



# Apple Campus One Infinite Loop

**APPLE: A Case Study Analysis**

**Shane R. Mittan, Project Manager**

Western Michigan University

School of Communication  
Telecommunications Management 4480  
Western Michigan University  
1903 West Michigan Avenue  
Kalamazoo, Michigan 49008  
Thursday, January 28, 2010

## **APPLE: A Case Study Analysis**

**Shane R. Mittan, Project Manager**

Thursday, January 28, 2010

©2010 Shane R. Mittan

Shane R. Mittan  
Bachelor of Arts (BA)  
Telecommunications and Information Management  
Western Michigan University  
College of Arts & Sciences  
School of Communication  
1903 West Michigan Ave.  
Kalamazoo, MI 49008

Tel: (989) 339-1688  
Email: [ShaneMittan@gmail.com](mailto:ShaneMittan@gmail.com)  
Web: <http://homepages.wmich.edu/~s5mittan>

# TABLE OF CONTENTS

|  |           |
|--|-----------|
| <b>I. HISTORICAL OVERVIEW.....</b>                               | <b>2</b>  |
| The First Apple Computers .....                                  | 2         |
| Figure 1 (Apple Logo, 1976) .....                                | 2         |
| Creating an Image .....  | 3         |
| Figure 2 (Apple Logo, 1977) .....                                | 3         |
| Graphical User Interface .....                                   | 4         |
| The Macintosh .....  | 5         |
| Figure 3 (Graphical User Interface of the Apple Macintosh) ..... | 5         |
| Jobs' NeXT Move.....   | 6         |
| Jobs' Personality .....  | 7         |
| The iPod and iTunes Media Store .....                            | 8         |
| <b>II. ORGANIZATIONAL STRUCTURE .....</b>                        | <b>9</b>  |
| Table 1 (Apple Organizational Chart) .....                       | 9         |
| <b>III. BUSINESS OPERATIONS.....</b>                             | <b>9</b>  |
| Business Philosophy .....  | 9         |
| Commitment to Innovation .....                                   | 10        |
| Current Products .....   | 11        |
| <i>The MacBookPro and MacBook</i> .....                          | 12        |
| <i>Mac OS X</i> .....  | 12        |
| <i>The iPod and iTunes Media Store</i> .....                     | 13        |
| <i>The iPhone</i> .....  | 13        |
| <i>The iPad</i> .....  | 13        |
| <b>IV. FINANCIAL PERFORMANCE .....</b>                           | <b>14</b> |
| Figure 4 (Apple's Net Sales of Operating Segments).....          | 14        |
| Table 2 (Apple's Net Sales by Product) .....                     | 15        |
| <b>V. FUTURE PLANS.....</b>                                      | <b>15</b> |
| Biting into a Greener Apple .....                                | 15        |
| Figure 5 (Apple's Weight Recycled Per Year) .....                | 16        |
| A Mobile Society of Constant Connection .....                    | 16        |
| Development and Operations.....                                  | 17        |
| Conclusion .....   | 18        |
| <b>ENDNOTES.....</b>   | <b>19</b> |

# I. HISTORICAL OVERVIEW

Apple Computer was formed in April 1976 by 25-year-old Steve Wozniak and 21-year-old Steve Jobs—both college dropouts. After selling a van for some extra start-up cash, the two set up shop in the Jobs’ family garage at 2066 Crist Drive in Los Altos, California, to start building computers. The ideas and early innovation techniques that emerged from this location would set the foundation for building one of the most important and globally effective technology companies the world has ever seen. In fact, some diehard Apple fans come from all over the globe just to pose for pictures in front of this now-famous garage.<sup>1</sup>

Apple Computer stands out from similar companies with their unconventional business ideas that constantly redefine the standards for product, marketing, and industry innovation techniques. The company has become well-known through their commitment to challenge the so-called “possibilities” of the computer industry. Their goal is to improve the user-friendliness of their products and to encourage an open-minded approach when developing new technologies and services.

## The First Apple Computers

Wozniak, the true technical mind behind the building process of Apple’s early computers, spent the summer of 1976 building the company’s very first computer, the Apple I.<sup>2</sup> Meanwhile, Jobs began creating advertisements and found a buyer for the computer. The Byte Shop in Mountain View, California, proved to be Apple’s first major customer—and, coincidentally, the first retail computer store chain in



Figure 1.  
Apple Logo (1976)

the world.<sup>3</sup> The two Steves were able to build and sell fifty Apple I computers that summer—all from within the confined space of the Jobs family’s single-car garage. This would mark the first of many successful products to come from the company.<sup>4</sup> Apple Computer was officially incorporated on January 3, 1977.<sup>5</sup>

Later that summer, Wozniak and Jobs began building the Apple II with the help of a few technically-savvy friends and classmates. It was at this time that Jobs first realized his true passion for the burgeoning computer industry.<sup>6</sup> To fuel this passion, Jobs consulted with retired Intel Corporation marketing manager Michael Markkula regarding the possible future of Apple Computer. During this consultation, Markkula worked with Jobs in coming up with a solid business plan and even purchased one-third of the company for \$250,000.<sup>7</sup>

### Creating an Image



**Figure 2.**  
**Apple Logo (1977)**

In 1977, Jobs and Markkula hired Michael Scott as the company’s first president and Chief Executive Officer (CEO).<sup>8</sup> In April of that same year, Apple decided it would be beneficial to their marketing strategies if they updated their image before putting the Apple II on the consumer market. To create their new logo, Jobs contacted Robert Janoff, an art director for advertising and public relations agency *Regis McKenna*. Janoff agreed to design the logo from an essentially blank canvas. “The really funny thing,” explains Janoff, “was the only direction we got from Steve Jobs is: ‘don’t make it cute.’”<sup>9</sup> Aside from some color alterations, Janoff’s iconic 1977 design remains to this day as the official logo of Apple Computer, Inc.

