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# **The Rise of Apple Inc: Opportunities and Challenges in the International Marketplace**

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## **ABSTRACT**

Apple Inc. is one of the world's leading multinational enterprises as measured by revenue, profits, assets, and brand equity. Its ascent has been rapid but not linear; it has experienced setbacks along the way. This paper will analyze Apple's evolution over the past decade and future prospects, with an eye toward identifying opportunities and challenges for global expansion.

## BACKGROUND

In 1976, Apple Inc. began as a garage operation by three men: Steve Jobs, Steve Wozniak and Ronald Wayne (Ellen Terrell, 2008). The entire company was based solely on the engineering genius of Wozniak and the entrepreneurial and innovative genius of Jobs. Wayne sold out his shares of Apple to Jobs and Wozniak. Only weeks after its founding, Jobs and Wozniak were the sole owners of the company when it was fully incorporated in 1977 (Terrell, 2008).

The company was based on the design, manufacturing, and selling of a new kind of operating computer designed by Wozniak, revolutionizing the world of the personal computer. Apple I was soon superseded by its successor the Apple II, which became the platform for VisiCalc, the first ever spreadsheet program (Terrell, 2008). Apple saw growth like no other during its first ten years of life as sales, but overall revenue saw an exponential growth every four months. By the time that Apple Inc. had its IPO and went public in 1980, sales reached \$117 million with the introduction of the Apple III (Terrell, 2008). However, to compete with Microsoft and IBM, the two technology giants of the time, Apple had to evolve and innovate a new computer with a graphic user interface (GUI). With this new shift towards a more user friendly computer that would be accessible to the everyday person, not just the business world. Jobs began work on the Lisa computer, the first personal computer with a GUI to go public in 1983; however, it turned out to be a failure and was soon replaced by the much more successful Macintosh computer (Nik Rawlinson, 2017).

Although, Apple saw much success in the early 1980s with its IPO and the introduction of the Macintosh, it eventually all came down on the company. In 1982, Wozniak left Apple because of the management style of his colleague and friend Steve Jobs. Jobs replaced Wozniak with PepsiCo's former President John Sculley. Sculley would eventually lead to Jobs being fired from his position as CEO of Apple and would also turn down a major deal with Microsoft to implement their Windows operating system (OS) software in Apple computers (Terrell, 2008). Soon after Jobs' departure, Apple began to spiral, losing much of its market share between the years 1990-1996. Analysts believed that the company, which had ushered in the era of personal computers, was doomed.

In 1976 the Board of Directors finally fired Sculley and decided to buy out NeXT Software, a company owned by Steve Jobs, to compete with Microsoft's Windows OS. That same year Jobs was made interim CEO and in 2000 permanent CEO (Rawlinson, 2017). It was at the turn of the century that Apple would begin to make a name for itself once again. Jobs restructured the company from the ground up and began work on new innovating projects that would make Apple profitable again. In 2001, Apple introduced not only the new Macintosh OS X but also the iPod music device while opening its first two retail stores in California (Rawlinson, 2017). The huge success of the iPod led to the creation of the iTunes Music store which is now one of Apple's most successful products and services bringing together music from all around the world to each user's device. In 2007, when Jobs announced the evolution of Apple Computers Inc. to Apple Inc. that truly revolutionized the company. During that same press conference, Apple released the new

revolutionary iPhone and Apple TV. Jobs had not only ushered in the world of personal computers with the Macintosh but also brought an end to that same era with the introduction of the personal smartphone. With the introduction of the iPhone, Apple opened the world up to the ability to have a computer in one hand.

The next four years under Steve Jobs, Apple launched the App Store, the iPad, the iPod Touch, the iPod Nano, the Macintosh OS Lion, the iPhone 4 and finally iCloud. Jobs would step down as CEO in August of 2011 due to health issues and Tim Cook became the new CEO of Apple Inc. However, it was after Jobs' death in October of 2011 that Apple's stock prices rallied to record highs. The following year with the introduction of the iPhone 5 and several other new products, Apple's stock market value rose to a world record of \$624 billion (Rawlinson, 2017).

