Apple, Inc. in 2012

OVERVIEW

espite the loss of Steve Jobs as CEO in 2011 and sluggish economic conditions in the United States, Apple Inc. had been able to sustain its impressive growth into 2012. 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 as measured by market capitalization. In fact, only Microsoft's market capitalization of \$619 billion on December 30, 1999 was greater that Apple's \$600 billion-plus market capitalization on April 10, 2012. The record growth in revenues and profits came primarily from volume increases in the sale of iPhones and iPads, which increased by 88 percent and 151 percent, respectively, from the same period in 2011. The sales of Mac computers increased by 7 percent from the second quarter of 2011 to reach 4 million units. The only sales disappointment for the company was a 15 percent year-over-year decline in iPod sales. The company sold 7.7 million iPods during the second quarter of 2012.

The company's record setting performance was a relief to those who worried that the company would struggle after the illness-forced resignation of Steve Jobs in August 2011 and then his death on October 5, 2011. Steve Jobs had battled a variety of health issues including pancreatic cancer since 2004 and had taken medical leaves of absence from his CEO position in 2004, 2009, and earlier in 2011, but despite his absence, he had been able to provide inspiration for the company's hottest new products such as the iPhone, iPad, and iPod. During all three medical leaves, Apple's chief operating officer, Tim Cook, took the helm of the company. He oversaw the successful launch of the company's most successful new products while also revamping the company's supply chain and improving overall operating efficiency. Tim Cook's successful performance during Steve Jobs' absences led to his appointment as successor to Jobs as CEO of Apple Inc.

But many challenges faced the new CEO and his chief managers in 2012. The company had yet to reverse the general decline in iPod unit sales and Apple was facing a serious competitive threat in the smartphone market. Continuing growth in iPhone sales was critical to the company's financial performance, since iPhone sales accounted for \$47.2 billion of the company's 2011 revenues of \$108.1 billion. Apple's iPad tablet computers were the company's second-largest contributor to total revenues with sales of more than \$20.4 billion during 2011.

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 2012, Android was the most widely used operating system platform for smartphones in the United States with a 50.9 percent share of the market. Google's \$12.5 billion of Motorola Mobility in 2012 provided it with the resources needed to expand beyond software and enter the market for smartphone handsets and tablet computers. Google introduced its first hardware product, the Nexus 7 tablet computer in June 2012. Dell, HP, and other computer manufacturers were also rolling out new tablet computers to compete against the iPad. With competitive rivalry heating up and technological change accelerating, Apple's new managers would be forced to work creatively and expeditiously to sustain the company's success achieved under Steve Jobs.

SUGGESTIONS FOR USING THE CASE

Students should be very interested in discussing this case given the increasing popularity of its products. A quick poll of the class should reveal that students currently own or use an Apple computer, iPod, iPhone, or iPad. Many are likely to be very loyal Apple owners or admirers of Steve Jobs' accomplishments at Apple and are very eager to discuss the company's products and business situation.

This case provides a unique opportunity for students to compare Apple's overwhelming success in the personal media player industry to its increasingly strong position in the smart phone segment of the mobile phone industry to its much weaker position in the computer industry. Students should develop an appreciation for the need for companies to tailor a strategy and develop capabilities that fit the specific industry to build a sustainable competitive advantage.

This case is well suited for use in your business strategy module and has ample information for students to illustrate the following concepts and utilize the following tools of analysis:

- Complete analysis of the company's strategy in the markets for computers, mobile phones, tablet computers, and personal media players (Chapter 5).
- Understand and appreciate the challenges associated with building organizational capabilities able to serve as the basis for developing a competitive advantage (Chapters 4 and 10) and then developing a strategy that successfully leverages these advantages (Chapter 5).
- Perform a thorough financial analysis of a company and understand the contribution of different product lines to a company's success. The financial ratio summary presented in Table 4.1 of the text should be a very valuable guide for students in doing the financial calculations to support their assessment of Apple's financial performance. We strongly recommend that students use the ratios provided in Appendix to complete their financial analyses.

The case also provides students with the opportunity to make recommendations that will yield even stronger positions in smartphones and digital media players, improve its position in the computer industry, and ensure that the iPad replicates the success of the iPod and iPhone.