After the success of the Apple I and Apple II, the company began work on the Apple III, which turned out to be their very first project failure. The Apple III proved to be an early sign of disagreements-to-come between the president Michael Scott and Steve Jobs. In fact, Scott laid-off 40 employees after the Apple III's failure—without any consultation or approval from the Board of Directors. Because of his abrupt actions, Scott was demoted to vice chairman, while Jobs was promoted to chairman. Markkula, who had originally hired Scott, took over as Apple's new CEO. Scott officially resigned from Apple in March of 1981.<sup>10</sup> This tension would continue to escalate through the development of the company's next computer, the Apple Lisa.

### **Graphical User Interface**

Named after Jobs' oldest daughter, the Lisa (also, Local Integrated Software Architecture) was the first personal computer to implement a graphical user interface (GUI) technology—an idea which Jobs had adopted from a prior visit to the Xerox Corporation. Surprisingly, Xerox did not think the technology would serve a practical purpose for personal computing.<sup>11</sup> The Lisa was the first personal computer to include such features as: a hierarchal file system, windows, folders, icons, multiple tasking, a mouse, a drop-down menu bar, and the ability to copy and paste.<sup>12</sup>

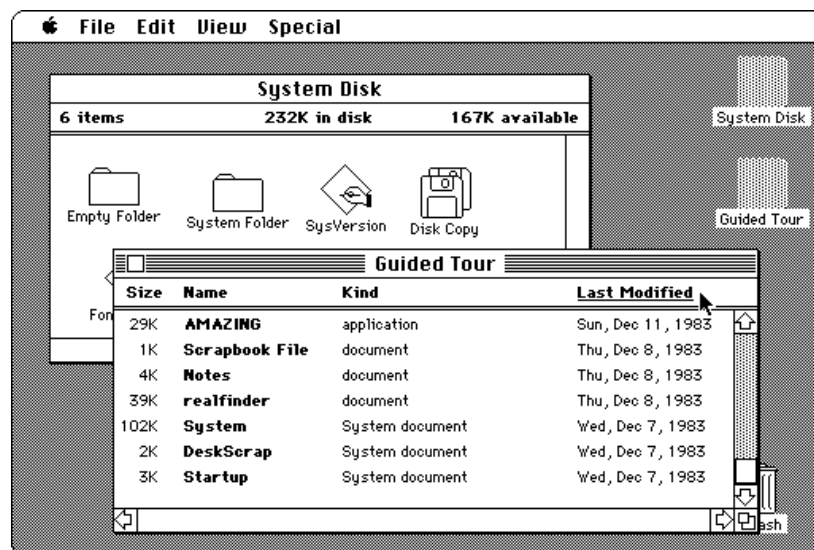
Jobs tested the patience of president Markkula and eager consumers by continuously implementing new GUI features and pushing back the Lisa's release date. Markkula grew tired of Jobs' constant need for improvement *at any cost*, and removed him from his valued position as Lisa's project designer. The Board of Directors then demoted Markkula and hired former PepsiCo vice president John Sculley as the new

CEO in 1983.<sup>13</sup> Jobs saw this reorganizing as an opportunity to shift his focus to designing the features for his next brainchild... the Macintosh.

## The Macintosh

With improvements in the GUI, the Macintosh became a “possibility box” for companies developing similar products.<sup>14</sup> Enhancing some features from the Lisa, the Macintosh implemented a desktop, mouse, graphical file system, icons, bit-mapped graphics, menu bar navigation, applications running inside windows, and more. The Macintosh laid the foundation for the entire computer industry. The true look and feel of personal computers today can be attributed to the early design features of the Macintosh.

**Figure 3.**  
**Graphical User Interface of the Apple Macintosh (1984)**



The Macintosh, however, did not dominate the consumer market as the company had hoped. Supported by Markkula and the other members of the board, president Sculley once again demoted Jobs (this time from vice-president and leader of the Macintosh division) in May 1985, leaving Jobs without any managerial power.<sup>15</sup>

In a somewhat desperate attempt to boost Macintosh sales, Apple released the Macintosh XL. This computer came with even more improved GUI updates, the innovative *New Folder* command, and the introduction of AppleTalk—the first self-configuring local area network (LAN) technology used to connect multiple computers to a single printer.<sup>16</sup> This set the desktop publishing revolution into motion.<sup>17</sup>

### **Jobs' NeXT Move**

Steve Jobs resigned from Apple in December 1985, due to constant power struggles and disagreements with president Sculley and the Board of Directors. Upon his resignation, Jobs formed a new company called NeXT, Inc.<sup>18</sup> Jobs saw NeXT as an opportunity to reignite the spark he had when he founded Apple. NeXT focused on creating computers that were user-friendly, aesthetically pleasing, and capable of running powerful software in the most efficient ways possible.