At this time Apple also faced several intellectual property lawsuits with Samsung Electronics Co. and HTC Corp. which led to several deals that favored Apple. It was clear that beyond 2012, after the death of Steve Jobs, the technology industry's greatest would finally challenge the monopoly that Apple had taken advantage of for over three decades. This renewed competition has led to the recruitment of several senior executives for Apple within the last seven years. The challenge facing Apple today is one of innovation rather than sales. Tim Cook is tasked with the future of Apple and following his predecessors innovative streak. To battle the major technology companies that are gaining on Apple. Samsung, Google, and HTC Apple will have to evolve once more as it has done in the past or risk falling back into the uncertainty that it faced during the 1990.

Ultimately, Cook and his senior executives must re-evaluate the success of Apple and devise a strategy to move forward in a manner that will benefit Apple in the long run, not simply from a business point of view but also from that of social entrepreneurship and legacy. Jobs left behind a legacy, a company that brought about change to the world whether it be through their several community initiatives or their innovative devices that revolutionized the world. Nonetheless, it is a legacy that Tim Cook must now uphold if Apple and its brand is to survive.

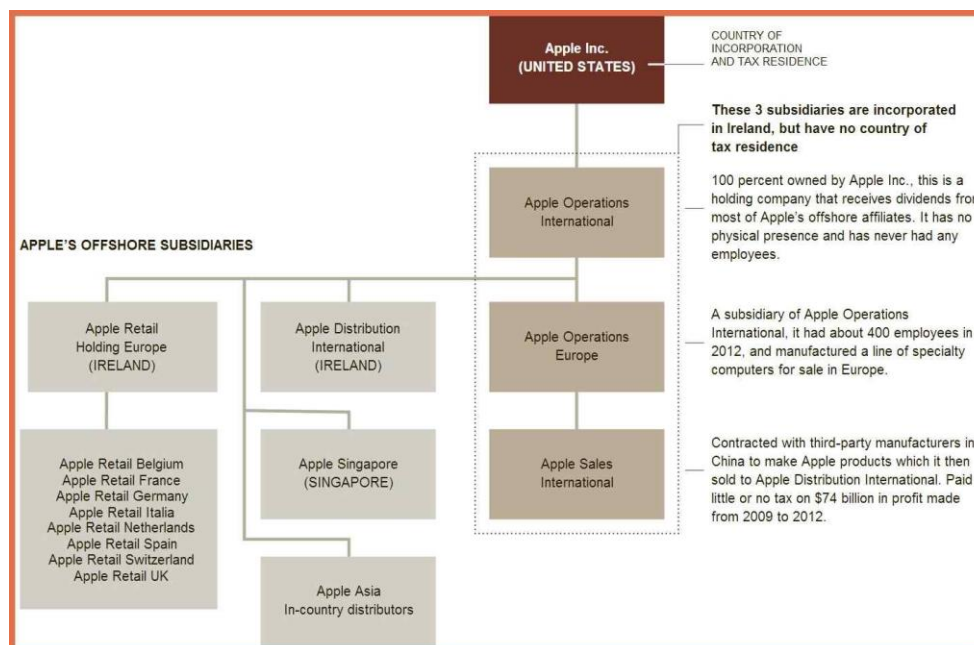
## **INTERNATIONAL OPERATIONS**

Apple is a global technology powerhouse. It owns 498 retail stores across 22 countries around the globe. It has expanded beyond a domestic company to a multinational enterprise that is rivaled only by giants such as Samsung, Wal-Mart, and McDonalds. However, Apple Inc. is not the main reason for this success, but rather its Irish subsidiary Apple Operations International. In 1980 Apple Operations International (AOI), was incorporated into Apple Computers Inc. and is based out of Cork, Ireland (Bloomberg). AOI is a subsidiary of Apple Inc. and is used to bypass the American tax system while running many of its operations across the globe. Alongside AOI are two other subsidiaries in Ireland: Apple Operations Europe and Apple Sales International. These three subsidiaries have no country of origin for taxing purposes and have been the main supplier of Apple's unprecedented wealth and growth.

