



# Strategic Management Analysis – Apple Watch

**Course Title:** Strategic Management of Technology

**Course Number:** ETM 526/626

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**Term:** Spring 2017

**Date:** June 5, 2017

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## **1 Executive Summary**

Apple smartwatch strategy is analyzed in this paper in comparison to its competitors like Samsung and Pebble. The features, cost, market share and sales of smartwatches are compared. The position of Apple smart watch in the technology adoption lifecycle is identified based on the sales. This paper also discusses the Porter's five-force model and SWOT analysis as applied to Apple's smart watch. Strength and weakness are analyzed for Apple smart watch and opportunities and threats in comparison to its competitors. The goal of this paper is to identify the position of Apple smartwatch in the smartwatch industry.

## **2 Introduction**

Wearable technology is an electronic device that could be worn in various parts of the body as implant or accessories. It includes eye wear, smart shirts, smart glasses, smart watch and many other technologies that could be worn in various parts of consumer's body. Smart watch has captured the highest volume compared to other wearable technologies available in the market. Smart watches are computerized wristwatch. Smart watches perform calculations, run mobile apps, receive and answer phone calls, play music, receive text messages. Many companies design and manufacture smart watch. The price, functionalities, design, hardware and software, compatibility and battery vary from one smart watch to another. The top five smart watch vendors are Apple, Garmin, Samsung, Lenovo and Pebble.

This paper analyzes the competitive strategy and strategic position of Apple in the smart watch category. Competitive strategy is defined as "deliberately choosing a different technique or set of activities to achieve a unique mix of value". [12] It discusses Apple's activities to deliver unique

mix of value to its customers and its strategy to remain as a top vendor in the market compared to its competitors.

### **3 Smartwatches**

#### **3.1 Apple**

Apple CEO Cook and design chief Jonathan described Apple watch as the “most personal” product. Apple did a study and identified that users unlock their phones more than 100 times a day. To reduce the user’s interaction with the phone and at the same time provide the expected level of engagement, Apple team came up with the idea of smart watch to provide important messages at a glance. User’s need not take their phone out of their pocket. It is also useful to check information like to-do list or weather. The screen size of the smart watch is smaller compared to the smart phone. They identified wrist as the best place for the technology. They wanted to add style element in addition to the technology. Apple watch is a piece of technology and fashion item. The main goal of Apple watch is to reduce the frequency and the duration of interaction with iPhone. It can be paired with iPhone 5 or later. [1]

Apple differentiated the materials used for display, bands and cases. The cheapest model is Apple Watch Sport. It has glass display, fluoroelastomer band and aluminum case. Apple watch edition is the expensive version and is made of sapphire crystal display and 18-karat gold case. The price ranges from \$349 to \$17,000. Display is of two sizes (38mm and 42mm). There are 38 different combination of materials which can be used by customers to customize their digital watch. They sell their watches in retail stores, online and designer wear boutiques. High end watches were sold in designer wear boutique.

The drawbacks include the battery life, sluggish performance while pulling data from the iPhone. Few apps were not optimized for the watch. [1]



Figure 1: Apple Watch

There are three methods to interact with Apple watch app namely glances, complications and the App. Glances are not just notifications. To display the glance user swipes on the watch. It is used to display small pieces of information and small interactions. For example, glances are used to display information like bank balance using banking apps. Complications are used to customize watch faces. The apps that support complications are used to customize the watch faces. For example, complications are used to display information like weather or upcoming meetings. When customized the user does not have to open the app or swipe to look at a glance. Apps that are cannot be customized can be opened to view and interact. It is accessed through apple watch crown. [2]

The features include an extremely accurate time keeping machine, calorie counter, heart rate

monitor, motion tracker, and other health and fitness apps. [1] When paired with iPhone5 or higher, it displays incoming calls, text messages, emails and other calendar events. Users can also access maps. Below are the key features [8] of Apple watch,

### **Communication**

- Digital Crown – Allows users to scroll and zoom.
- Taptic engine – Alerts user by tapping different patterns on their wrist for difference notifications.
- Force touch – provides different options by pressing harder.
- Animated Emoji – Smiley faces can be customized. It can be customized to wink or stick tongue out.
- Receive calls and text – Calls and text can be received when paired with iPhone 5 or above.
- Analyze text – It analyzes text and suggests response.
- Walkie Talkie – Voice message can be sent to other users.
- Wi-Fi

### **Fitness**

- Measures heart rate – Heart rate can be measured using the heart rate sensor in the Apple watch. It can also be sent to other users (Family, friends, cardiologist) using taptic engine.
- Accelerometer – It calculates the calories burnt based on the number of steps walked.