The assignment questions and teaching outline presented below reflect our thinking and suggestions about how to conduct the class discussion and what aspects to emphasize.

To give students guidance in what to think about and what analytical tools to utilize in preparing the Apple, Inc. in 2012 case for class discussion, we strongly recommend providing class members with a set of study questions and insisting that they prepare good notes/answers to these questions in preparing for class discussion of the case.

To facilitate your use of study questions and making them available to students, we have posted a file of the assignment questions contained in this teaching note for the Apple, Inc. in 2012 case on the student section of the publisher's Online Learning Center for the 19th edition (www.mhhe.com/thompson). (We should also point out that there is a set of study questions posted in the student section of the OLC for each of the 30 cases included in the 19th edition.)

You may also find it beneficial to have your class read the Guide to Case Analysis that is posted in the student section of the Online Learning Center for the 19th edition at www.mhhe.com/thompson. Students will find the content of this Guide particularly helpful if this is their first experience with cases and they are unsure about the mechanics of how to prepare a case for class discussion, oral presentation, or written analysis.

There's also a case preparation exercise on Connect that allows students to list strategic issues confronting the company's senior management and make strategy recommendations to improve Apple's competitive position in the markets for computers, digital media players, smartphones, and tablet computers. The Connect-based case exercise for the Apple in 2012 case does not include the auto grading feature available with some other Connect case exercises such as Costco Wholesale in 2012 or Under Armour. You may want to peruse the Apple in 2012 case exercise on Connect prior to class to get a feel for the kind of thinking and analysis that it calls upon students

to do. Students that do a conscientious job of completing the exercise should be well prepared to contribute to the class discussion.

Video for Use with the Apple Case. There is an accompanying 19:18 PBS video that you might want to show the class (or have students watch on their own). It is titled "Remembrance of Steve Jobs." A link to this video is posted in the Instructor section of the Online Learning Center at www.mhhe.com/thompson and a DVD containing this video can also be obtained through your McGraw-Hill representative. Consider showing the video at the beginning of the class.

This case is suitable for both written and oral presentations. Our recommended assignment questions are as follows:

- 1. As part of your internship requirements with Apple Inc., you have been asked to prepare an analysis of Apple's competitive position in the markets for computers, digital media players, smartphones, and tablet computers. Your report should contain 2-3 pages of recommendations for sustaining the company's success in digital media players, smartphones, and tablet computers and improving its position in computers. Your 2-3 page executive summary of recommendations should be accompanied by exhibits such as an overview of Apple's strategy, a competitive strength assessment, and a financial analysis.
- 2. A key executive at Apple has learned of your considerable skills in strategic analysis and has hired you to develop a strategic plan that will enable Apple to improve its position in the computer industry, maintain its leadership position in the digital music player industry, and continue to build a strong position in the market for smartphones and tablet computers. In developing your recommendations, you should assess the computer, mobile phone, and personal media player industries. You should also assess Apple's competitive strength in its key product categories and analyze its recent financial performance. Finally, the plan should offer specific, actionable recommendations that will allow Apple to further improve its position in all of its product categories. Your recommendations should be well supported with arguments and justifications for each recommendation. Your report should include 4-6 pages of recommendations and whatever supporting charts, tables or exhibits you deem useful.

ASSIGNMENT QUESTIONS

- 1. What are the chief elements of Apple's overall competitive strategy? How well do the pieces fit together? Is the strategy evolving?
- 2. What are the key elements of Apple's strategy in computers, personal media players, tablet computers, and smartphones? Have its strategies in its core businesses yielded success? Explain.
- 3. What does a competitive strength assessment reveal about Apple's computer business, as compared to the leaders in the computer industry? Use the methodology in Table 4.4 to support your answer. Does it appear that the company's competitive positions in personal media players, tablet computers, and smartphones are stronger or weaker than its position in computers?
- 4. Does it make good strategic sense for Apple to be a competitor in the computer, personal media player, smartphone, and tablet computer industries? Are the value chain activities that Apple performs in computers, personal media players, tablet computers and smartphones very similar and "compatible" or are there very important differences from product to product? Which of the four products lines computers, tablet computers, personal media players, or smartphones do you think is most important to Apple's future growth and profitability? Why?
- 5. What is your assessment of Apple Computer's financial performance the past three years? (Use the financial ratios in the Appendix of the text as a guide in doing your financial analysis.)
- 6. What recommendations would you make to allow Apple to strengthen its position in its most important markets? What steps should it take to ensure that the iPad becomes a major contributor to the company's overall performance?

