# **3** Apple Inc. in 2015

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Since the death of Steve Jobs on October 5, 2011, critics had questioned Tim Cook's ability to lead Apple. Much of the criticism centered on Apple's lack of innovation since Jobs, citing how Cook may not possess the same product vision. Further, many wondered whether Apple could sustain its success. Yet, despite the economic conditions in the United States post-recession, Apple Inc. had been able to sustain its impressive growth, resulting in a 275 percent growth in net sales between 2010 and 2014. The company set record quarterly revenues and profits during its second quarter of 2012, which resulted in its stock price catapulting to a level that made it the world's most valuable company—a title it continued to hold in early 2015 with market capitalization of nearly \$760 billion. Some analysts speculated that Apple might eventually become the world's first trillion-dollar company.

Despite the company's tremendous successes, new challenges faced Cook and his chief managers in 2015. The company had yet to reverse the general decline in iPod unit sales and was facing a serious competitive threat in both the smartphone and tablet markets. Samsung had surged to the top of the smartphone market in late 2011 by introducing the Galaxy and other models that utilized Google's Android operating system to match the key features of the iPhone. In 2015, Android maintained its status as the most widely used operating system platform for smartphones worldwide with a 24.5 percent share of the market at year-end 2014. Dell, HP, and other computer manufacturers had also released tablet computers, furthering pressure on the iPad.

Apple's record growth in revenues and profits in previous years came primarily from volume

increases in the sale of iPhones and iPads. Still critical to the company's financial performance, iPhone sales accounted for \$102 billion of the company's 2014 revenues of \$182.8 billion, and Apple's iPad tablet computers were the company's second-largest contributor to total revenues with sales of more than \$30.2 billion during 2014. Although iPhone sales increased by 12 percent in 2014, sales of the iPhone had experienced a 16 percent year-over-year increase from 2012 to 2013. In addition, iPad sales had decreased by 5 percent from 2013 to 2014. Disappointing sales continued for the iPod, with a 48 percent year-over-year decline in sales in 2014.

With competitive rivalry continuing in the smartphone and tablet market, Cook and his chief managers would need to consider different avenues for growth. The single largest growth in sales was within Apple's iTunes, App, Mac, and iBookstore, where revenues increased by 40 percent between 2012 and 2014. Also, the rising popularity among consumers to seek alternatives to cable television had fueled sales of Apple TV in 2014. And it was still undetermined how Cook's unveiling of the Apple Watch in September 2014 would impact the company's prospects for growth in revenues.

# Steve Jobs' Strategic Leadership at Apple

Stephen Wozniak and Steve Jobs founded Apple Computer in 1976 when they began selling a crudely designed personal computer called the Apple I to

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Silicon Valley computer enthusiasts. Two years later, the partners introduced the first mass-produced personal computer (PC), the Apple II, which eventually sold more than 10,000 units. While the Apple II was relatively successful, the next revision of the product line, the Macintosh (Mac), would dramatically change personal computing through its user-friendly graphical user interface (GUI), which allowed users to interact with screen images rather than merely type text commands.

The Macintosh that was introduced in 1984 was hailed as a breakthrough in personal computing, but it did not have the speed, power, or software availability to compete with the PC that IBM had introduced in 1981. One of the reasons the Macintosh lacked the necessary software was that Apple put very strict restrictions on the Apple Certified Developer Program, which made it difficult for software developers to obtain Macs at a discount and receive informational materials about the operating system.

With the Mac faring poorly in the market, founder Steve Jobs became highly critical of the company's president and CEO, John Sculley, who had been hired by the board in 1983. Finally, in 1985, as Sculley was preparing to visit China, Jobs devised a boardroom coup to replace him. Sculley found out about the plan and canceled his trip. After Apple's board voted unanimously to keep Sculley in his position, Jobs, who was retained as chairman of the company but stripped of all decision-making authority, soon resigned. During the remainder of 1985, Apple continued to encounter problems and laid off one-fifth of its employees while posting its first ever quarterly loss.

Despite these setbacks, Apple kept bringing innovative products to the market, while closely guarding the secrets behind its technology. In 1987, Apple released a revamped Macintosh computer that proved to be a favorite in K-12 schools and with graphic artists and other users needing excellent graphics capabilities. However, by 1990, PCs running Windows 3.0 and Word for Windows were preferred by businesses and consumers and held a commanding 97+ percent share of the market for personal computers.