## **App Usage**

- WatchKit – It is a tool that helps users to create app.

## **Miscellaneous**

- iTunes- Access and listen to iTune radio and library. It also allows the user to control the volume and songs.
- Apple TV – Access Apple TV by swiping.
- Siri – Watch mic can be used to access Siri.
- Maps – Map feature can be accessed through Siri.
- Apple Pay – It can be used to customize banking information.
- Sensitive automatic display – When the user raises the wrist the display turns on and turns off when wrist is down.

## **3.2 Competitors**

The top five smartwatch vendors in 2016 were Apple, Garmin, Samsung, Lenovo, Pebble. Pebble introduced its smart watch in 2013. It can be paired with iPhone and Android phone. When paired with iPhone and Android phone, it displayed the incoming calls, email and text messages. It had a black and white display. Battery life was good compared to Apple watch. Battery lasts for 7 days. The pebble smartwatch is waterproof. The price ranges from \$99 to \$199. The smart watch case is either plastic or stainless steel. The band can be rubber or silicon or leather. The drawback of pebble watch is the storage capacity. [1]

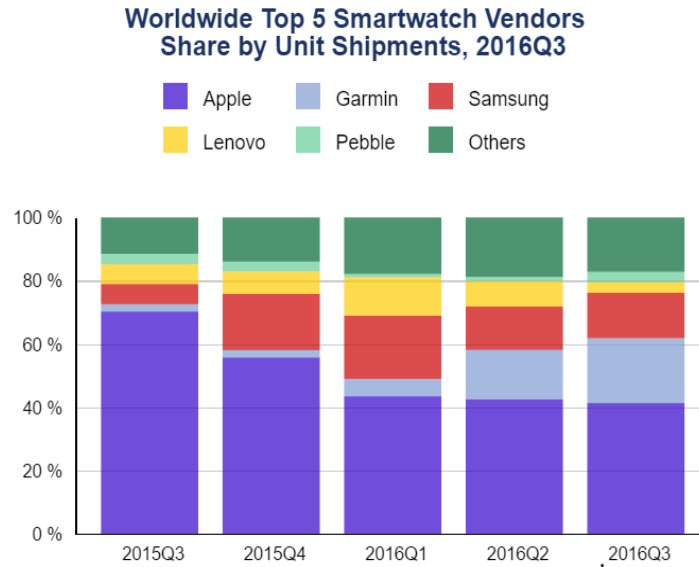


Figure 2: Smartwatch vendors market share

Samsung introduced smart watch in 2013. The first smart watch launched was Samsung gear. Samsung watches ran the Tizen OS. Samsung introduced six different watches. Gear Live introduced by Samsung could be paired with any Android smartphone. In 2014, Samsung was the market leader in smart watch category. [1]

CATEGORIES	APPLE	SAMSUNG	PEBBLE
Starting Price	\$349	\$300	\$150
Compatibility	iPhone 5 and higher	Samsung Galaxy S3 and higher, Samsung Note 2 and higher	Android and iOS
Battery	18 Hrs	4 Days	7 Days

<b>Style options</b>	Apple watch, Apple watch sport, Apple watch edition, Different band, Gold, steel and aluminum casing	Charcoal black or frost white	Silver, black and gold finishes available with leather and stainless-steel strap
<b>Functionality</b>	Notification of incoming calls, texts, emails, calendar events, information from third party app	Display text message, email and calls.	Display email, text, phone and other notifications from iPhone and android app
<b>Features</b>	Digital crown, Digital Touch, Taptic engine, Voice assistant, Stand ring, Activity tracking, GPS, Water proof	3G connectivity built in. Does not require phone for internet. Activity tracking, Cross multiple devices	Water proof

Table 1: Comparison of Smartwatches [1]

## 4 Technology Adoption Lifecycle

Apple watch pre-orders was more than 2.3 million. Apple watch pre-order sales was more than Android wear's yearly sales. This shows the large group of early adopters who wanted to test before its availability in the retail store. Early adopters are individuals with high opinion and are very careful in their decisions. Early adopters increased the momentum in the early phase. This momentum resulted in early majority in the technology adoption lifecycle. Early adopters contact early majority and adopt the innovation.