Throughout the next eleven years, Apple continued to develop desktop computers and operating systems, but the company was not able to fully recover after Jobs had left. Sculley resigned from the company in October 1993, while under extreme pressure to increase Apple's sales and market share with new products and services. Michael Spindler, President of Apple Europe, was then promoted to head the entire company as the new CEO.<sup>19</sup> Most projects headed by Spindler (most notably the Apple Newton and Copland operating systems) proved to be major failures. After three yet-again unsuccessful years, Spindler was forced to resign from his position as CEO.

Apple then promoted board member Gil Amelio to head the company in 1996. Apple's stock prices continued to plummet, and the Board of Directors were once again



facing the reality that they would soon need to find someone who could successfully run the company. Similar to his predecessors, Amelio's reign as CEO proved unsuccessful, and he was removed from the position in late 1996.<sup>20</sup>

In what proved to be the company's best decision of the decade, Apple re-hired Steve Jobs—this time serving as the company's new CEO. With his innovative vision and strong leadership style, Jobs finally made his triumphant return to the company he had co-founded. Days later, on December 20, 1996, Apple announced its plans to acquire NeXT Software, Inc. The purchase was completed on February 4, 1997, and this software became the foundation for the Mac's future operating systems.<sup>21</sup> In regards to Apple's new plans for expansion, product development, and business strategy:

Steve Jobs is sitting in the Apple boardroom. Actually, he is slouched like a teenager in one of the cushy leather chairs, his worn jogging shoes resting on the directors' table. The table is very long, very impressive--and very empty. Just Jobs here, wearing shorts and an impish grin. The old board of directors at Apple is history, he says. . . Eight stories of corporate excess are about to be abandoned. 'I hate this building,' says Jobs. 'This building has come to symbolize everything that went wrong with Apple. It's about corporate hubris. Greed.' This is not a building that can make 'insanely great' computer products.<sup>22</sup>

### **Jobs' Personality**

Described as obsessive, impulsive, and overly critical, Steve Jobs truly knows what he wants, and cultivates his ideas into realities. In a television documentary entitled "*Triumph of the Nerds*," Jobs describes Apple's largest competitor—Microsoft:

The only problem with Microsoft is they just have no taste. I don't mean that in a small way. I mean that in a big way, in the sense that they don't think of original ideas and they don't bring much culture into their products. I have no problem with their success — they've earned their success for the most part. I have a problem with the fact that they just make really third-rate products.<sup>23</sup>

Jobs is said to have called Microsoft CEO Bill Gates after the interview was published to apologize for the harshness of his words. Still, he apparently told Gates that he truly meant what he had said, and that every word of it was the truth. It is apparent that Jobs not only cares about the performance of Apple computers, but also the look and feel of them as well.

This is but a mere insight to Steve Jobs' personality—both as the CEO of a multi-billion dollar global corporation, and as the average person eager and excited for new products and technologies that shape our social environment. This eagerness has led Jobs to develop one such pocket-sized technology has changed ways in which college students (even top business executives) go about their daily routines...

### **The iPod and iTunes Media Store**

The iPod (October 2001) is a prime example of Steve Jobs' innovative mastery. The never-before-seen features of the iPod can be attributed to its sophisticated user-friendly design and the device's ability to be used on both Mac and Windows-based computers. To accompany the iPod, Apple released iTunes in April 2003. iTunes is software that manages various types of mixed digital media between the computer and the iPod, allowing users to purchase, organize, and playback various types of mixed-media files (photos, videos, music, podcasts, etc.). Users can then transfer these files directly to their iPod using Apple's user-friendly drag-and-drop file transferring feature.

## II. ORGANIZATIONAL STRUCTURE

Headquartered in Cupertino, California, USA, Apple Computer operates on a global scale, with multiple locations world-wide. Apple's business operations are structured into three main categories: hardware, software, and business support services. Within these categories are various divisions, including: Macintosh (computers), peripherals (Apple TV, digital video displays, etc.), applications (iTunes, iLife, Final Cut Studio, etc.), internet services (Safari, QuickTime, MobileMe, etc.), and others. Table 1 provides a broadened visual representation of Apple's basic organizational structure.

**Table 1.**  
**Apple's Organizational Chart (November, 2008)**

| <b><u>Hardware</u></b> | <b><u>Software</u></b> | <b><u>Business Support Services</u></b> |
|------------------------|------------------------|---|
| iPod                   | Applications           | Legal                                   |
| iPhone                 | Internet Services      | Retail                                  |
| Macintosh              | Operating System       | Accounting                              |
| Peripherals            |                        | Product Support                         |
|                        |                        | General Counsel                         |
|                        |                        | Industrial Design                       |
|                        |                        | Markets and Distribution                |

Source: Apple, 2009<sup>24</sup>

## III. BUSINESS OPERATIONS

### **Business Philosophy**

Apple's strong following of loyal customers and an ever-increasing fan base can be attributed to the company's strive to constantly "Think Different," as their slogan suggests. The company's business strategy leverages on their unique ability to design and develop their own operating system, application software, and hardware.<sup>25</sup>

Along with free-spirit innovation and an open-minded approach to business, Apple's primary focus is providing powerful and user-friendly products and solutions. Combined, these elements drive Apple to remain a world leader on the cutting-edge of corporate technology. Not only does the company consider the look-and-feel of their products and services important, but also the look and feel of their offices and staff! In communicating Apple's primary business philosophy to potential employees, Jobs describes daily life at the company headquarters:

Don't expect business as usual. A lot of big companies are about endless meetings. Massive bureaucracy. Executive parking spaces. And suits. We don't see what any of that has to do with great work. So we don't bother. This isn't your cushy corporate nine-to-fiver. Fortunately. Prepare to be inspired. We've got an environment where you can make things happen. Fast. There's plenty of open space—and open minds. Collaboration. And of course, innovation. We also have a shared obsession with getting every last detail right. Leave your neckties, bring your ideas.<sup>26</sup>

This strategy has proven successful, and Jobs shows no signs of regret to the ways in which Apple now manages its most unique and valuable assets—its human resources. Business may change, processes may change, but people will never go out of business. Steve Jobs has created an empire around applying this philosophy to his business ventures.