Apple Operations International is owned by Apple Inc. and is used simply to collect dividends from the various other Apple affiliations around the world. Under this umbrella is its very own subsidiary of Apple Operations Europe which manufactures a line of computers for distribution across the Europe Union. Associated with these two is Apple Sales International which works with third-party manufactures in China to make Apple products.

However, AOI has various other subsidiaries that has allowed Apple to do business in Europe at the low tax rate of 2% that was brokered with the Irish government when AOI was established in 1980. Under the umbrella of AOI are Apple Distribution International (Ireland), Apple Retail Holding Europe (Ireland), Apple Singapore, and Apple Asia In-country distributors. Going further into the subsidiary of Apple Retail Holding Europe, there are eight other retail subsidiaries spread across Europe. These include Apple Retail Belgium, France, Germany, Italia, Netherlands, Spain, Switzerland, and UK. All of which pay dividends up to Apple Retail Holdings Europe, which in turn pays dividends to AOI, which ultimately returns those dividends to Apple Inc. all of which is done tax free.

Aside from its subsidiary activities, Apple is beginning to shift its focus towards emerging markets, specifically in Latin America and India. As sales begin to flatline in developed nations and saturated markets such as the United States, Europe, and China, Apple now begins to shift its focus towards India, which has the largest emerging middle class in the world. Currently Apple is working with the Indian government to move manufacturing to India as part of a strategic move to expand operations in India. With hopes of lowering manufacturing costs Apple will be able to lower the price of their expensive devices to

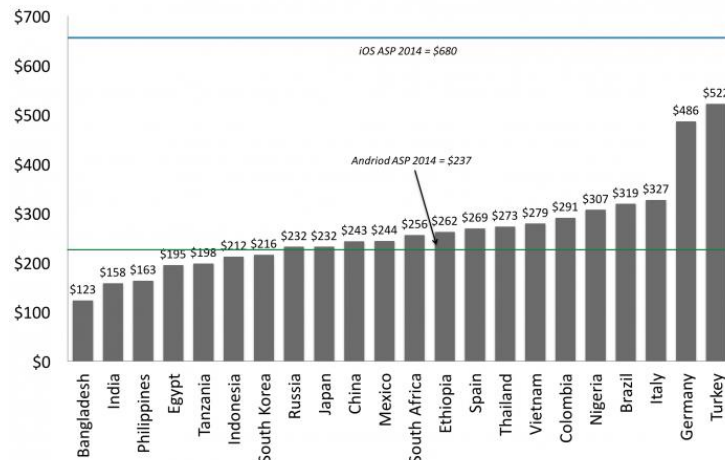


make them affordable for the emerging middle class in India.

Currently the average price of an android as of 2015 is \$237 USD, whereas the average price of an Apple iPhone is \$680 USD as of 2014 (World Bank). It is due to this large price gap that android sales are doing much better in these lower income markets than Apple is, and so Apple is beginning to shift its focus from the expensive luxurious iPhone to a more affordable low market entry device that can allow them to build brand recognition as they did in China previously and in the United States and other developed markets with their more affordable iPhone 5C.