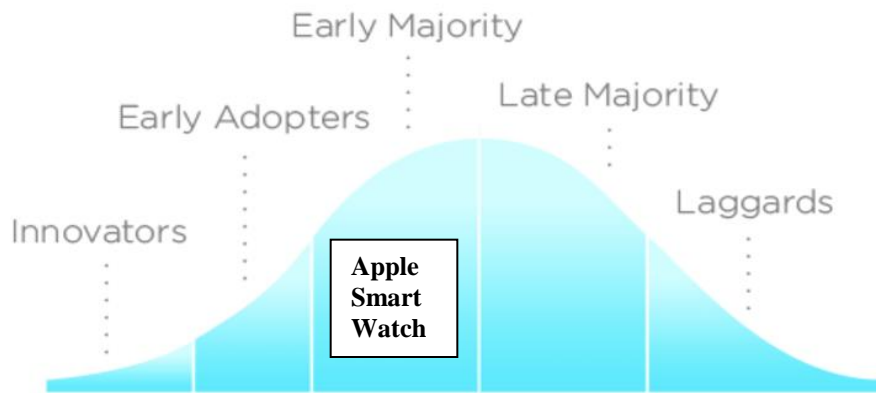


Figure 3: Technology Adoption lifecycle [3]

Customization is one of their main strategy. Initially they offered different experience with their features like digital crown, force touch and taptic engine compared to their competitors. To target early majority phase, they understand the user's needs and add new features. Apple watch OS4 has new features like activity, health and sleep tracking, new watch faces, improved siri, new apps, sync with multiple devices (Ex: iPad and iPhone). [3]

## 5 Porters five force analysis of smart watch industry



Figure 4: Porter's five force [9]

### **Threat of New Entrants or New Entry**

Threat of new entrants is moderate for Apple. Firms with high financial capacity can enter the market create competition for Apple. The force is moderate because it is costly to develop strong brand and high capital investments. Firms with high financial capacity like Google and Samsung can create impact.

In 2016 Q4, Apple watch sales was more than 11.6 million units. Samsung sales was around 2.4 million units. Apple accounted to 55% of the market share in the smart watch category. [4] Pebble smart watch is cheap, simple and has long lasting battery compared to Apple watch. Pebble's strategy was to attract loyal customers. Google's strategy was to create open platform so that they can license it to other firms who develop android-wear devices. Samsung is the major competitor for Apple smart watch. [9]

### **Threat of Substitutes or Substitution**

There are many substitutes for Apple watch but the performance and features are not as good as Apple watch. Samsung Gear 3 is the best for android smart phone. Samsung Gear 3 is also compatible with iOS. The advantage of Samsung gear 3 is the internal storage and disadvantage is the absence of apps. It runs on Tizen operating system. Samsung Gear 2 and Samsung Gear 3 can store music because of the internal storage space available. It also has a hear rate monitor. Pebble has great battery life and provides fitness data and notifications. It has also been acquired by Fitbit. Garmin vivoactive HR works with android and iPhones. The advantage is its built in GPS. Fitbit is the third highest in sales. Apples fitness functionality possess a major competition for Fitbit. Though there are many alternatives for Apple smart watch it is still the best because of

it advanced features and competitive advantage. The advantages have made Apple watch more desirable compared to its competitors. [9]

### **Bargaining Power of Suppliers**

The suppliers of Apple components are high and the supply is also high. They have suppliers around the world. They suppliers cannot demand much on Apple as their can shift to another supplier. Their bargaining power is low. Multiple chip companies supplied components for Apple watch. S1 chip in Apple watch was supplied by Broadcom, San disk, NXP Semiconductors, STMicroelectronics and many other companies. [5] Apple also invites designers to create app for smartwatch. [9]