In 1991, Apple released its first-generation notebook computer, the PowerBook and, in 1993, Apple's board of directors opted to remove Sculley

from the position of CEO. The board chose to place the chief operating officer, Michael Spindler, in the vacated spot. Under Spindler, Apple released the PowerMac family of PCs in 1994, the first Macs to incorporate the PowerPC chip, a very fast processor co-developed with Motorola and IBM. Even though the PowerMac family received excellent reviews by technology analysts, Microsoft's Windows 95 matched many of the capabilities of the Mac OS and prevented the PowerMac from gaining significant market share. In January 1996, Apple asked Spindler to resign and chose Gil Amelio, former president of National Semiconductor, to take his place.

During his first 100 days in office, Amelio announced many sweeping changes for the company. He split Apple into seven distinct divisions, each responsible for its own profit or loss, and he tried to better inform the developers and consumers of Apple's products and projects. Amelio acquired NeXT, the company Steve Jobs had founded upon his resignation from Apple in 1985. Steve Jobs was rehired by Apple as part of the acquisition. In 1997, after recording additional quarterly losses, Apple's board terminated Amelio's employment with the company and named Steve Jobs interim CEO.

Under Jobs' leadership, Apple introduced the limited-feature iMac in 1998 and the company's iBook line of notebook computers in 1999. The company was profitable in every quarter during 1998 and 1999, and its share price reached an alltime high in the upper \$70 range. Jobs was named permanent CEO of Apple in 2000 and, in 2001, oversaw the release of the iPod. The iPod recorded modest sales until the 2003 launch of iTunes, the online retail store where consumers could legally purchase individual songs. By July 2004, 100 million songs had been sold, and iTunes had a 70 percent market share among all legal online music download services. The tremendous success of the iPod helped transform Apple from a struggling computer company into a powerful consumer electronics company.

By 2005, consumers' satisfaction with the iPod had helped renew interest in Apple computers, with its market share in personal computers growing from a negligible share to 4 percent. The company also exploited consumer loyalty and satisfaction with the iPod to enter the market for smartphones with

the 2007 launch of the iPhone. The brand loyalty developed through the first iPod and then the iPhone made the company's 2010 launch of the iPad a roaring success with 3.3 million units sold during its first three months on the market. Much of Apple's turnaround could be credited to Steve Jobs, who had idea after idea for how to improve the company and turn its performance around. He not only consistently pushed for innovative new ideas and products but also enforced several structural changes, including ridding the company of unprofitable segments and divisions.

The success of the turnaround could also be attributed to the efforts of Tim Cook, Apple's chief operating officer, who oversaw the company's operations at various times between 2004 and 2011. Cook was first asked to act as the company's chief manager in 2004 when Steve Jobs was recovering from pancreatic cancer surgery, later in 2009 when Jobs

took a six-month medical leave for a liver transplant, and again in early 2011 when Jobs left the company for another medical leave. Jobs' illness eventually forced his resignation shortly before his death on October 5, 2011. While Jobs had been the inspiration for the company's hottest new products such as the iPhone, iPad, and iPod, analysts and key Apple managers viewed Cook as an "operational genius." While COO and acting CEO, Tim Cook was responsible for overhauling Apple's supply chain system and transforming it into one of the lowest cost electronics-manufacturers. Prior to coming to Apple in 1998, Cook was a rising star in Compaq Computer's management team.

A summary of Apple's financial performance for fiscal years 2010 through 2014 is provided in Exhibit 1. The company's net sales by operating segment and product line and unit sales by product line for 2012 through 2014 are provided in Exhibit 2.

# EXHIBIT 1

# Summary of Apple Inc.'s Financial Performance, 2010–2014 (\$ in millions, except share amounts)

|   | 2014            | 2013           | 2012      | 2011      | 2010            |
|---|-----------------|----------------|-----------|-----------|-----------------|
| Net sales   | \$182,795       | \$170,910      | \$156,508 | \$108,249 | \$65,225        |
| Costs and expenses                                      |                 |                |           |           | 4-4,220         |
| Cost of sales   | 112,258         | 106,606        | 87,846    | 64,431    | 39,541          |
| Research and development                                | 6,041           | 4,475          | 3,381     | 2,429     | 1,782           |
| Selling, general and administrative                     | <u>11,993</u>   | _ 10,830       | 10,040    | 7,599     | <u>5,517</u>    |
| Total operating expenses                                | 18,034          | 15,305         | 13,421    | 10,028    | 7,299           |
| Operating income  | 52,503          | 48,999         | 55,241    | 33,790    | 18,385          |
| Other income and expenses                               | <u>980</u>      | <u>1,156</u>   | 522       | 415       | 155             |
| Iлсоme before provision for income taxes                | 53,483          | 50,155         | 55,763    | 34,205    | 18,540          |
| Provision for income taxes                              | <u>13,973</u>   | <u> 13,118</u> | 14,030    | 8,283     | _ 4,527         |
| Net income  | \$39,510        | \$37,037       | \$41,733  | \$25,922  | \$14,013        |
| Earnings per common share                               |                 |                |           |           | ,,.             |
| Basic   | \$6.49          | \$40.03        | \$44.64   | \$28.05   | \$15.41         |
| Diluted   | \$6.45          | \$39.75        | \$44.15   | \$27.68   | <b>\$1</b> 5.15 |
| Cash dividends declared per common share                | \$1.82          | \$11.40        | \$2.65    | \$0.00    | \$0.00          |
| Shares used in computing earnings per share             |                 |                |           | •         | 40.00           |
| Basic   | 6,085,572       | 925,331        | 934,818   | 924,258   | 909,461         |
| Diluted   | 6,122,663       | 931,662        | 945,355   | 936,645   | 924,712         |
| Total cash, cash equivalents, and marketable securities | \$155,239       | \$146,761      | \$121,251 | \$81,570  | \$51,011        |
| Total assets  | 231,839         | 207,000        | 176,064   | 116,371   | 75,183          |
| Total long-term obligations                             | 24,826          | 20,208         | 16,664    | 10,100    | 5,531           |
| Total liabilities                                       | <b>12</b> 0,292 | 83,451         | 57,854    | 39,756    | 27,392          |
| Total shareholders' equity                              | 111,547         | 123,549        | 118,210   | 76,615    | 47,791          |