**Average Smartphone Retail Price By Country (USD)**

2014



Source: KPCB Internet Trends Report, McKinsey, The World Bank

BI INTELLIGENCE

Aside from its subsidiaries and new international operations abroad Apple also holds various licenses with other competitors and companies to gain new technology and/or protect their own intellectual property. The most famous of these licenses being the 1997 deal with Microsoft done between former CEO Steve Jobs and Microsoft CEO Bill Gates. The license allows each company to use each other's work to develop new operating systems, however, neither can simply close the others product verbatim, as was made known by Apple during the *Apple Inc. v. Samsung Electronic Co.* hearing (*Apple Inc. v. Samsung Electronic Co. 580 U.S. (2016)*). Apple was able to develop its very own iOS and since then both companies have shared a partnership of development and growth. Apple also holds a licensing agreement with HTC that it brokered in 2012. Apple agreed to reach a global settlement on all lawsuits with HTC Corp. in return of creating a ten year licensing agreement that would give Apple and HTC rights to current and future patents for the duration of the agreement, bringing Apple an increased profit of \$280 million a year (Bloomberg). Recently, Apple also signed a licensing agreement with Warner Music Group to provide record labels for their online music streaming service, Apple Music. This agreement comes in the wake of the booming trend for online music streaming services. Apple looks to compete with Spotify and Google's YouTube and YouTube Red, investing an additional \$1 billion into Apple Music over the next year. A projection by Goldman Sachs states that music industry sales will climb from the current \$15.7 billion to \$41 billion by 2030 (Bloomberg). This means that the music market is one in which Apple must jump on now if it is to reap the benefits later and with this new licensing agreement with Warner Music Group, Apple is on the right track to enter the market strong.

## EVOLUTION

As Apple Inc. comes to the close of another decade of innovation and evolution, it must now look at how to continue to evolve and adapt to the changing global environment to ensure its continual growth and success. This year marks the tenth anniversary of the introduction of the iPhone by Steve Jobs in 2007. With that anniversary comes the introduction of the new and revolutionary iPhone X. However, the iPhone X is not the only new product that Apple has introduced in the last ten years. This segment of the paper will focus on the evolution of Apple's portfolio, not only its product portfolio but also its investment portfolio, which today is valued at  $\frac{1}{3}$  of its entire market share value.

Originally, in 2007 Apple was in various countries, however, it was not as diversified as it is today with 498 retail stores in 22 countries across the globe. It also had a rather limited product and investment portfolio that would see an exponential growth unlike any other company has seen.

Below, is a table from the 2007 Annual Fiscal Report as required by the Securities Exchange Act of 1934. It is clearly visible in this table that Apple only had sales in the Americas, Europe, and Japan. It can also be seen that Apple only had sales and revenue for the Macintosh, the iPod, and the newly introduced iPhone.

	September 29, 2007
Net Sales by Operating Segment (a):	
Americas net sales	\$ 11,596
Europe net sales	5,460
Japan net sales	1,082
Retail net sales	4,115
Other Segments net sales (b)	1,753
Total net sales	\$ 24,006
Unit Sales by Operating Segment:	
Americas Mac unit sales	3,019
Europe Mac unit sales	1,816
Japan Mac unit sales	302
Retail Mac unit sales	1,386
Other Segments Mac unit sales (b)	528
Total Mac unit sales	7,051
Net Sales by Product:	
Desktops (c)	\$ 4,020
Portables (d)	6,294
Total Mac net sales	10,314
iPod	8,305
Other music related products and services (e)	2,496
iPhone and related products and services (f)	123

Peripherals and other hardware	
(g)	1,260
Software, service, and other sales (h)	1,508
Total net sales	\$ 24,006
Unit Sales by Product:	
Desktops (c)	2,714
Portables (d)	4,337
Total Mac unit sales	7,051
Net sales per Mac unit sold	
(i)	\$ 1,463
iPod unit sales	51,630
Net sales per iPod unit sold	
(j)	\$ 161
iPhone unit sales	1,389

However, when looking at the 2016 4<sup>th</sup> Quarter Annual Report it can be seen that there has been dramatic changes to the product portfolio as well as to the regions in which Apple is located now. Nearly ten years after the introduction of the iPhone sales have increased from a decent 1.389 million sold to an astounding 211,884 million units sold. Apple also incorporated its new iPad product and expanded into Greater China and other regions in Southeast Asia and the Pacific.