### **Bargaining Power of Buyers**

The buyers or customers power is important for all the firms. Revenue from the individuals purchase does influence the power of Apple but not completely. Buyers can change their brand easily if they are not satisfied with performance. Therefore, Apple needs to consider the buyers power while designing their product. Apple always has a unique mix of value which attracts the customers and rarely they change their brand. In the Apple watch, the customization is their competitive strategy. Apple also has smart watches in different ranges starting from \$349. Customers who already own iPhones buy Apple watches. The number of users using iPhone is high that it would never let the buying power of Apple smartwatch to sink. [9]

### **Competitive Rivalry**

There are few companies competing with Apple in the smart watch category. The cost of

switching to other smart watches are low. Apple's competitors include Samsung, Google, Fitbit and other smart watch companies. Rivalries not only include the companies like Samsung but also include companies that develop the features Apple smart watch has. Fitbit for fitness functionality and Tap-to-Pay for payment options are also its rivalries.

Apple watch sales and market share is the highest in the smart watch category in 2016. [6] This shows their position in the market compared to its competitors. Samsung has the second highest market share following Apple in the smartwatch category. Therefore, Samsung is Apples major competitor. [9]

Global Smartwatch Vendor Shipments (Millions of Units)				
	Q4 '15	2015	Q4 '16	2016
Apple	5.1	13.6	5.2	11.6
Samsung	1.3	2.7	0.8	2.4
Others	1.7	4.5	2.2	7.1
<b>Total</b>	<b>8.1</b>	<b>20.8</b>	<b>8.2</b>	<b>21.1</b>
Global Smartwatch Vendor Marketshare %				
	Q4 '15	2015	Q4 '16	2016
Apple	63.0%	65.4%	63.4%	55.0%
Samsung	16.0%	13.0%	9.8%	11.4%
Others	21.0%	21.6%	26.8%	33.6%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Total Growth: Year-over-Year (%)	315.6%	352.2%	1.2%	1.4%

Source: Strategy Analytics

Figure 5: Smart watch sales and market share

## 6 SWOT Analysis

Strength	Weakness
<ul style="list-style-type: none"> <li>Unique features</li> </ul>	<ul style="list-style-type: none"> <li>Data extraction</li> </ul>

<ul style="list-style-type: none"> <li>• Brand image</li> <li>• Brief notification</li> <li>• Display vital information</li> <li>• Accessories and customization</li> <li>• Profit margins</li> </ul>	<ul style="list-style-type: none"> <li>• Battery life</li> <li>• Apps</li> <li>• Voice recognition</li> <li>• Setting up process</li> </ul>
<b>Opportunity</b>	<b>Threat</b>
<ul style="list-style-type: none"> <li>• High end watches sales</li> <li>• Demand for wearable devices</li> </ul>	<ul style="list-style-type: none"> <li>• Cost – Expensive compared to the smart watches available in the market</li> <li>• Low entry barrier</li> </ul>

Table 2: SWOT Analysis [1] [10]

### Strength

- Unique Features - Communication features include digital touch, animated emoji, receive calls and text, wi-fi, walkie talkie. Fitness features include measuring heart rate, accelerometer, set workout goals. App functionality includes WatchKit. Other key features include iTunes, Apple TV access, Siri, Map, Apple Pay, Sensitive automatic display. [1]
- Brand Image – Apple has the highest brand image. Their innovation process and leadership in all the industries give Apple the competitive advantage compared to its competitors. The customers expectation from Apple is high because of the strong brand personality. [1]



- Display vital information – Apple watch notifications are brief. When iPhone is unlocked user does not get any notification in the Apple watch. [1]
- Accessories and customization – Apple watch has a wide range of bands, case and display. Users can customize their Apple watch. The price is based on the materials used. [1]
- Profit margins – Innovation helps Apple to maintain pricing strategy. Pricing strategy results in high profit margins. [1]

#### **Weakness [10]**

- Data Extraction – The performance is sluggish while extracting data from the iPhone.
- Battery Life – The Apple watch needs to be recharged every day. The battery life is only 18 hours. [1]
- Apps – The number of apps are less and many apps are not optimized for the Apple watch. [1]
- Voice recognition – It is sometimes difficult for Siri to understand the word and it will require iPhone to browse. [1]
- Setting process – It takes only few minutes to pair Apple watch with iPhone. But the setting process is complicated and it takes a long time.