Sources: Apple Inc., 2012, 2013 and 2014 10-K reports, \*A seven-for-one stock split occurred on June 6, 2014.

### EXHIBIT 2

# Apple, Inc.'s Net Sales by Operating Segment, Net Sales by Product, and Unit Sales by Product, 2012–2014 (\$ in millions; unit sales in thousands)

| Net Sales by Operating Segment:            | 2014      | Change        | 2013      | Change | 2012          |
|--|-----------|---------------|-----------|--------|---------------|
| Americas net sales                         | \$65,232  | 4%            | \$62,739  | 9%     | \$57,512      |
| Europe net sales                           | 40,929    | 8%            | 37,883    | 4%     | 36,323        |
| Greater Chine net sales                    | 29,846    | 17%           | 25,417    | 13%    | 22,533        |
| Japan net sales                            | 14,982    | 1 <b>1</b> %  | 13,462    | 27%    | 10,571        |
| Rest of Asia Pacific net sales             | 10,344    | (7)%          | 11,181    | 4%     | 10,741        |
| Retail net sales                           | 21,462    | 6%            | 20,228    | 7%     | <u>18,828</u> |
| Total net sales                            | \$182,795 | 7%            | \$170,910 | 9%     | \$156,508     |
| Net Sales by Product:                      |           |               |           |        |               |
| iPhone <sup>1</sup>                        | \$101,991 | 12%           | \$91,279  | 16%    | \$78,692      |
| iPad <sup>1</sup>                          | 30,283    | (5)%          | 31,980    | 3%     | 30,945        |
| Mac <sup>1</sup>                           | 24,079    | 12%           | 21,483    | (7)%   | 23,221        |
| iPod <sup>1</sup>                          | 2,286     | (48)%         | 4,411     | (21)%  | 5,615         |
| iTunes, Software and Services <sup>2</sup> | 18,063    | 13%           | 16,051    | 25%    | 12,890        |
| Accessories <sup>3</sup>                   | 6,093     | 7%            | 5,706     | 11%    | 5,145         |
| Total net sales                            | \$182,795 | <del>7%</del> | \$170,910 | 9%     | \$156,508     |
| Unit Sales by Product:                     |           |               |           |        |               |
| îPhone                                     | 169,219   | 13%           | 150,257   | 20%    | 125,046       |
| iPad                                       | 67,977    | (4)%          | 71,033    | 22%    | 58,310        |
| Mac  | 18,906    | 16%           | 16,341    | (10)%  | 18,158        |
| iPod                                       | 14,377    | (45)%         | 26,379    | (25)%  | 35,165        |

Source: Apple Inc., 2014 10-K report.

# Overview of the Personal Computer Industry

The personal computer industry was relatively consolidated, with five sellers accounting for 81.3 percent of the U.S. shipments and 65.3 percent of worldwide shipments in 2014 (see Exhibit 3). Worldwide PC shipments had declined since 2011 with total global PC demand projected to erode by as much as 30 percent by 2018. The downward trend was partly due to the rise in popularity of tablet computers for home and business use. Tablet computers, such as the iPad, were becoming replacements for laptops and PCs primarily among consumers but were increasingly becoming a viable substitute for PCs within the business setting as business apps and cloud computing expanded. The market for tablet

computers increased from 219.9 million units in 2013 to 229.6 million units in 2014, which represented 4.4 percent year-over-year growth.

