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## A Resource-Based View on Sustaining Competitive Advantage: A Case Discussion

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### **Abstract:**

*This paper discusses Apple Computer, Inc.'s (Apple) distinctive competencies in line with its competitive environment to identify its competitive advantage and its sustainability. We find that Apple's distinctive competencies lie with its innovative capabilities, proprietary ecosystems, and marketing. Given the highly competitive nature of Apple's competitive environment, we find it hard to sustain a competitive advantage with constant updates of internal resources. In light of these findings, we recommend Apple adopts a learning (knowledge-based) organization approach and positions itself for speedy innovation in order to consistently "shift the rules of the game". In conclusion, the sustainability of its competitive advantage and superior performance would eventually rely on Apple's continuous endeavors to shape, mould or influence the future market and technological evolutions. This means it should focus its strategy and management on continuous improvements and innovations, i.e., change.*

**Keywords:** *Apple, case analysis, competitive advantage, resource-based view*

### **1. Introduction**

Competitive advantage is vital to firms in surviving and winning in competition, the potential and sustainability of which depends on its resources and capabilities according to the resource view of the firm (Barney, 1991; Barney, 2001; Barney & Clark, 2007). In contrast to the external view of the firm which focuses primarily on the competitive environment (Porter, 1980, 2008), the resource-based view argues that organizations should have an emphasis on organizing and mobilizing internally to exploit potentially competitive resources and capabilities (Barney et al., 2001; Barney & Hesterly, 2010). Utilizing both streams of theories of the firm, this case discussion uses secondary sources of data to analyze the sustainability of Apple Computers Inc.'s (Apple) competitive advantage, its underlying distinctive competencies, and the nature of competition in which Apple tries to sustain its superior performance. After discussing the drivers of competition in the computer technology industry, some recommendations are offered in guiding Apple to build necessary capabilities for sustained competitive advantage.

#### **1.1. Apple: A Competitive Analysis**

Apple's competitive advantage evolves from its successful differentiation strategy, relying on its internal resources and capabilities for its competitive position. This paper adopts relevant conceptual frameworks by Barney and Hesterly (2010) for the internal analysis of Apple's competitive advantage, including three aspects below.

##### **1.1.1. Internal Resources**

According to Barney and Hesterly (2010), Apple's resources that could be the sources of its competitive advantage include its organisational resources, human resources, reputational resources, and technological resources (Table 1, also refer to Appendix A). It is worth of note that such resources have been built up through Apple's history to facilitate its innovative capabilities which make them more costly for competitors to imitate (Heracleous & Papachroni, 2009).

Strategic Resources	Examples in Apple	VRIO Model Implications
Organisational resources	“Think out of the box” and “work and rework until perfection” organisational culture; Steve Jobs’ leadership (until his recent resignation, see Apple Inc., 2011b); Well-connected value activities.	Valuable, relatively rare, imperfect/hard to imitate and relatively difficult to substitute.
Technological resources	The proprietary ecosystem; Enormous technological patents (and inventions);	Valuable, rare, imperfect/hard to imitate and difficult to substitute.
Human resources	“Talented people with passion for excellence”; “Top-notch folks” who are “super smart and creative”; Excellent teamwork and management experiences and skills.	Valuable, relatively rare, costly to imitate and relatively difficult to substitute.
Reputational resources	Brand image and customer loyalty; America’s No.1 most admired company; The most innovative company (year 2006-2008).	Valuable, rare, costly to imitate and difficult to substitute.

Table 1: Apple’s strategic resources

1.1.2. Internal Capabilities

Through both primary and support activities of the value chain (Porter, 1996), Apple continuously creates values for its customers. Research shows that some important activities on which Apple has built its distinctive competencies to outperform its competitors include Technological Development, Human Resource Management, General Administration, Supplier Partnership, Product Design, Research and Development, Marketing, and Retailing Management (e.g., Edwards, 2009; Tariq, Ishrat & Khan, 2011; Carew, Florkowski & Smith, 2006; Helft, 2011; Mallin & Finkle, 2011; please also refer to Appendix B). Nevertheless, it is not these individual activities that make Apple distinctive but rather the synergistic sum of the whole system.