	2016
Net Sales by Operating Segment:	
Americas	\$ 86,613
Europe	49,952
Greater China	48,492
Japan	16,928
Rest of Asia Pacific	13,654
Total net sales	\$ 215,639
Net Sales by Product:	
iPhone (1)	\$ 136,700
iPad (1)	20,628
Mac (1)	22,831
Services (2)	24,348
Other Products (1)(3)	11,132
Total net sales	\$ 215,639
Unit Sales by Product:	
iPhone	211,884
iPad	45,590
Mac	18,484

Apple, like any other major company, also invested to provide a steady supply of revenue and dividends for its stakeholders and stockholders. However, their investment portfolio in 2007 extremely different than what it is today. Below, is a segment from Apple's 2007 Annual Report Balance Sheet. In this segment it can be seen that Apple held slightly over \$6 million in short-term investments with a total of over \$25 million in assets. Even though it seems as if Apple was spending a large amount of money on investments and had a large amount of assets, it is dwarfed by its total assets as of the 4<sup>th</sup> quarter of 2016.



	September 29, 2007
<b>ASSETS:</b>	
Current assets:	
Cash and cash equivalents	\$ 9,352
Short-term investments	6,034
Accounts receivable, less allowances of \$47 and \$52, Respectively	1,637
Inventories	346
Deferred tax assets	782
Other current assets	3,805
Total current assets	21,956
Property, plant, and equipment, net	1,832
Goodwill	38
Acquired intangible assets, net	299
Other assets	1,222
Total assets	\$ 25,347

In 2016, Apple wracked up an astounding \$321 million in assets in comparison to its 2007 \$25 million. With a nearly quadruple amount of short-term investments at \$46 million, compared to its 2007 \$6 million. However, according to Statista Apple has seen unprecedented growth over the last decade. In 2007 Apple only saw \$24.6 billion in worldwide revenue, a number dwarfed by its \$229 billion in 2017, a substantial growth that can be credited to the huge success of the iPhone across the globe. From the beginning iPhone to the current iPhone 8 and anniversary iPhone X.

	September 24, 2016
<b>ASSETS:</b>	
Current assets:	
Cash and cash equivalents	\$ 20,484
Short-term marketable securities	46,671
Accounts receivable, less allowances of \$53 and \$63, Respectively	15,754
Inventories	2,132
Vendor non-trade receivables	13,545
Other current assets	8,283
Total current assets	106,869
Long-term marketable securities	170,430
Property, plant and equipment, net	27,010
Goodwill	5,414
Acquired intangible assets, net	3,206
Other non-current assets	8,757
Total assets	\$ 321,686

Although Apple has undergone a tremendous amount of evolution over the last decade, it still has a long ways to go to continue to carry out the legacy that Steve Jobs left behind. It is clear that as the global environment shifted and changed with globalization, so did Apple. The iPhone is the prime example of this evolution. The iPhone began as a small

glass touchscreen phone that lacked a GPS and even 3G data capabilities. It eventually was replaced by its big brother the iPhone 3G which introduced 3G data and GPS, however, even then the iPhone 3G soon became obsolete in a world in which technology was being created much faster than it could be used. The following year the 3GS was introduced which saw fixes to hardware and software of the 3G which made it the better model to own. Shortly after, the 3GS was replaced by the iPhone 4 which led to one of the largest battles in the technology industry when a prototype was lost in a bar and was leaked across the internet weeks before its launch. Soon after, came the iPhone 5, 5s, and its new more affordable low market entry device the iPhone 5c. Followed by the iPhone 6, 6 plus, and the subsequent 6s models. Getting to the newer generation iPhones which include the iPhone 7, 7 plus and its respective S models. Leading to the 2017 anniversary phones, the regular cycle iPhone 8 and 8 plus as well as the iPhone X. As part of their ten year anniversary Apple introduced the iPhone X, which has facial recognition capabilities and the slimmest look yet in an iPhone with no home screen, and the highest quality camera on an iPhone to date, matched with the fastest Intel processor yet.

Each and every year Apple adapts to the demands of its consumers providing new and innovative technology in every device that they launch. However, it has become predictable and because of this competitors such as Samsung have been beating them every step of the way. It is time for Tim Cook and the rest of the Apple leadership to revolutionize the company once more as Steve Jobs did in 1997 when he returned to Apple. The past ten years have been nothing but success, but success will be followed by failure if changes are not made. At the close of 2016 Apple reported a decrease of sales by 5% (Bloomberg). This is a loss that cannot be tolerated as sales for androids, specifically Apple's main competitor Samsung, continue to rise each year. The main issue is that the iPhone is far too expensive for the emerging markets that are giving Apple's competitors such success.