TEACHING OUTLINE AND ANALYSIS

1. What are the chief elements of Apple's overall competitive strategy? How well do the pieces fit together? Is the strategy evolving?

Students should recognize that Apple has done an excellent job of developing and piecing together its very distinct strategy through effective innovation that has resulted in new product introductions and the improvement of existing products. Apple has employed a differentiation strategy linked to innovation with its three core products – computers, personal media players and mobile phones. More specifically, Apple attempts to meet the needs of a global market by offering customers innovative new products and improved existing products. A key piece of their strategy involves meeting the needs of the converging digital electronics and computer markets. Finally, students should indicate that Apple has elected to implement its strategy by designing and developing proprietary operating systems and software technologies, thus allowing for strict protection of its intellectual rights.

As technology evolves, so has Apple's strategy. Initially, Apple focused on the computer industry by introducing innovative products. Apple continues to introduce innovative products in the computer industry but recently has focused a great deal of strategic attention and resources on meeting the needs of customers in the converging digital electronics and computer markets. This, along with the successful entry into the personal media player industry, marks a clear evolution in Apple's strategy. Also, Apple's entry into the mobile phone industry with its iPhone and the tablet computer industry with its iPad are evidence of a further evolving strategy.

2. What are the key elements of Apple's strategy in computers, personal media players, tablet computers, and smartphones? Have its strategies in its core businesses yielded success? Explain.

Students should be able to identify the following elements of Apple's differentiation strategy utilized in its computer, personal media player, tablet computer, and smartphone businesses.

Components of Apple's Strategy in Computers

- Style Apple has carved a niche that attracts consumers due to its appearance and fashion status.
- Proprietary capabilities Apple computers use technology and programs that are unique to Apple.
- Limited product line breadth Apple offers a limited number of computer models.

After reviewing the above elements, students should suggest that it is likely that Apple's current strategy will allow Apple to continue to increase its sales of computers because of a growing number of consumers wanting seamless integration with their iPods, iPads, and iPhones. But Apple has not made any inroads with business buyers and does not pose a serious threat to the market dominance of Dell and HP for the following reasons:

- Lack of price competitiveness. Apple has always been among the higher priced systems in the computer industry. With the exception of integration with other Apple devices, value-oriented computer users had little motivation to buy a premium-priced product.
- **Limited number of business applications adapted for Mac OS.** Apple's compatibility with business applications was improving, but was not sufficient for most business users.

Components of Apple's Strategy in Personal Media Players

- Late mover advantage Apple has single-handedly shaped how companies compete in this industry by entering the market only after pioneers had made serious missteps. Apple entered the market as a late mover with highly innovative and stylish products that were easy to use. Apple has consistently beat the competition to market with new features such as including touch screen technology in their personal media players.
- Fashionable perception Apple turned the personal media player into a fashion statement. Until the rise in popularity of the iPhone, Apple engrained in the consumer that a digital music player is more than just a music and video player it is a status symbol. The same can now be said about the iPhone.
- **Music Store support** By leveraging the downloading abilities of iTunes, Apple has launched iPod to success. Once again, greater innovation of iTunes leads to more capabilities of the iPod.