# Apple's Competitive Position in the Personal Computer Industry

Apple's proprietary operating system, strong graphics-handling capabilities, and sleek designs differentiated Macs from PCs, but many consumers and business users who owned PCs were hesitant to purchase a Mac because of Apple's premium pricing and because of the learning curve involved with mastering its proprietary operating system. Since the introduction of the first Macintosh computer in

<sup>&</sup>lt;sup>1</sup> Deferrals and amortizations of related nonsoftware services and software upgrade rights included.

<sup>&</sup>lt;sup>2</sup> Revenues from the iTunes Store, the App Store, the Mac App Store, the IBooks Store, AppleCare, licensing, and other services are included in figures.

<sup>&</sup>lt;sup>3</sup> Sales of Apple-branded and third-party iPod, iPad, Mac, and iPhone accessories are included.



# U.S. and Global Market Shares of Leading PC Vendors, 2010-2014

|              |                 |                        |                 | A. U.S. I              | Market Sha      | .S. Market Shares of the Leading PC Vendors, 2010–2014       | ling PC Ver     | 1dors, 2010-2          | 014           |                        |               |
|--------------|-----------------|------------------------|-----------------|------------------------|-----------------|--|-----------------|------------------------|---------------|------------------------|---------------|
|              |                 | 2014                   | =               | 2013                   |                 | 2012   |                 | 2011                   |               | 2010                   |               |
| 2014<br>Rank | Vendor          | Shipments<br>(in 000s) | Market<br>Share | Shipments<br>(in 000s) | Market<br>Share | Shipments<br>(in 000s)                                       | Market<br>Share | Shipments<br>(in 000s) | Market        | Shipments<br>(in 000s) | Market        |
| -            | Hewlett-Packard | 18,332                 | 27.6%           | 16,160                 | 25.5%           | 17.845   | 27.0%           | 18 595                 | 26.19.        | 10.499                 | ,60 HC        |
| 7            | Dell            | 16,158                 | 24,3            | 14,055                 | 22.1            | 14.062   | 213             | 15 202                 | 22.2          | 12, 150<br>CPC 51      | 65.54<br>8 CC |
| က            | Apple           | 8,085                  | 12.2            | 7,255                  | 11.4            | 7.182  | 10.9<br>10.9    | 7,649                  | 2.2.3<br>10.7 | 1,352<br>6 596         | 7.57          |
| 4            | Lenovo.         | 7,100                  | 10.7            | 6,195                  | 80              | 5 277  | C 8             | 2 6                    |               | 0000                   | 0.0           |
| D.           | Toshiba         | 4,299                  | 6.5             | 4.647                  | 7.3             | 4 664  | 7.1             | 6.69F                  | 0 T           | P.C3 3                 | æ c<br>⊒ c    |
|              | Others ·        | 12,396                 | 18.7            | 15,151                 | 23.0            | 15,000   |                 | ייי ר<br>הייי ר        | ţ.            | 470,0                  | o i           |
|              | All vondore     | 11 200                 | 200             | 2 2 2                  | 65.5            | 000,01   | C:17            | 77417                  | 31.5          | 25,050                 | 33.4          |
|              |                 | 60c'l /                | 80.00           | 101,67                 | 100.0%          | 62,879   | 100.0%          | 71,309                 | 100.0%        | 75,101                 | 100.0%        |
|              |                 |                        |                 | B. Global              | Market Sha      | B. Global Market Shares of the Leading PC Vendors, 2010-2014 | ding PC Ve      | indors, 2010–;         | 2014          |                        |               |
|              |                 | 2014                   |                 | 2013                   | أحم             | 2012   |                 | 2011                   |               | 2010                   |               |
| 2014         |                 | Shipments              | Market          | Shipments              | Market          | Shipments  | Market          | Shipments              | Market        | Shinmante              | Market        |
| Rank         | Vendor          | (in 000s)              | Share           | (in 000s)              | Share           | (in 000s)  | Share           | (in 000s)              | Share         | (in Onde)              | Share         |
| _            | Lenovo          | 59,233                 | 19.2%           | 53,804                 | 17.1%           | 52,348   | 15.0%           | 44.007                 | 12.5%         | 34 182                 | 800           |
| ~            | Hewlett-Packard | 56,849                 | 18.4            | 52,188                 | 16.6            | 58,129   | 16.6            | 62,334                 | 17.7          | 64.213                 | 18.5          |
| m            | Dell            | 41,665                 | 13.5            | 37,787                 | 12.0            | 38,719   | 11.1            | 44,282                 | 12.6          | 43.403                 | 17.5          |
| 4            | Acer Group      | 24,104                 | 7.8             | 24,508                 | 7.8             | 33,588   | 9.6             | 37,169                 | 10.6          | 42,430                 | 12.3          |
| 10           | Apple           | 19,822                 | 6.4             | 17,132                 | 5,4             | n,a.   | n.a.            | n.a.                   | П. <b>Э</b> . |                        | ) e           |
|              | Others          | 106,952                | 34.7            | 129,702                | 41.2            | 143,386  | 41.0            | 164.6034               | 46.64         | 142 874                | 413           |
|              | All vendors     | 308,625                | 100.0%          | 315,121                | 100.0%          | 349,383  | 100.0%          | 352,395                | 100.0%        | 346,198                | 100.0%        |
|              |                 |                        |                 |                        |                 |  |                 |                        |               |                        |               |