#### **Opportunity [1]**

- Watch Sales – High end watches account to 45% of the watch sales worldwide. The cost of high end watches is above \$1000. Therefore, Apple has good opportunity in the smartwatch category as the high-end versions are expensive. [1]

- Demand for wearable device – The demand for wearable devices is high. Market share improves as the functionality improves. There is a good demand for smartwatches, fitness bands, activity trackers and other wearable devices in the future.

#### **Threat [9]**

- Cost – Cost of Apple watch is higher compared to other smartwatches available in the market. Even the basic version is expensive compared to its competitor models.
- Low entry barrier – Samsung is Apple's major competitor. There are also many other smart watches available in the market and entry barrier is low.

## **7 Conclusion**

Apple is the world's strongest brand. It is known for its innovation in every industry. Apple not only sells the product but also experience. It creates a dependency in daily life. Many users are big fans of Apple product and they purchase all the products that Apple sells. The major revenue for Apple is from iPhone sales. It creates new customer demand through other product or services.

Apple was not the first smartwatch but it was able to identify the drawbacks of the competitor's smartwatch to implement in Apple watch. Apple has the highest market share in the smart watch category. Samsung and other competitors are still a threat to Apple but the Apple watch sales and its competitive advantage show it will continue to remain the best player in the smart watch category. The design of Apple watch has a major advantage compared to its competitors. All the other smart watches are simple and not fashionable. The technical advancement also contributes to the growth in market share. The key strategy of Apple is the commodification of the product.

It is difficult for its competitor to copy. It is not easy to achieve parity in hardware and software and achieve the same momentum as Apple.

## 8 References

1. D. Yoffie and E. Baldwin, "Apples Future: Apple Watch, Apple TV, and/or Apple Car?", Harvard Business School, 2016.
2. <https://code.tutsplus.com/articles/designing-for-apple-watch-product-strategy--cms-25998>. [Accessed: 05- Jun- 2017].
3. <http://www.macworld.co.uk/news/apple/w> [1]D. Yoffie and E. Baldwin, "Apples Future: Apple Watch, Apple TV, and/or Apple Car?", Harvard Business School, 2016.  
ase-date-new-features-for-apple-watch-3640975/. [Accessed: 05- Jun- 2017].
4. C. Stark, "Wearables Trendspotting: Apple is the smartwatch market | Stark Insider", Stark Insider, 2017. [Online]. Available: <http://www.starkinsider.com/2017/02/apple-smartwatch-market-q4-sales-report.html>. [Accessed: 05- Jun- 2017].
5. <http://www.investors.com/news/technology/click/brcm-nxpi-sndk-stm-idti-adi-mu-chips-found-in-apple-watch/>. [Accessed: 05- Jun- 2017].
6. <https://watchaware.com/post/19480/apple-watch-sales-dominate>. [Accessed: 05- Jun- 2017].
7. "Smartwatch Market Declines 51.6% in the Third Quarter as Platforms and Vendors Realign, IDC Finds", [www.idc.com](http://www.idc.com), 2017. [Online]. Available: <http://www.idc.com/getdoc.jsp?containerId=prUS41875116>. [Accessed: 05- Jun- 2017].
8. <http://mashable.com/2014/09/09/apple-watch-tools/#ZtDpVzuINaQL>. [Accessed: 05- Jun- 2017].
9. E. Ferguson, "Apple Inc. Five Forces Analysis (Porter's Model) - Panmore Institute", Panmore Institute, 2017. [Online]. Available: <http://panmore.com/apple-inc-five-forces-analysis-porters-model-case-study>. [Accessed: 05- Jun- 2017].

10. N. Smithson, "Apple Inc. SWOT Analysis & Recommendations - Panmore Institute", Panmore Institute, 2017. [Online]. Available: <http://panmore.com/apple-inc-swot-analysis-recommendations>. [Accessed: 05- Jun- 2017].
11. S. Lenaerts, "Designing for Apple Watch: Product Strategy", Code Envato Tuts+, 2017. [Online]. Available: <https://code.tutsplus.com/articles/designing-for-apple-watch-product-strategy--cms-25998>. [Accessed: 05- Jun- 2017].
12. <https://www.quora.com/What-is-Apples-strategy-with-the-Apple-Watch-and-its-model-mix>. [Accessed: 06- Jun- 2017].