Apple's success in the personal media player industry can be attributed to the following factors:

- Apple's differentiation strategy yielded unmatched brand recognition and consumer loyalty in the industry. Apple's ease of use, stylish designs, and large content library created a loyal customer base in the digital media player industry that rivals have been unable to replicate.
- Apple's systematic dedication to and support of continuously developing market leading innovation of products and product features. Apple has consistently changed and reinvented the iPod to meet more consumer needs and offer more features. As a prime example, Apple introduced the iPod offering video capabilities. By being the first to market with this product and supplementing it by offering video downloads through iTunes, Apple captured more consumers.
- The relationship between the iPod and iTunes. Perhaps one of the best moves Apple made was to customize iTunes to seamlessly sync with the iPod. By transforming iTunes from a software tunes player to a full online music and video store, it played directly to the strengths of the iPod. By strategically offering iTunes to Windows users after the iPod and iTunes established a strong brand name, this mutually beneficial relationship between iPod and iTunes was extended to a much larger consumer base.
- Strategic partnerships. By developing key partnerships with major recording labels and networks, Apple was able to offer a media library that was temporarily unmatched by competitors. Had Apple been unable to secure these partnerships, iTunes' success, and thus the iPod's success, would have been severely limited.

Components of Apple's Strategy in Smartphones

- **First to market innovation** Apple's innovative approach to entering the smartphone market is largely responsible for the attractiveness of the smartphone segment of the mobile phone industry. The iPhone's touch screen, integration with iTunes, and mobile apps have allowed the iPhone to capture a 31.9 percent market share by May 2012. The company's market share in smartphones had remained relatively stable through Q1 2012—see case Exhibit 6.
- **Fashionable perception** Like the iPod, Apple has made smartphones a fashion accessory and status symbol demanded by many consumers.
- **App Store support** By leveraging the downloading abilities of iTunes and mobile apps, Apple has replicated the success of the iPod.

Components of Apple's Strategy in Tablet Computers

- First to market innovation Apple's innovative approach to entering the tablet computer market is largely responsible for the attractiveness of the tablet computer segment of the computer industry.
- **Fashionable perception** Like the iPod and iPhone, Apple has made tablet computers a status symbol demanded by many consumers.
- **App Store support** By leveraging the downloading abilities of iTunes and various apps for iPads, Apple has replicated the success of the iPod and iPhone.

One you have laid these differences out with the students it is worthwhile to ask them whether they believe Apple's limited success in the computer industry had any impact on their success on the digital music player industry, smartphone, or tablet computer markets. Astute students are likely to realize that the commoditization of the computer industry largely negated any significant benefits Apple could have gained from its innovative capabilities, while these capabilities remain essential in the markets for smartphones, tablet computers, and personal media players.

3. What does a competitive strength assessment reveal about Apple's computer business, as compared to the leaders in the personal computer industry? Use the methodology in Table 4.4 to support your answer. Does it appear that the company's competitive positions in personal media players and smartphones are stronger or weaker than its position in computers?

Students should be able to prepare a competitive strength assessment for the major producers of personal computers. Although the students' strength measures, respective weightings, and ratings may vary, conclusions reached by students should be consistent with what we show in Table 1.

TABLE 1 Competitive Strength Assessment for the Leading Rivals in the Computer Industry

Rating Scale: 1 = very weak; 10 = very strong

		Apple		Dell		НР		Acer	
Key Success Factors/ Strength Measures	Importance Weight	Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score
Price	0.1	6	0.6	9	0.9	9	0.9	10	1.0
Quality/Product									
performance	0.15	8	1.2	7	1.05	7	1.05	6	0.9
Peripheral									
synchronization									
capabilities	0.1	9	0.9	7	0.7	7	0.7	7	0.7
New product									
innovation									
capabilities	0.2	10	2.0	6	1.2	7	1.4	6	1.2
Customization									
availability	0.15	5	0.75	10	1.5	9	1.35	5	0.75
Software									
compatibility	0.1	5	0.5	8	0.8	8	0.8	8	0.8
Reputation/Image	0.1	8	0.8	8	0.8	8	0.8	6	0.6
Market position	0.05	4	0.2	9	0.45	10	0.5	6	0.3
Breadth of product									
offerings	0.05	6	0.3	8	0.4	7	0.35	8	0.4
Total	1.0	61	7.25	72	7.8	72	7.85	62	6.65

As indicated by the table above, Dell and HP are the strongest player in the computer industry, something that is supported by the market share statistics presented in case Exhibit 3. Conversely, Table 1 indicates Acer as the industry's weakest rival in part because of an overreliance on lower quality, low priced PCs. Acer acquired Packard Bell and Gateway and is quickly becoming a major seller, particularly in geographic segments such as Europe, the Middle East and Africa.