1984, the company had been unable to achieve a 5 percent market share in the United States. However, the company's market share in the United States had improved from 4.7 percent in 2006 to 8.8 percent in 2010, primarily because of the success of the iPod and iPhone. These products created a halo effect whereby some consumers (but not business users) switched to Apple computers after purchasing an iPod, iPhone, or iPad. This trend continued as more consumers adopted Apple computers due to their experience with other Apple products and how each product seamlessly integrates with the other. By 2014, Apple's market share in the United States had grown to 12.2 percent—giving it a numberthree ranking in the U.S. PC market. Apple was also ranked fifth in the world for the first time in 2013.

Apple's computer product line consisted of several models in various configurations. Its desktop lines included the Mac Pro (aimed at professional and business users); the iMac (targeted toward consumer, educational, and business use); and Mac mini (made specifically for consumer use). Apple had two notebook product lines: MacBook Pro (for professional and advanced consumer users) and MacBook Air (designed for education users and consumers). All Apple computers were priced at a steep premium compared to PCs and laptops offered by Dell, HP, and other rivals. In January 2015, Mac Pro pricing started at \$2,999, representing a \$500 increase since 2012, iMac and MacBook Pro pricing began at \$1,099, the MacBook Air was offered from \$899. and Mac mini pricing started at \$499, representing a \$100 decrease in each from the 2012 prices.

# **Apple and Tablet Computers**

Apple entered the market for tablet computers with its April 3, 2010, launch of the iPad. Tablet computers had been on the market since the late 1990s, but only Apple's version had gained any significant interest from consumers and business users. Previous-generation tablet computers required the use of a stylus to launch applications and enter information. Most users found the stylus interface to be an annoyance and preferred to use a smartphone or laptop when portability was required. Dell, Acer, and Hewlett-Packard had all raced to get touch-screen tablet computers to market but were unable to do so until very late 2010 and early 2011 because of the

technological differences between tablet computers and PCs. Tablet computers were technologically similar to smartphones and shared almost no components with PCs. HP acquired Palm for \$1.2 billion in May 2010 to accelerate its entry into tablet computers. However, most PC manufacturers chose to utilize smartphone microprocessors and Google's Android operating system in their tablet computer models.

By mid-2012, Apple held a 68 percent share of the market for tablet computers. However, competitive pressures had dramatically reduced Apple's market share. In 2013, Apple was responsible for 33.8 percent of all shipments, but by 2014, the company's share of shipments had decreased to 27.6 percent. Its chief rival in the smartphone market, Samsung, had captured a 17.5 percent market share by 2014. Yet, the most significant impact may be due to an increase in the overall number of competitors. Only 60 percent of the total shipments in 2014 were accounted for by the top five vendors.

Apple's iPad 2, launched in March 2011, contained a dual-core processor that was far more powerful than the first-generation iPad and most competing tablet computers. Apple reduced the size and thickness of its iPad models and launched the iPad Air in late 2013 to address consumer criticism over weight and comfort of use. The iPad Air was approximately 22 percent lighter than standard iPad models and weighed about one pound. Apple launched the iPad Mini in direct response to smaller "phablets" offered by competitors. Although the same width as the iPad Air, the iPad Mini was approximately 1.5 inches shorter and weighed 25 percent less. The original iPad was discontinued in 2014.

In 2015, iPad Air and iPad Air 2 models retailed from \$399 to \$499 for the 16GB, respectively. The 128GB iPad Air 2 model retailed for \$699. The iPad Mini model was \$249. Apple's tablet computer pricing had dropped dramatically since 2012, when its 64GB iPad 2 retailed for \$829.

# Apple's Rivals in the Personal Computer Industry

### **Hewlett-Packard**

Hewlett-Packard (HP) was broadly diversified across segments of the computer industry with business divisions focused on information technology

consulting services, large enterprise systems, software, personal computers, printers and other imaging devices, and financial services. The company's Printing and Personal Systems Group (PSS), which manufactured and marketed HP and Compaq desktop computers and portable computers, was its largest division, accounting for revenues over 34 billion in 2014. HP recorded total net revenues of \$111 billion in 2014, with its enterprise group and enterprise services accounting for 26.7 billion and 21.2 billion, respectively. The company's software business units accounted for sales of nearly \$3.6 billion and its financial services unit contributed net revenue of about \$3.4 billion in 2014.

