on software known as Tizen, which is backed by the Linux Foundation. Samsung has a contractual agreement with Linux permitting Samsung to combine resources and for the development of the software to be used in Samsung's wearables technology. Samsung merged its previous Linux-based OS effort, known as Bada with Tizen and ever since has incorporated the technology for wearables. In addition to the merging of Samsung and Tizen, in 2016 Samsung began to coordinate with Microsoft to enable their .Net Core to aid Tizen.⁶⁰

⁶⁰ Securing Patient Records on Wearables Just Got Simple. (2017, December 31). Retrieved November 11, 2019, from <https://insights.samsung.com/2017/01/23/securing-patient-records-on-wearables-just-got-simple/>

Recommendations and Conclusion

A. Description and Evaluation of Company's Strategy:

Samsung conducts in-house R&D and design which enhances the speed of communication within the company regarding design plans and R&D updates to be exchanged. As a result, Samsung can maintain its project timeline accuracy, as well as ensure proper regulation over deadlines. Moreover, Samsung has a far-reaching line of products in industries like cell phones, appliances, wearables, semiconductors. Undergoing operations in various technology industries, Samsung represents an international leading manufacturer for microprocessors. This allows Samsung to generate revenue from multiple sources and various markets. Additionally, they are involved in diverse geographic markets around the world and manage to tailor their products to each country's needs accordingly. This showcases Samsung's exceptional ability to cultivate its robust global presence while expressing sociocultural diversity. This displays the company's power to manage excellent quality control in all the industries they are involved in. Furthermore, Samsung's protection of intellectual property remains a vital component of the company's strategy allowing the company to control ownership of the rights and ability to sell to other companies.

B. Prioritization of Company's Future Challenges:

Samsung Should Prioritize the Following Issues:

1. Ongoing Trade War Between U.S & China

- Samsung should start drafting a plan in case the trade war escalates and they no longer have access to any imports or exports from their big trading partners. Despite the circumstances, production lines must continue to operate as Samsung's revenue is centered around its products. In addition, Samsung must also continue to effectively deal with high tariffs of any kind, including having a strong budget allocation.

2. Market Competition

- Samsung experiences and will continue to experience immense competition from other reputable brands in the market like Apple and Fitbit. Also, foreign players, who sell similar products at a reduced price remain a significant threat. As the field of technology continues to grow at

a rapid rate, it will constantly attract new entrants, making it harder for companies to differentiate themselves from their competition.

3. Data Privacy

- Collecting user data, while maintaining privacy is a critical issue on a global scale. User data enhances marketing techniques, but as the risk of user privacy, which many consumers are strictly against. This usually occurs when product users fail to read the terms and agreements when purchasing new products or installing/updating software. Also, with high levels of cybercrime, Samsung must ensure it has effective forms of cybersecurity, protecting its users and company from things like data breaches and hacking.

C. Recommended Actions to Address Future Challenges:

The following are recommendations we suggest Samsung to consider based on our analysis of the company. We believe these recommendations will help the company continue being successful and ahead of their competitors.

1. Connected Ecosystem:

Even though Samsung products are able to connect to one another, they should invest in building a stronger connected ecosystem. This would be beneficial because they will be able to create stronger loyalty with their customers and it will not be as easy to change brands.

2. Semi-Outsource Design and Development:

- a. Capitalize on technology forecasting- market research firms most likely have the time and resources to survey the field and examine future technologies.
- b. Large engineering firms can do testing on upcoming technologies in their existing laboratories.

3. Organizational Due Diligence:

- a. The company has had problems regarding their reputation due to actions their board directors have done in the past. They need to make sure they have a strong board of directors and hire individuals who share the same values as the company to better represent Samsung. This will help them avoid any negative publicity and showcase all the good actions they do for the community as well as their products.

- b. Samsung should also come up with new innovative applications and design for their wearables to differentiate themselves. The wearables market has a very close group of competitors, who have very similar products. Samsung needs to find ways to become more unique. They should also continue working on increasing their battery life even though they are the leading company in this sector. This is very important to continue being ahead of their competitors since this factor is extremely important for customers.

4. Samsung Could Lower Their Prices By Cutting Costs:

- a. Outsource Engineers: By outsourcing engineers Samsung would be able to reduce their operating costs/labor costs and improve their design quality. Furthermore, by outsourcing engineers, Samsung would be able to use better technology that will aid in their production and lower product costs.
- b. Outsource More Products to China: By outsourcing more products to China, Samsung will be able to compete with rivals that are producing low-cost products.
- c. Continue to Build Own Products: Samsung has historically be known for building their own products in their own factories and places like China and South Korea.
- d. Manage Inventory More Efficiently: set up a system/software that automatically reads barcodes and is set to automatically reorder materials from suppliers as soon as the inventory level is below the threshold.
- e. Strengthen Relationships Between Suppliers: Communicate with all aspects of the inventory ordering and receiving to make sure there is transparency on both sides. Often meet with suppliers and understand their positions so that both parties can work through challenges more efficiently.

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