### **Commitment to Innovation**

Innovation can be broken down into three subset areas: product, business process, and business model innovation. Product innovation does exactly as its name suggests; enhances features of current products and services. A prime example of this is Apple's iPod and its devastating effects on its competitors (i.e.: The Sony Walkman).<sup>27</sup> Business process innovation involves reengineering business processes by building entirely new

markets to meet untapped customer needs as explained by Kim and Mauborgne's *Blue Ocean Strategy*.<sup>28</sup> Business model innovation involves introducing an entirely new value proposition to the market. A prime example of business model innovation is the combination of Apple's iPod and iTunes media store. The significance of these products cannot be understated, as they produced the first sustainable music-downloading business model of its kind.<sup>29</sup>

Innovation is also one of the best methods to stay competitive over time, as it creates a long-lasting competitive advantage. Those who lack innovation and tend to simply "stick to what they know" become severely disadvantaged in the marketplace. There are two innovation methods: sustaining and disruptive. Sustaining innovation deals with improving current product performance, services, and features—providing better performance than what was previously available for a certain product or service. In contrast, disruptive innovation represents implementing a completely new approach to an existing product or service's design and production process.<sup>30</sup>

### **Current Products**

Apple operates using the vertical integration model by facilitating all aspects of both hardware and software production.<sup>31</sup> One of the only third-party components used in recent Macs are Intel Core 2 Duo processors, which allow third-party operating systems (Linux, Windows, etc.) to run on Intel-based Macs.<sup>32</sup> Apple's signature operating system (Mac OS X), however, will only run on Macs—keeping Apple in control of its development, distribution, and price. This ensures that users get completely integrated, secure, powerful, and easy to use computers built *by* Apple users, *for* Apple users.

### *The MacBook Pro and MacBook*

The MacBook Pro (January 2006) is a sleek and powerful laptop designed for professional and advanced computer users. With three screen size options up to 17-inches, the MacBook Pro includes a built-in iSight video camera, an Intel Core 2 Duo processor, and a NVIDIA GeForce 9400M integrated graphics processor. This laptop has up to 4 gigabytes (GB) of random access memory (RAM), and up to a 320GB hard drive. Along with built-in 802.11n wireless networking and Bluetooth 2.1, the MacBook Pro also includes Apple's new MagSafe power adaptor.<sup>33</sup>

The MacBook (May 2006) was designed for students and general computer users. This 13-inch laptop has many features of the MacBook Pro, but most are slightly scaled-down. In 2007, the MacBook was the best-valued laptop in the U.S.<sup>34</sup>

### *Mac OS X*

Each version of OS X comes with new and improved features that build from previous versions. Mac OS X Leopard (2007) contains features never included on any previous operating system in history. For instance, Quick Look allows users to instantly see a file's contents without running any applications, Time Machine can automatically back up an entire hard disk, and Spaces provides multiple virtual desktop screens.<sup>35</sup>

Apple's latest operating system, Mac OS X Snow Leopard (August 2009), features mostly visual and functional enhancements, as it is one of the company's "lighter" operating system upgrades. With light improvements to Mac OS X, Apple has yet again set a higher standard for their next big operating system upgrade. As usual, Mac users eagerly await these "magical" updates with anticipation.

### *The iPod and iTunes Media Store*

Apple's most recent iPod to date, the iPod Touch (September 2008), is the first iPod to have a touch-sensitive screen and include Wi-Fi wireless networking. The home screen features multiple 'touch-buttons' to play music, videos, see photos and maps, surf the Internet, check email, etc. Users can also access the iTunes Media Store and download content with the *touch* of a 'button.' With up to 32GB storage, the iPod Touch offers 36 hours of audio playback and 6 hours of video playback.<sup>36</sup>

### *The iPhone*

Essentially combining an iPod Touch with a 3G mobile phone, the iPhone (June 2008) is an Internet-ready communications device complete with email, web browsing, maps, and more.<sup>37</sup> iTunes libraries up to 16GB can also be synced to the iPhone. Some of the iPhone's rapid success can be attributed to the various factory-installed applications, as well as those created by third-party developers. By allowing this open-source capability, Apple has once again captivated and dominated the market with a single product.