Students should note that Apple's competitive position in the personal media player industry is much stronger than its position in the computer industry. The company held a 78 percent share of the digital music player industry in 2011. No other single rival had been able to achieve a market share greater than 5 percent in 2012. In addition, its iTunes music store held a 65 percent share of the U.S. digital music market in 2011 and a 23 percent share of total U.S. music sales. Amazon.com was the second-largest seller of digital music in the United States with a 12 percent market share.

Students will also agree that Apple's competitive position in smartphones is stronger than its position in computers. The iPhone was the second best-selling smartphone in the second quarter of 2012. Students can argue convincingly that the popularity of the iPhone has contributed to the success of the entire smartphone industry, which grew from unit sales of 1.7 billion in 2009 to 4.9 billion in 2011. Even though Google's Android operating system was the leading smartphone platform in 2012 and Apple lost its number-one ranking in the handset segment of the industry to Samsung in late 2011, students will likely suggest that Apple has a sustainable competitive advantage relative to its handset rivals in the smartphone industry in 2012. However, students should not overlook the threat to Apple posed by Google's \$12.5 billion acquisition of Motorola Mobility.

4. Does it make good strategic sense for Apple to be a competitor in the computer, personal media player, smartphone, and tablet computer industries? Are the value chain activities that Apple performs in computers, personal media players, tablet computers and smartphones very similar and "compatible" or are there very important differences from product to product? Which of the four products lines—computers, tablet computers, personal media players, or smartphones—do you think is most important to Apple's future growth and profitability? Why?

It has made strategic sense for Apple to compete in the computer, personal media player, smartphone, and tablet computer markets. There are similarities in Apple's value chain activities when comparing activities in developing, manufacturing, and marketing computers, digital music players, smartphones, and tablet computers. Students should infer that the supporting activities (i.e., product R&D, human resource management and general administration) are similar. Of the supporting activities, R&D has been most important to Apple, which competes on the basis of differentiation through innovation and style. Much of the technology developed for one of its product lines has been in or used to build the popularity of its other products. Students should also note that there are similarities in its primary activities (i.e., supply chain management, operations, distribution, sales and marketing, and service) with a few key exceptions. Apple's operations and service is different for each product due to the significant differences in product specifications such as size and function, particularly when comparing computer with non-computer products. The specifications and, thus, value chain similarities for non-computer Apple products are very similar with some versions of the iPod and the iPhone using some of the same touch screen technology. In addition, the iPad has a number of value chain matchups with the iPod Touch and iPhone since many apps developed for the iPhone and iPod Touch would also run on the iPad. Also, the iPad and iPhone used a common operating system.

Apple's strong dominance in smartphones and tablet computers makes the two product categories very important to Apple's long-term success. Apple also enjoys a strong market position in personal media players and digital content for such players. Even though it appears that the market for lower-end media players has stalled, Apple's iPod Touch has experienced gains in the marketplace and Apple's iTunes Store is a solid contributor to the company's sales and earnings. Students should point out that Apple has enjoyed great success in the mobile phone industry, which is very promising. Apple's performance in the computer industry is less promising internationally, but its market share in the U.S. had increased from 5.8% in 2007 to 10.7% in 2011—see case Exhibit 3.

5. What is your assessment of Apple Computer's financial performance the past three years? (Use the financial ratios in the Appendix of the text as a guide in doing your financial analysis.)

Students should be able to use the financial information provided in case Exhibit 1 and the financial ratios provided in the Appendix of the text to make calculations similar to what are shown in Table 3.

TABLE 3 Selected Financial Statistics and Ratios for Apple, Inc., 2007 - 2011

Performance Ratios	2011	2010	2009	2008	2007
Net sales growth	65.9%	52.0%	14.4%	56.2%	24.3%
Operating profit margin	31.2%	28.2%	27.4%	22.2%	18.4%
Net profit margin	23.9%	21.5%	19.2%	16.3%	14.6
R&D as % of sales	2.2%	2.7%	3.1%	3.0%	3.3%
Return on assets (ROA)	22.3%	18.6%	17.3%	16.9%	14.1%
Return on equity (ROE)	33.8%	29.3%	26.0%	27.4%	24.1%

Calculated from case Exhibit 1.