Luckily, Apple has a plan. Earlier this year Apple CEO Tim Cook presented the new developments in Apple technology and new segments of the technology industry that it will be expanding to, essentially these are the building blocks for the future of Apple for the next ten years. Beginning with Augmented Reality (AR), Apple unlike its competitors is not working on developing a new pair of AR glasses like Facebook or Google. Instead it has introduced an AR software update into its iOS 11 software update. This will allow for iPhones across the world to use basic AR which will help build a database of information and analysis for when Apple does decide to make the leap into fully AR devices. Second, Virtual Reality (VR) is a growing field in design and in the technology industry. However, Apple has not jumped on that train either, that is because the technology is still relatively new. Rather than focusing on developing their own VR devices, Apple has opted to develop VR software for their new macOS Sierra to allow developers and digital design artists to have the VR capabilities that they will need for their work. Apple has prided itself as the preferred choice for artists and digital designers and this will help to ensure that they do not abandon the brand for a competitor, in turn securing their consumer base.

Another area in which Apple hopes to advance is in artificial intelligence (AI). With the introduction of its new HomePod as a Wifi stereo Apple is able to introduce Siri into the average household, when a person is not connected to their phone or other Apple devices. Although Apple has had very limited exposure or development with AI technology in the form of Siri, the HomePod offers a way to turn Siri into a personal assistant at home by connecting it to various appliances, very much like the Amazon Echo device. Finally, Apple has also introduced its new iOS 11 software to the iPad making it more like a touchscreen Macintosh rather than an oversized iPhone. In doing this they are getting closer to completing Steve Jobs vision of creating a completely portable personal computer (PC). Apple under the leadership of Jobs ushered in the revolution of the PC and aimed at reaching its ultimate climax by creating the most efficient portable personal computer available on the market.

Although no set plan has been presented by the executives at Apple, there is much that is being worked on within the walls of Apple's headquarters in Silicon Valley. Additionally, with the creation of Apple University, it will be a matter of time before new innovative minds make their way to the company and bring about a new technological revolution unlike any before.

Ten years ago when Steve Jobs unveiled the iPhone to the world, no one could have known the incredible effects that it would have on the world as a whole. Today, life would be impossible without it. It was the smartphone that started it all, it ushered in the era of the smartphone and irreversibly changed how we as humans do life. It is difficult to believe how any other innovation could change our lives as the iPhone did, but Apple must try if it is to survive.

## **CONCLUSION**

Apple, the world's largest information technology company has had its success but it has also had its failure. Over its lifetime Apple has introduced a new kind of personal computer, ushered in the era of the smartphone, and created its own demand for devices the likes of which the world had never imagined or dreamed of, outside of your typical Star Trek episode.

However, Apple now faces a new challenge, adapt to an ever changing global consumer and changing demand or risk losing its domination of the informational technology industry. Over the past decade Apple has paved the way for new developments in smartphones and handheld devices such as the iPod and the iPad. But, as of late Apple has flatlined and its innovations have become a thing of the past. Year after year Apple produces only minimal upgrades to their devices not providing the shock and awe factor that Steve Jobs provided nearly 7 years ago. It is this lack of surprise and creative innovation that has driven loyal customers away from the brand.

To survive this downfall and recover the lost ground Apple must adapt. It has to take into consideration the new factors that drive consumer buying around the globe. Those factors

include sustainability, impact on the environment, VR, AR, and AI. More and more customers around the world are looking for devices and products that are environmentally “green”, giving them a sense that they helping climate change. As well as adapting the new technologies of VR, AR, and AI to their products will make the difference between Apple and its competitors. Long gone is the time of a simple software update every year, within the next few years Apple must provide substantial updates to their devices and/or provide brand new devices altogether to provide a rally for the brand and its stock, truly carrying out Jobs vision and legacy.

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