### *The iPad*

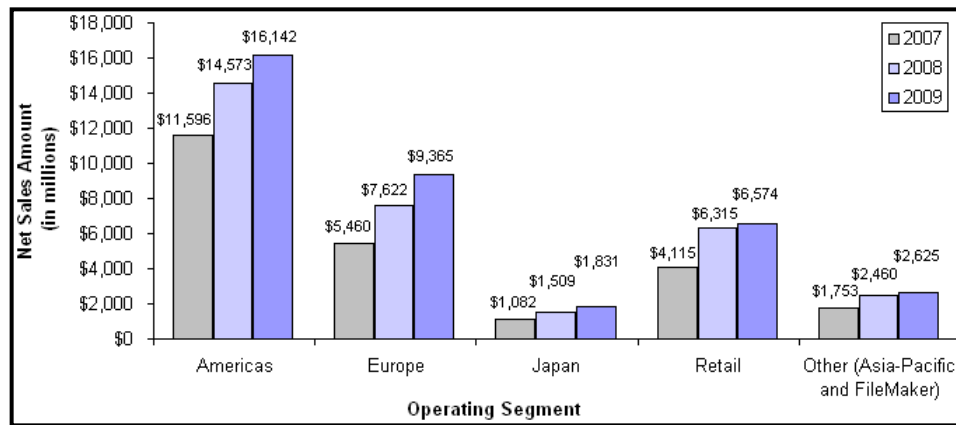
Apple's latest product combines all of the products listed above (and more). The magazine-sized iPad (January 2010), according to Apple, is the company's "most advanced technology in a magical and revolutionary device."<sup>38</sup> Available in a Wi-Fi and 3G models, the iPad has a fingerprint-resistant LCD touch-screen display with a 1024x768 pixel resolution. The device has up to 64GB storage and up to 10 hours of battery life. It is also compatible with both Mac and Windows-based computers.<sup>39</sup>

## IV. FINANCIAL PERFORMANCE

With their fiscal year ending on September 26, 2009, Apple reported total net sales of \$36.537 billion dollars among each of their five operating segments in 2009. This figure is up from \$32.479 billion dollars in 2008 and \$24.006 billion dollars in 2007.<sup>40</sup>

The Americas account for most of the company's net sales, with \$16.142 billion dollars in 2009. Europe accounts for the second-largest operating segment net sales, with the Retail segment not far behind. Figure 4 illustrates how these figures are attained through contributions from each operating segment.

**Figure 4.**  
**Apple's Net Sales of Operating Segments (in millions)**



Source: Apple, 2009<sup>41</sup>

Table 2 shows that from 2007-2009, Apple experienced a 266% sales increase within the iPhone product line—the largest product sales increase between 2007 and 2009. Apple's music-related and software products also experienced significant increases in sales during this three-year span.



**Table 2.**  
**Apple's Net Sales by Product (in millions)**

|  | <b>2009</b>     | <b>Change</b> | <b>2008</b>     | <b>Change</b> | <b>2007</b>     |
|--|-----------------|---------------|-----------------|---------------|-----------------|
| <b>Net Sales by Product:</b>                 |                 |               |                 |               |                 |
| Desktops .....                               | \$ 4,308        | (23)%         | \$ 5,603        | 39%           | \$ 4,020        |
| Portables .....                              | 9,472           | 9%            | 8,673           | 38%           | 6,294           |
| <b>Total Mac net sales</b> .....             | <b>13,780</b>   | <b>(3)%</b>   | <b>14,276</b>   | <b>38%</b>    | <b>10,314</b>   |
| iPod .....                                   | 8,091           | (12)%         | 9,153           | 10%           | 8,305           |
| Other music related products and services .. | 4,036           | 21%           | 3,340           | 34%           | 2,496           |
| iPhone and related products and services ... | 6,754           | 266%          | 1,844           | --            | 123             |
| Peripherals and other hardware .....         | 1,470           | (11)%         | 1,659           | 32%           | 1,260           |
| Software, service, and other sales .....     | 2,406           | 9%            | 2,207           | 46%           | 1,508           |
| <b>Total net sales</b> .....                 | <b>\$36,537</b> | <b>12%</b>    | <b>\$32,479</b> | <b>35%</b>    | <b>\$24,006</b> |

Source: Apple, 2009<sup>42</sup>

Apple did not declare or pay any cash dividends in 2008 or 2009, as the company plans to retain these earnings for use in the operation of their business for the foreseeable future.<sup>43</sup> With these and other earnings, Apple is working to expand its operations by increasing market share, extending products' life cycles, reducing production and consumer costs, and pursuing even greater vertical integration.

## V. FUTURE PLANS

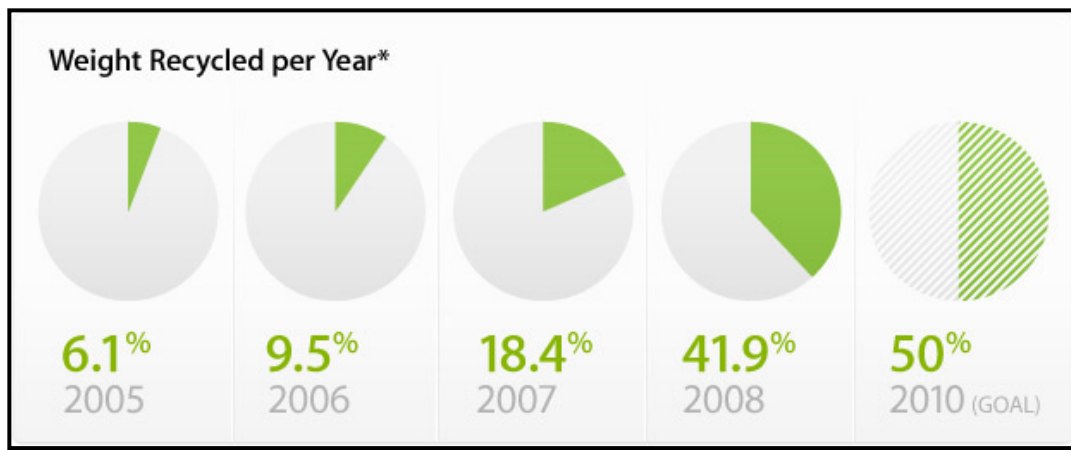
### Biting into a Greener Apple

Today, while most companies' primary strategies include increasing revenue and cutting costs, Apple's focus is on transforming every aspect of their business process to operate more efficiently. In other words, Apple is becoming greener. When asked about the company's plans to become more environmentally conscious and reduce their carbon footprint, Steve Jobs explains:

It is generally not Apple’s policy to trumpet our plans for the future; we tend to talk about the things we have just accomplished. Unfortunately this policy has left our customers, shareholders, employees and the industry in the dark about Apple’s desires and plans to become greener. Apple plans to reduce and eventually eliminate the use of mercury by transitioning to LED backlighting for all displays when technically and economically feasible.<sup>44</sup>

Apple has recycling initiatives implemented in 95% of the countries that sell their products. In 2008, the company recycled 33 million pounds of electronic waste (e-waste), accounting for 41.9% of their products sold world-wide. Figure 5 shows the company’s progressive commitment to their recycling programs, as well as a projected goal to be reached by the end of the 2010 fiscal year.<sup>45</sup>

**Figure 5.**  
**Apple’s Weight Recycled Per Year (2005-2010)**  
\*As percentage of weight of products sold seven years earlier.



Source: Apple, 2010<sup>46</sup>

### **A Mobile Society of Constant Connection**

Humans are social creatures. As such, we thrive on the ability to remain constantly connected through a variety of our beloved mobile communications devices. Realizing this, Apple is synergizing their products and services (iPod, iPhone, iTunes, etc.) with all

types of mixed-media content (music, videos, photos, applications, etc.). As Apple continues to bring convergence to a now-digital world, consumers can expect extensive improvements with each Apple product release.

### **Development and Operations**

Apple's future operations depend largely on the company's ability to continue developing high-quality components of mobile communication devices, such as: microprocessors, nonvolatile (NAND) flash memory, dynamic random access memory (DRAM), liquid crystal displays (LCDs), and many more—all in sufficient quantities made available to consumers at competitive prices.<sup>47</sup>

The company plans to continually stimulate demand for certain products by implementing new design, operability, and user-friendly features. Apple also plans to continue lowering product prices, despite the fact that doing so would affect the company's gross margins unfavorably. Due to their significant international operating locations, fluctuations with resources, exchange rates, and taxes can also affect their future financial results and operational strategies.<sup>48</sup>

Apple's future also depends on third-party developers and their ability to continue creating software applications that are both powerful and useful for Apple's products. Companies like Microsoft, Dell, Sony, Hewlett-Packard, and other manufacturers of electronic communication devices could pose a major threat if third-party Apple software development should decrease or cease in production.<sup>49</sup>

## Conclusion

Apple has truly put the “personal” in personal computing. In 1984, the Macintosh proved to be the company’s foundation-laying product. The Macintosh began the desktop publishing revolution with its cutting-edge GUI and laser writer printer capability.

Today, Apple continues to lead the industry with their outstanding and award-winning products and services. Apple is also credited with leading the digital media revolution with their iPod portable music and video players and iTunes online media store, creating the first sustainable music-downloading business model in history.<sup>50</sup>

The company has also entered the mobile phone industry with an altogether different business strategy known as *value innovation* with the iPhone. Value innovation focuses on making the competition irrelevant by opening up new and untapped markets, creating a leap in value for consumers.<sup>51</sup> The iPhone is yet another product that has changed the way the industry defines new product standards and possibilities.

With growing demand for high-quality, powerful, user-friendly, and cost effective products, Apple is undoubtedly the leader in terms of bringing these ideas to life. The company realizes that rather than publicly announcing product development plans years in advance, products are better-received with an “awe” response if they are simply released when they’re finished as opposed to providing “beta” or “demo” versions to the public. This is an excellent strategy when the goal is to keep consumers eager for the latest products and asking, “What could they possibly improve next?”

## Endnotes:

---

<sup>1</sup> Owen Linzmayer, *Apple Confidential: The Real Story of Apple Computer, Inc.* (San Francisco, CA: No Starch Press, 1991), 1.

<sup>2</sup> The Apple I was based on the MOStek 6502 chip, whereas most other "kit" computers were built from the Intel 8080. Initial cost was \$666.66. See Glen Stanford, "Apple I," *Apple-History*. Available at: <http://www.apple-history.com/body.php?page=gallery&model=aI&sort=date&performa=off&order=ASC> Retrieved: September 20, 2009.

<sup>3</sup> Linzmayer, *Apple Confidential: The Real Story of Apple Computer, Inc.*, 3.

<sup>4</sup> Funding Universe, "Apple Computer, Inc.," *Funding Universe Company Histories*, Available at: <http://www.fundinguniverse.com/company-histories/Apple-Computer-Inc-Company-History.html> Retrieved: September 21, 2009.

<sup>5</sup> Apple Computer, "Investor Relations," Available at: <http://www.apple.com/investor> Retrieved: September 8, 2009.