PSS revenues remained the same between 2013 and 2014. Previous decreases in net revenue may be attributed to a decrease in the overall PC market; however, PSS revenues increased slightly from 2013 to 2014 due to an increase in commercial PC purchases.

In October 2014, HP announced its intent to split into two independent, publicly traded companies. The PSS segment, currently the printing and personal systems business units, would form HP Inc. The other segments, such as the enterprise systems and financial businesses, would be renamed Hewlett-Packard Enterprise. This division was expected to be completed by the end of 2015. Exhibit 4 provides the revenue contribution by PSS business unit for 2010 through 2014.

### Dell Inc.

Dell Inc. had been the leading producer of PCs in the United States from 2001 through 2006. Tough economic conditions, declining demand for PCs by consumers, and growing price competition in the PC industry had significantly affected Dell's financial performance later in the 2000s, with its revenues declining from \$62 billion in fiscal 2012 to \$56.9 billion in fiscal 2013. In addition, Dell's net earnings fell from \$3.5 billion in fiscal 2012 to \$2.4 billion in fiscal 2013.

In 2013, Dell's stockholders approved the acquisition of the company by its founder, Michael Dell, and technology investment firm, Silver Lake Partners. The acquisition was aimed at refocusing the company on its core business and allow it to restore its formally impressive financial performance.

The company offered a wide range of desktop computers and portables, ranging from low-end, low-priced models to state-of-the-art, high-priced models. The company also offered servers; work-stations; peripherals such as printers, monitors, and projectors; and Wi-Fi products. The company's shipments of PCs, however, declined from 62 billion in 2011 to 56.7 billion in 2014. Lenovo's deep price discounts had yielded a 34 percent increase in worldwide shipments over the same period, resulting in its rise to the top and Dell's fall to third worldwide for 2014. See Exhibit 5.

# Apple's Competitive Position in the Market for Smartphones

The first version of the iPhone was released on June 29, 2007, with more than 270,000 first-generation iPhones being sold during the first 30 hours of the product's launch. The iPhone was named *Time* 

| EXHIBIT 4 |  |
|-----------|--|
|           |  |

| Product      | 2014         | 2013          | 2012     | 2011       | 2010                    |
|--------------|--------------|---------------|----------|------------|-------------------------|
| Natebooks    | \$17,540     | \$16,029      | \$18,830 | \$21,824   | \$22,545                |
| Desktop PCs  | 13,197       | 12,844        | 13,888   | 15,370     | 15,478                  |
| Workstations | 2,218        | 2,147         | 2,148    | 1,805      | 1,786                   |
| Other        | <u>1,348</u> | <u>1,15</u> 9 | 977      | <u>575</u> | -                       |
| Total        | \$34,303     | \$ 32,179     | \$35,843 | \$39,574   | <u>932</u><br>\$ 40,741 |

| Product Category         | Fiscal<br>2013 | Fiscal ' 2012 | Fiscal<br>2011   | Fiscal<br>2010 |
|--------------------------|----------------|---------------|------------------|----------------|
| Servers and networking   | \$9,294        | \$8,336       | \$7,609          | \$6,032        |
| Storage                  | 1,699          | 1,943         | 2,295            | •              |
| Services                 | 8,396          | 8,322         | 7.673            | 2,192          |
| Software and peripherals | 9,257          | 10,222        | .,               | 5,622          |
| Mobility                 | 15,303         | 19,104        | 10,261           | 9,499          |
| Desktop PCs              | 12,991         | •             | 18,971           | 16,610         |
| Total net revenue        |                | <u>14,144</u> | <u>14,685</u>    | <u> 12,947</u> |
| ioral lier revelide      | \$56,940       | \$62,071      | <b>\$</b> 61,494 | \$52,904       |

Source: Dell Inc., 2011, 2012 and 2013 10-K reports.

magazine's Invention of the Year in 2007. The iPhone 3G was released in 70 countries on July 11, 2008, and was available in the United States exclusively through AT&T Mobility. The iPhone 3G allowed users to access the Internet wirelessly at twice the speed of the previous version of the iPhone and featured a built-in global positioning system (GPS), and, in an effort to increase adoption by corporate users, was compatible with Microsoft Exchange. The iPhone 3GS was introduced on June 19, 2009, and included all of the 3G features, and again doubled the Internet speeds over the 3G.