Students should quickly recognize that, with the exception of 2009, Apple's performance during the recession that began in 2008 has been exceptionally strong with revenues growing by 56.2% between 2007 and 2008, by 52.0% between 2009 and 2010, and by 65.9% between 2010 and 2011. Students should also recognize that the company's profitability measures have improved considerably since 2007. The company's R&D as a percentage of sales has declined only slightly as revenues have dramatically increased during the 2007 – 2011 period.

The company reported its best-ever quarterly results in the second quarter of fiscal 2012 with revenues of \$39.2 billion. Apple shipped a record 4 million Mac units during the quarter. Also, the company sold a record 11.8 million iPads and 35.1 million iPhones during the second quarter of 2012. The only sales disappointment during the second quarter of 2012 was the 15 percent year-over-year decline in iPod unit sales.

Students are likely to suggest that that the strength of Apple's strategy and products have allowed it to withstand the effects of the challenging economic conditions than competing consumer electronics manufacturers and companies competing in other industries.

6. What recommendations would you make to allow Apple to strengthen its position in its most important markets? What steps should it take to ensure that the iPad becomes a success in the marketplace and a major contributor to the company's overall performance?

Personal Computer Industry

The analysis above suggests that Apple's shortcomings in the computer industry stem from a lack of compatibility with some business productivity software, a lack of customization, and the lack of a lower priced model. Hence, Apple should take actions that reduce the impact of these factors or eliminate them altogether. Below is a list of steps Apple should take:

■ Adopt customization into their business model

Apple should enable the user to "design their own" computer. This step towards computer customization will help offset the competitive advantage upon which Dell has developed much of its industry-leading performance. Specifically, Apple should allow customers to choose such things as amount of RAM, processing speed, memory, peripherals, etc.

Apple has a perception of fashion and style that it can leverage in its effort to include customization of its products. It should bring to the industry an exaggerated concept of customization by allowing consumers to customize the style. This would allow users to customize certain parts of their computer to fit their liking. While the exact elements should be decided upon according to feasibility, an example includes an option in the color of the computer.

Lower production costs to introduce a lower priced line of laptops and desktop computers

Students may recommend that Apple develop a lower-priced line of portable computers and desktop computers to compete against the many brands of well-equipped PCs and laptops selling at or below the \$500 price point. The company's margins on its MacBook line of laptops are likely much greater than the margins on the entry level computers offered by Dell and HP, but Apple could pick up considerable volume with lower-priced models. In addition, a low-priced model would allow Apple to attract first-time buyers who could become familiar with the Mac OS and not experience a significant switching cost after becoming accustomed to Windows. Such a price reduction would require the use of less costly microprocessors and other components and improved manufacturing processes.

■ Advertise Aggressively

Although Apple has become much more compatible with products such as Office, few in the market realize this. Advertising more heavily will help end the notion of incompatibility of Apple computers with Microsoft Office software that most use. Some potential and interested buyers believe that Apple does not easily accept documents produced on PCs without significant conversion issues.

Apple should also advertise the stylish component of their computers in a way that is similar to the iPod. They should capitalize on the "halo" effect of consumers who have used their iPods, iPads, and iPhones since these products are very popular and generate excitement.

Apple should advertise their product as being different but superior. In particular, Apple should concentrate on the ease of synchronization with peripherals such as the iPod, iPad, and iPhone that many consumers already use. Apple should also point out their "superior" OS along with its compatibility.

Personal Media Player Industry

Apple has shaped and led the personal media player industry upon entering in 2001. Keys to its competitive advantage include innovation, strategic partnerships, iTunes compatibility and brand identity resulting in a 78 percent market share in 2011. This stellar performance should be continued.

■ Continue innovation with product features

Apple should continue the iPod's lead in the industry through continued innovation in features and capabilities. Apple should also consider expanding the utility of the iPod for some users by offering new types of apps that are compatible with the iPod, iPad, and iPhone.

■ Continue the stylish marketing

The iPod has swept away the competition in no small part due to the unique consumer perception that it is fashionable to own one. Apple should continue to differentiate its iPod not only on the basis of innovation but also on the basis of style to attract a wide demographic and psychographic consumer base.