<sup>6</sup> The Apple II was based on Wozniak's Apple I design, but with several additions. The Apple II included a larger ROM, more expandable RAM (4K to start), and 8 expansion slots. It had integer BASIC hard-coded on the ROM for easier programming, and included two game paddles and a demo cassette for \$1,298. See Glen Stanford, "Apple II," *Apple-History*. Available at: <http://www.apple-history.com/body.php?page=gallery&model=aII&sort=date&performa=off&order=ASC> Retrieved: September 20, 2009.

<sup>7</sup> Funding Universe, "Apple Computer, Inc."

<sup>8</sup> Michael Scott was the first CEO of Apple Computer from 1977 to 1981. On February 25, 1981, the day known as *Black Wednesday*, Scott fired 40 Apple employees personally, including half of the Apple II team, in a belief that they were redundant. He was then demoted to vice chairman, and Mike Markkula replaced him as CEO. See AllExperts, "Michael Scott (Apple Computer)," *AllExperts.com*, Available at: [http://en.allexperts.com/e/m/mi/michael\\_scott\\_%28apple\\_computer%29.htm](http://en.allexperts.com/e/m/mi/michael_scott_%28apple_computer%29.htm) Retrieved: October 2, 2009.

<sup>9</sup> Ivan Razl, "Interview with Rob Janoff, Designer of the Apple Logo," August 3, 2009, Available at: [http://creativebits.org/interview/interview\\_rob\\_janoff\\_designer\\_apple\\_logo](http://creativebits.org/interview/interview_rob_janoff_designer_apple_logo) Retrieved: September 4, 2009.

<sup>10</sup> AllExperts, "Michael Scott (Apple Computer)," *AllExperts.com*, Available at: [http://en.allexperts.com/e/m/mi/michael\\_scott\\_%28apple\\_computer%29.htm](http://en.allexperts.com/e/m/mi/michael_scott_%28apple_computer%29.htm) Retrieved: October 2, 2009.

<sup>11</sup> The first GUI was developed by Xerox in the 1970s. By the 1980s, CPU power and monitors for effective GUI became cheap enough for home computers. See Mary Bellis, "Inventors of the Modern Computer: The History of the Graphical User Interface or GUI – The Apple Lisa," *About.com: Inventors*, Available at: <http://inventors.about.com/library/weekly/aa043099.htm> Retrieved: October 2, 2009.

<sup>12</sup> Mary Bellis, "Inventors of the Modern Computer: The History of the Graphical User Interface or GUI – The Apple Lisa," *About.com: Inventors*, Available at: <http://inventors.about.com/library/weekly/aa043099.htm> Retrieved: October 2, 2009

<sup>13</sup> Sculley joined Apple in 1983 from Pepsico Inc, where he had risen from marketing executive to the company's president. Sculley solidified his image as Silicon Valley's reigning philosopher-king when he ousted Jobs after a power struggle. The company was reeling from a series of business disasters. Chief among them was the Newton hand-held computer, Sculley's pet project. He then resigned from Apple. See PBS, "John Sculley," *The Players*, Available at: <http://www.pbs.org/wgbh/pages/frontline/president/players/sculley.html> Retrieved: October 4, 2009.

---

<sup>14</sup> Equipped with 128 KB RAM, 64 KB ROM, a 3.5" 400 KB floppy drive, a 1-bit 512 x 342 pixel b&w monitor, a mouse, and a couple applications (MacWrite, MacPaint), the Macintosh was destined to change the face of computing forever - it not only created the Mac look and feel, it also inspired Microsoft Windows and several other windowing interfaces. See LowEndMac, "The Macintosh a.k.a. Macintosh 128k," *Vintage Macs: Compact Macs*, 2009, Available at: <http://lowendmac.com/compact/original-macintosh-128k.html> Retrieved September 18, 2009.

<sup>15</sup> Martin Groeger, "John Sculley and Steve Jobs," *Silicon Valley: The Apple Story*, December 3, 1999, Available at: [http://www.silicon-valley-story.de/sv/apple\\_sculley.html](http://www.silicon-valley-story.de/sv/apple_sculley.html) Retrieved: September 15, 2009.

<sup>16</sup> AppleTalk is an inexpensive local area network developed by Apple Computer that can be used by both Apple and non-Apple computers for communication and sharing of resources such as printers and file servers. See MSN Encarta, "AppleTalk," *Microsoft Encarta Online Encyclopedia*, Available at: [http://encarta.msn.com/encyclopedia\\_761555448/AppleTalk.html](http://encarta.msn.com/encyclopedia_761555448/AppleTalk.html) Retrieved: September 7, 2009.

<sup>17</sup> Daniel Knight, "1985: Word, Excel, PageMaker, and the LaserWriter," *LowEndMac*, January 13, 2008, Available at: <http://lowendmac.com/history/1985dk.shtml> Retrieved: September 18, 2009.

<sup>18</sup> After leaving Apple in 1985, Steve Jobs founded NeXT, Inc. NeXT combined powerful hardware and software in ways that had never been done before—a high-resolution display, built-in Ethernet, CD-quality sound, and multimedia e-mail. See Simson Garfinkel, "The Short History of NeXT," Available at: <http://simson.net/ref/NeXT/aboutnext.htm> Retrieved: September 18, 2009.

<sup>19</sup> MSN Encarta, "John Sculley," *Microsoft Encarta Online Encyclopedia*, Available at: [http://www.msn.com/encyclopedia\\_761556077/John\\_Sculley.html](http://www.msn.com/encyclopedia_761556077/John_Sculley.html) Retrieved: September 7, 2009.