The iPhone 4 was launched on June 24, 2010, and included video-calling capabilities (only over a Wi-Fi network), a 5-megapixel camera including flash and zoom, 720p video recording, a longerlasting battery, and a gyroscopic motion sensor to enable an improved gaming experience. The iPhone 4 sold more than 1.7 million units within three days of its launch. The iPhone 4S sold more than 4 million units within the first three days of its October 14, 2011, launch. The iPhone 4S also possessed the first significant innovation in the iPhone series with the addition of Siri, Apple's intelligent assistant and voice control feature. By 2011, Apple had expanded its carrier network beyond AT&T to include Verizon, Sprint, and C-Spire in the United States and a variety of carriers in Europe and Asia.

The iPhone 5 represented several shifts in Apple's strategy with its iPhone product. Mirroring Apple's approach to consumer trends in size preference, the iPhone 5 was increased to 4 inches from

the previous 3.5-inch size. It also featured the first change in the connector, an all-digital "lighting connector." One of the more dramatic shifts, it changed how the phone interfaced with other products and rendered many peripherals obsolete.

The release of both the iPhone 5S and 5C demonstrated Apple's change in approach to segmenting the market. Both were still the larger, 4-inch format; however, the 5C maintained many of the previous features found in the iPhone 5 and was less expensive. The 5S, however, extended many of the current capabilities, while introducing a new feature, Touch ID. The Touch ID was a fingerprint scanner in the home button meant to increase security. This would also lay the foundation for another new feature found in the iPhone 5S: the Apple Pay mobile payment system.

The iPhone 6 and 6 Plus continued Apple's changing strategy regarding phone size. While the iPhone 6 increased to 4.7 inches, the iPhone 6 Plus was 5.5 inches, furthering Apple's move into the phablet market and mirroring the strategy with the iPad Mini. The price of the iPhone 6 and 6Plus in 2015 were \$199 and \$299, respectively, for the 16GB models.

# Demand and Competition in the Smartphone Market

Since 2012, worldwide shipments of smartphones had almost doubled, from 725 million units in 2012 to 1.3 billion in 2014. For the first time, shipments

of smartphones were more than 50 percent of all mobile phone shipments in 2013, demonstrating a dramatic change in how consumers used mobile technology to access the Internet and multimedia content. Driving this increase in smartphone shipments was the steady decrease in overall manufacturing costs and increased competition, leading to a decrease in the price paid by the consumer.

Countries such as China and South Korea and regions such as the Middle East and Africa offered the greatest growth opportunities but also presented challenges to smartphone producers. For example, in 2014, there were over 1 billion mobile phone users in China, approximately 700 million of whom were smartphone users. Apple began selling the iPhone 4 in China in 2010 through its partnership with China Telecom, the country's second-largest wireless provider and its network of 25 flagship stores located in the country's largest cities. The iPhone 4S became available in China in January 2012-making it available in 90 countries within three months of its initial launch. However, intellectual property protection and counterfeit products, including counterfeit Apple Stores, posed significant problems.

In South Korea, smartphone usage surpassed PC usage in 2014, where 84 percent of the population used a smartphone to access the Internet, compared to 78 percent that used a PC. Yet, strong brand loyalty for Korea-based Samsung can be found not only in Korea but also in the United States, helping

Samsung capture nearly 25 percent of the global market share for smartphone shipments in 2014.

The Middle East and Africa experienced 83 percent growth in 2014. This growth was due to less expensive smartphones, as 20 percent of all smartphones in the region were priced at \$100 or less. This growing market was a challenge due to Apple's pricing strategy. Competitors such as Lenovo successfully targeted this market and built large market shares in the region.

With the market for smartphones growing rapidly, competition was becoming stronger. Google's entry into the market with its Android operating system had allowed vendors such as LG, Motorola, and Samsung to offer models that matched many of the features of the iPhone. In fact, Android's strong capabilities had made it the number-one smartphone platform worldwide, with 76.6 percent of shipments running on Android in the fourth quarter of 2014. Exhibit 6 presents shipments and market shares for the leading smartphone producers between 2012 and 2014.

# Apple's Competitive Position in the Personal Media Player Industry

Although Apple didn't introduce the first portable digital music player, the company has consistently possessed over 70 percent of the market, and the