Avoid marketing approaches and developer requirements that may violate anti-trust laws

Apple's iTunes Store and the ease of synchronization capabilities of its products have given Apple a clear advantage in the sale of digital music and other digital media. However, because of its commanding lead in digital media sales the company must closely scrutinize its policies to determine if they overly push the bounds of anti-trust laws.

Smartphone Industry

Apple's iPhone has been a hit in the mobile phone industry since its June 2007 launch. Students will note that the iPhone has put pressure on the other makers of smart phones to further enhance the features of their products. Students will comment that the future battle for industry leadership will likely be waged by Apple and Google, which would soon enter the market for smartphone handsets through its \$12.5 billion acquisition of Motorola Mobility. Actions that students may recommend to improve Apple's market standing in the mobile phone industry are listed below:

■ Continue to lead in product innovation.

Apple must continue to develop innovations in the iPhone capabilities since the smartphone segment of the mobile phone industry is in the midst of a race for technological leadership. New features and capabilities must further develop the iPhone's ability to lead the convergence of communications, information, and entertainment.

■ Make the iPhone compatible with more carrier networks.

Apple should make its iPhones available to all major carriers in markets around the world. However, students should recognize that Apple may be required to make substantial modifications to the iPhone to allow it to operate on multiple carrier networks.

■ Develop valuable new apps.

Students are also likely to recommend that Apple and its third party partners continue to develop applications available for purchase through its App Store that will appeal to smartphone users.

Tablet Computers

Students will be very impressed with the success achieved by Apple in the tablet computer market with 32.4 million units sold by year-end 2011 and 68 percent market share in mid-2012. Final iPad shipments would be considerably higher in 2011 with 11.85 million iPads sold during the second quarter of 2012 alone. As with the iPod and iPhone, the iPad caught rivals off-guard – forcing them to quickly design and launch new lines of tablet computers to limit Apple's dominance in the rapidly growing segment of the computer industry. Specific recommendations students may make to ensure that the iPad captures the majority of growth in the segment may include:

■ Lower production costs.

The ability to sell at lower price points will likely become more important as Dell, Acer, HP, Samsung, Motorola, and Nokia, get new tablet computers to market that will operate on the Android operating system.

■ Develop new applications that approach the capabilities of portable and desktop computers.

Apple must attempt to make the iPad a substitute for a laptop and not just an oversized iPod. The company must develop word processing and other frequently used applications that will allow it to become valuable to business users as well as consumer users. The ability to store and share files on Apple's iCloud service should be valuable to users of all types.

■ Continue to innovate in ways that prevent new entrant tablets from making significant inroads into the market.

Innovations such as improved touch screens, lighter weight, better graphics capabilities more robust processors, and internal storage, and USB and HDMI ports are examples of new features that Apple must consider to prevent new entrants from gaining significant market share.

EPILOGUE

The most significant updates since the writing of the teaching note are:

- 1. Apple recorded record quarterly revenue of \$54.53 billion and record net quarterly profit of \$13.1 billion, during its 13-week first quarter of 2013. These results compare to revenue of \$46.3 billion and net quarterly profit of \$13.1 billion during the 14-week first quarter in 2012. The company sold 4.1 million Mac computers during the quarter compared to 5.1 million in the same quarter in 2012. Also during the quarter, Apple sold 47.8 million iPhones compared to 37 million during the same quarter in 2012 and 22.9 million iPads compared to 15.4 million during the first quarter of 2012. Apple sold 12.7 million iPods during the first quarter of 2013 compared to 15.4 million in the same quarter the year prior.
- 2. Apple's 2012 net sales increased to \$156.5 billion from \$108.2 billion in 2011. The company's net income increased from \$25.9 billion in 2011 to \$41.7 billion in 2012.

Apple sold 125 million iPhones in 2012—a 73 percent year-over-year increase. Apple also sold 58.3 million iPads during 2012 (an 80 percent unit year-over-year increase), 18.2 million Macs (a 9 percent increase from 2011), and 35.2 million iPods (a 17 percent unit decline from 2011.)

You can visit www.apple.com to read the company's recent financial results and press releases.