<sup>20</sup> AllExperts, "Gil Amelio," *AllExperts.com*, Available at: [http://en.allexperts.com/e/g/gil\\_amelio.htm](http://en.allexperts.com/e/g/gil_amelio.htm) Retrieved: October 2, 2009

<sup>21</sup> Apple Computer, "Investor Relations"

<sup>22</sup> Cathy Booth; David Jackson (San Francisco), and Valerie Marchant (New York), "Steve's Job: Restart Apple," *Time Magazine*, August 18, 1997, Available at: <http://www.time.com/time/magazine/article/0,9171,986849,00.html> Retrieved: October 4, 2009.

<sup>23</sup> Steven Lohr, "Creating Jobs," *New York Times*, January 12, 1997, 14.

<sup>24</sup> Apple Computer, "2009 10-K Annual Report," 2-9.

<sup>25</sup> Ibid, 1.

<sup>26</sup> Apple Computer, "Jobs at Apple," Available at: <http://www.apple.com/jobs/us/corporate.html> Retrieved: September 8, 2009.

<sup>27</sup> In the late 1960s, Sony and other consumer electronics manufacturers began the mass production of cassette tapes and recorders. By the late 1970s, the tape cassette machines improved significantly and had become an established norm in audio delivery. In 1979; Sony launched the Walkman in Japan. See Matthew Andreychuck, "Sony Corporation: A Case Study Analysis," (2008): 2.

<sup>28</sup> W. Chan Kim and Renée Mauborgne, *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*, (Boston, MA: Harvard Business School Publishing, 2005).

<sup>29</sup> Richard Gershon, *Telecommunications and Business Strategy* (New York, NY: Routledge, 2009), 365.

<sup>30</sup> Ibid, 373.

---

<sup>31</sup> There are several ways that a major corporation can strategically plan for its future. One common growth strategy is vertical integration whereby a company will control most or all of its operational phases. The rationale is that vertical integration will allow a large-sized company to be more efficient and creative by promoting combines synergies between its various operating divisions. See Richard Gershon, *The Transnational Media Corporation: Global Messages and Free Market Competition* (Mahway, NJ: Lawrence Erlbaum Associates, 1997), 11.

<sup>32</sup> Boot Camp is software included with Mac OS X 10.5 Leopard that lets you run compatible versions of Microsoft Windows on an Intel-based Mac. With Mac OS X, you can use Microsoft Office, connect to most printers and cameras, join PC networks, and run Windows. See Apple Computer, “Boot Camp 2.0, Mac OS X 10.5: Frequently asked questions,” Available at: <http://support.apple.com/kb/HT1656> Retrieved: September 9, 2009.

<sup>33</sup> Apple Computer, “2008 10-K Annual Report,” 3.

<sup>34</sup> Laptop Picker, “*Best Laptop Deal 2007 - Apple MacBook (+ free iPod) at \$1099*,” Laptop Picker, August 14, 2007, Available at: <http://www.laptoppicker.com/archives/best-laptop-deal-apple-macbook.html> Retrieved: October 2, 2009.

<sup>35</sup> Apple Computer, “2008 10-K Annual Report,” 6.

<sup>36</sup> Apple Computer, “2008 10-K Annual Report,” 5.

<sup>37</sup> With iPhone, applications work together seamlessly and they sync with your computer—whether you’re on a Mac or PC. iPhone combines three devices in one: a revolutionary mobile phone, a widescreen iPod, and a breakthrough Internet device. iPhone uses fast 3G and Wi-Fi wireless connections to deliver rich HTML email, Maps with GPS, and Safari. See Apple Computer, “Why you’ll love iPhone,” Available at: <http://www.apple.com/iphone/why-iphone> Retrieved: October 3, 2009.

<sup>38</sup> Apple Computer, “iPad,” January 27, 2010, Available at: <http://www.apple.com/ipad> Retrieved: January 28, 2010.

<sup>39</sup> Apple Computer, “iPad: Technical Specifications,” January 27, 2010, Available at: <http://www.apple.com/ipad/specs> Retrieved: January 28, 2010.

<sup>40</sup> Apple Computer, “2009 10-K Annual Report,” 41.

<sup>41</sup> Ibid.

<sup>42</sup> Ibid.

<sup>43</sup> Apple Computer, “Apple Reports Fourth Quarter Results: Most Profitable Quarter Ever; Record Mac and iPhone Sales,” Available at: <http://www.apple.com/pr/library/2009/10/19results.html> Retrieved: November 5, 2009.

<sup>44</sup> Apple Computer, “A Greener Apple,” 2006, Available at: <http://www.apple.com/hotnews/agreenerapple> Retrieved: November 5, 2009.

<sup>45</sup> Apple Computer, “Apple and the Environment: The Story Behind Apple’s Environmental Footprint,” 2010. Available at: <http://www.apple.com/environment/complete-lifecycle> Retrieved: January 22, 2010.

<sup>46</sup> Ibid.

<sup>47</sup> Apple Computer, “2009 10-K Annual Report,” 15.

---

<sup>48</sup> Ibid, 46.

<sup>49</sup> Ibid, 17-18.

<sup>50</sup> Richard Gershon, *Telecommunications and Business Strategy* (New York, NY: Routledge, 2009), 367.

<sup>51</sup> Kim and Mauborgne, *Blue Ocean Strategy*, 12.