1.1.3. Distinctive Competencies

Apple’s strategic resources and superior capabilities to employ and deploy such resources have led to Apple’s distinctive competencies on which its competitive advantage is based (e.g., see Mallin & Finkle, 2011; Lashinsky, 2012; Andruss, 2012). Claiming to be innovative all the time (e.g., see Apple Inc., 2011a; 2011b), its core competencies are illustrated in Table 2 below. For reason of space, Appendix C provides a more detailed internal assessment. The below two subsections offer a brief assessment of the competition.

1.1.4. Industry Assessment – The Nature of Competition

Apple’s product and service portfolio primarily fall under consumer electronics industry (Mallin & Finkle, 2011; see Appendix D). Arguably, the very nature of such high-tech industries lies with the rapid technological innovations which shorten product lifecycles resulting in severe competition (or even hypercompetition; see D’Aveni, 1995; Heracleous & Papachroni, 2009). It could be interpreted that the nature of the industry is based primarily on two aspects: innovation and speed.

Distinctive Competencies	Examples/Elaborations	Strategic Implications
(In-house) Product design	Ease to use in almost all Apple’s products	Product differentiation, brand reputation and differentiation.
Research and Development/ Technological advancement	2 <sup>nd</sup> generation of iPod which is windows compatible	Product differentiation, brand reputation.
Market communication/ Customer relationship management	“Byte into an Apple”; “Say hello to iPhone”	Brand differentiation, loyal customer base which is hard to imitate.
Building a proprietary ecosystem	Intimate integration between software, hardware and operating system	Product and brand differentiation, very hard to imitate.
Creativity and innovation	Introduction of first iPod, iTunes and iPhone	Product differentiation, brand reputation and differentiation.

Table 2: Apple’s Distinctive Competencies

Sources: Authors’ Analyses based On Apple Inc.’S Company Website (<http://www.apple.com> in 2012); Heracleous & Papachroni (2009); Mallin & Finkle (2011); Lashinsky (2012); Andruss (2012), etc

We take personal computer industry as an example, which is a significant source of revenue for Apple (Apple Inc., 2012a), using Porter’s Five Forces Model (2008) to better understand the structure of the competition (See Appendix E). Partially due to convergence of device and an increasing trend of competition on ecosystems, relatively frequent merger and acquisition (M&A) activities have been taking place in the industry which result in increasing threats from established competitors, new entrants, suppliers (forward integration), and substitutes (see Worldwide Computer & Software Stores

Industry, 2012; Heracleous & Papachroni, 2009; Haigh, 2012). Buyers' bargaining power is rising due to the increasing variety of choices and availability of information. Overall, the industry Apple is operating is highly competitive and dynamic in nature. For reason of space, a more elaborated analysis is provided in Appendix E.

### 1.1.5. Sustainability of Competitive Advantage

The dynamic and hypercompetitive nature of Apple's competition make it very difficult to sustain competitive advantage in the industry (D'Aveni, 1995). A "golden rule" for sustaining Apple's competitive advantage, interestingly, might be "to consistently change ahead". With potential threats from established competitors, new entrants, suppliers and potential substitutes, and the increasingly demanding customers, do-nothing-and-stay-on-top is virtually impossible for Apple. Appendix F offers a SWOT analysis to further illustrate this point. In an industry where today's state-of-the-art technology would soon become tomorrow's standard, a competitive advantage purely in technology would not sustain much longer. Therefore, the sustainability of Apple's competitive advantage depends on its competencies to continuously understand customer needs and then "move ahead of waves" faster than its competitors.

### 1.2. Sustaining Apple's Superior Performance

To continue its successful performance, Apple must also understand the drivers of the competition and then build capabilities reflecting such drivers for success. Among other drivers of competition, technical and technological innovation is a predominant force (Bresnahan & Greenstein, 1999). Technology redefines the industry with continuous technological advancements (Heracleous & Papachroni, 2009). Three important factors for Apple's innovations are speed (how fast one could innovate), product design (how well one could apply the innovation), and deep pockets in order to support R&D activities (e.g., see Apple Inc., 2012b).