# Top Five Worldwide Smartphone Vendors, Shipment Volumes and Market Shares, 2012-2014

|      |             | 2014                    | <u> </u>        | 2013                       |                 | 2012                       |                 |
|------|-------------|-------------------------|-----------------|----------------------------|-----------------|----------------------------|-----------------|
| Rank | Vendor      | Shipments (in millions) | Market<br>Share | Shipments<br>(in millions) | Market<br>Share | Shipments<br>(in millions) | Market<br>Share |
| 1    | Samsung     | 318.2                   | 24.5%           | 316.4                      | 31.0%           | 219.7                      | 30.3%           |
| 2    | Apple       | 192.7                   | 14.8            | 153.4                      | 15.1            | 135,9                      | 18.7            |
| 3    | Huawei      | 73.6                    | 5.7             | 49.0                       | 4.8             | 29.1                       | 4.0             |
| 4    | Lenovo      | 70.0                    | 5.4,            | 45.5                       | 4.5             | 23.7                       | 3.3             |
| 5    | LG          | 59,2                    | 4.6             | 47.8                       | 4.7             | 26.3                       | 3.6             |
|      | Others      | <u>587.3</u>            | <u>45.1</u>     | 407.4                      | 40.0            | <u>290.5</u>               | 40.1            |
|      | All vendors | 1,301.1                 | 100.0%          | 1019.4                     | 100.0%          | 725.3                      | 100.0%          |

name iPod had become a generic term used to describe digital media players. When Apple launched its first iPod in 2001, many critics did not give the product much of a chance for success, given its fairly hefty price tag of \$399. However, the iPod's sleek styling, ease of use, and integration with iTunes and digital music purchases, coupled with the eventual price decreases and differing models, allowed it to develop such high levels of customer satisfaction and loyalty that rivals found it difficult to gain traction in the marketplace. Even though many competing MP3 players compared favorably to Apple's iPod models, none of Apple's key rivals in the media player industry had been able to achieve a market share greater than 5 percent since 2004. Most consumers did not find many convincing reasons to consider any brand of media player other than Apple.

While the original iPod only played music, the most popular portable players in 2015 not only played music but also could be connected to Wi-Fi networks to play videos, access the Internet, view photos, or listen to FM high-definition radio. The iPod Touch had remained the best-selling media player since its introduction in 2012 with more than 350 million units sold by year-end 2014. However, the wide-scale adoption of smartphones had cannibalized the portable media player market with iPod sales declining by 45 percent between 2013 and 2014 and Apple formally discontinuing the iPod Classic in September 2014. Apple continued to sell the iPod touch, iPod nano, and iPod Shuffle in 2015 with prices beginning at \$199, \$149, and \$49. respectively.

# **App Store and iTunes**

iTunes was Apple's software for managing digital music, movies, and other content on its PCs, tablets, and smartphones. Further, iTunes was its online marketplace to sell music, as well as movies and TV shows. In the early 2000s, when Napster and other free music sharing sites were encountering legal issues, Apple was able to gain widespread acceptance in both the marketplace and from the music industry through the ease of use and copyright protection afforded by iTunes. As of 2015, over 43 million songs were available for consumers to choose

from, and the iTunes Store had expanded to offer consumers the ability to purchase and download videos, movies, and television shows that could be played on iPods, iPhones, or Apple TV, devices.

Users of Apple's iPods, iPhones, iPads, or Macs could also use the company's iMatch or iCloud services that integrated apps, iBooks, and iTunes purchased at the App Store to all devices owned by the individual. The iCloud service also allowed users to share calendars and contacts, wirelessly push photographs to all devices, and back up data from Apple devices.

Finally, the growth in popularity of cable-alternative devices such as Apple TV had further contributed to sales on iTunes. Consumers increasingly cancelled traditional cable services and began consuming TV and movie content through streaming services. Netflix, Amazon, and Hulu, for example, provided monthly subscription services allowing consumers to access movies and TV seasons. Full NBA, MLS, and other sports seasons are also available through subscriptions. In 2015, HBO announced a cable-free subscription service available to Apple TV owners. While Apple TV provided users with the ability to access Apple's content, other media companies were selling their services through Apple as well.

# Apple's Performance in 2015 and the Launch of the Apple Watch

As of 2015, Apple's outstanding performance had not been impeded by the loss of Steve Jobs as CEO, who had been the inspiration of its most important and innovative products. Since 2011, Apple had almost tripled its net sales and had become ranked in the top five of global PC shipments. Yet, as Mac sales had increased to 19 million units and iPhone sales to 170 million units, the iPod had been discontinued, and iPad sales had stagnated around 70 million units.

The biggest concerns for the company in 2015 were how to handle the shrinking market for PCs and the increased competition in the smartphone and tablet markets. Clearly, iPad and iPhone sales were

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the largest contributors to the company's financial performance. Even though Tim Cook was successfully leading the company after the death of Steve Jobs, it was Jobs who had been widely recognized as the visionary force behind the development of

the iPod, iPhone, and iPad. With the launch of the Apple Watch, however, industry observers would learn whether Cook would also be able to lead the development of products that would disrupt technology markets.

### **ENDNOTES**

<sup>&</sup>lt;sup>1</sup> Yukari Iwatani Kane and Nick Wingfield, "Apple's Deep Bench Faces Chaffenges," Wall Street Journal Online, August 24, 2011.