Another important factor is network externalities, i.e., integration of and among software and hardware (Economides, 1998). This could form a stronghold for Apple to block its competitors from eroding its market share (D'Aveni, 1995). Although players in the computer industry have been designing new products trying to prolong the product life cycle, personal computers have already entered its mature stage and costs might well be considered as a vital factor for competition (Kotler & Armstrong, 2010). Other significant influences include customer relationship, after sales services, and brand reputation, etc.

#### 1.2.1. Building up Necessary Capabilities for Continued Superior Performance

Apple's excellence was very much influenced by its past CEO, Steve Jobs' leadership (Finkle & Mallin, 2010). It would be wise for Apple to adopt a learning organization (knowledge-based) approach instead of relying on the "one-man-show" strategy (Soliman, 2011). By adopting a continuous renewal perspective of change, faster revolutionary innovations would be enhanced by knowledge creation (Upson, et.al, 2012).

First, Apple would be advised to maintain its current casual working environment and organizational culture of innovation. Besides, team learning and systems thinking could also be incubated to facilitate innovations. Furthermore, strong and shared vision should be implanted into Apple's culture (Senge, et.al., 1999).

Secondly, an organic organizational design at Apple would be better for creativity and innovation (Bueno, Anton, & Paz Salmador, 2008). Operating in the dynamic industry, some flexible (and informal) organizational structure and processes which grant faster and better communication would be fundamental.

Thirdly, Apple should put emphases on its Human Resource Management. A company full of talented employees like Apple requires careful management (Gibbs, 1990). There should be a lesson learnt from the stock price fluctuations when Steve's illness was made aware to the public: Apple should plan its leadership succession ahead.

Finally, the seven rules D'Aveni (1995) advocates to "sustain the unsustainable competitive advantage" in hypercompetition is handy for Apple to continue outperforming the competition. Much have been discussed, these could be summarized by advising Apple to build up flexible capabilities for speedy innovation aiming for maximum customer satisfaction and future evolution of market and technology.

## **2. Conclusion**

Apple's competitive advantage rests on its distinctive competencies which have been resulted from its strategic resources and capabilities. In light of its nature and drivers of competition, the sustainability of its competitive advantage and superior performance would eventually rely on Apple's continuous endeavors to shape, mould or influence the future market and technological evolutions. This means it should focus its strategy and management on continuous improvements and innovations, i.e., change. Apple should engage in constant change to continuously build on its innovative capabilities and surprise the market in order to sustain its competitive advantage.

## **3. Note**

This paper is adapted from an assignment submitted to the University of Ballarat (Australia) as part of the course requirements during the first author's MBA studies in 2012, which was funded by a Ballarat MBA scholarship.

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### Appendix A

Types of Resources	Valuable	Rare	Inimitability	Non-sustainability	Competitive Implications	Economic Implications
Physical resources	Yes	No	No	No	Competitive Parity	Normal
Reputation resources	Yes	Yes	Yes	Yes	Competitive advantage	Above Normal
Human resources	Yes	Yes	Yes	Yes	Competitive advantage	Above Normal
Technology resources	Yes	Yes	Yes	Yes	Competitive advantage	Above Normal
Financial resources	Yes	No	No	No	Competitive Parity	Normal
Organisational resources	Yes	Yes	Yes	Yes	Competitive advantage	Above Normal

Table 3: Assessment of Apple's Internal Resources  
Source: Adapted from Barney and Hesterly (2010)

Value Chain activities	Examples/elaborations
General Administration (Firm infrastructure)	Strong cash position; Innovative organisational culture.
Human Resource Management	Recruit and select the best; Talents retention programmes.
Research and Development (Technological Development)	Patent protection; Heavy spending on R&D.
Supplier Management (Procurement)	Strategic partnerships with OEMs; Backward integration.
Product Design	All in-house designs; Ease to use, fashionable and stylish packaging.
Marketing	Fantastic market understanding and communication with appropriate Ads (e.g., "Get a Mac").
Retailing Management	Selective distribution and full-service Apple Stores.
Service	Included and extended warranty; Apple Genius Bar at Apple Stores for better customer communication.

Table 4: Assessment of Apple's Capabilities (Value Chain)  
Source: Adapted from Porter (1996)

Internal Components	Relevant Factors
Resources base	Human resources; Technology; R&D capacity; Existing loyal customer base.
Activity system	Marketing abilities; Exclusive distribution; Superior pricing system; Supportive organizational culture; Supportive leadership; Purchasing activities; Value-delivery system to customers.
Product offering	Innovative products such as iPod, iTunes, Phone, Apple TV, iWork, iCloud, etc.; Integrated product offerings; Integrated hardware and software; Integrated product and service offerings; Unique product features; Superior product quality;

Table 5: Internal Assessment for Apple

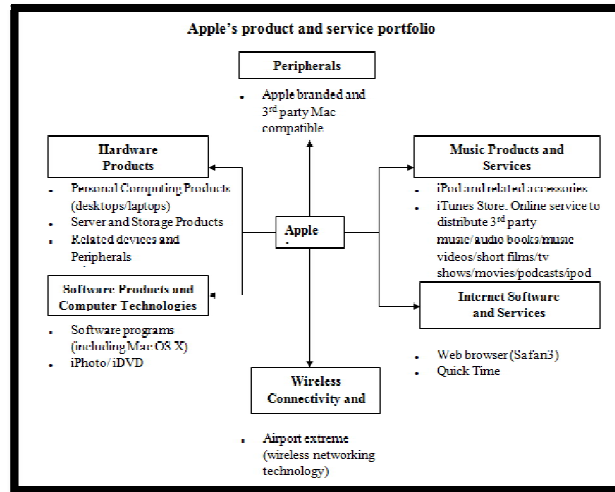


Figure 1: Apple's Product and Service Portfolio  
Source: Adopted from Heracleous & Papachroni (2009)

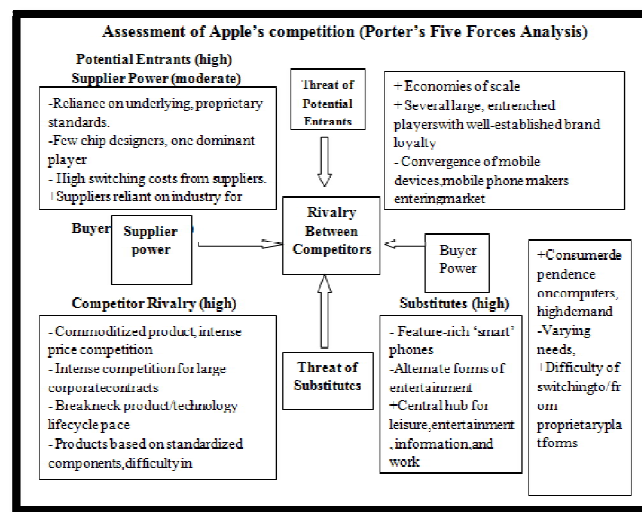


Figure 2: Assessment of Apple's Competition (Porter's Five Forces Analysis)  
Overall Industry Competition: HIGH  
Source: Adapted From Porter (2008)

Strengths	Weakness
Brand reputation;	Less capable of broadening its customer targets
Relatively strong financial positions;	high operational cost;
Strong marketing abilities;	High prices;
Innovative technical teams;	Products not compatible with other operating systems;
Customer loyalty;	Over-dependence on a key leader (Steve Jobs);
State-of-art technology;	Inconsistency in top management.
Strong leadership;	
Innovative organizational culture;	
Integrated product offerings;	
Eye-catching product design;	
Emphasis on R&D.	
Opportunity	Threat
Broader market segments;	New entrants to the industry;
Going global;	Existing and established competitors;
First-mover advantages by innovation;	Changing customer preferences;
Product developments on gaps between current product offerings to enhance the product integration.	Increasing regulations on environmental issues;
	Rapidchanging technological advancement
	easier access to information and technology know-how by new entrants;
	Poor protection for intellectual property rights in certain countries.

Table 6: SWOT Analysis for Apple