AEM 2601: Reading Questions 6 – Best Answers

TABLE 9.2 Leaders, followers, and success in emerging industries

Product	Innovator	Follower	The winner
Jet airliner	De Havilland (Comet)	Boeing (707)	Follower
Float glass	Pilkington	Corning	Leader
X-ray scanner	EMI	General Electric	Follower
Office PC	Xerox	IBM	Follower
VCRs	Ampex/Sony	Matsushita	Follower
Instant camera	Polaroid	Kodak	Leader
Microwave oven	Raytheon	Samsung	Follower
Video games player	Atari	Nintendo/Sony	Followers
Disposable diaper	Procter & Gamble	Kimberley-Clark	Leader
Compact disk	Sony/Philips	Matsushita, Pioneer	Leader
Web browser	Netscape	Microsoft	Follower
Web search engine	Lycos	Google	Follower
MP3 music players	Diamond Multimedia	Apple (iPod)	Follower
Operating systems for mobile devices	Symbian, Palm OS	Microsoft, Apple, Google	Followers
Laser printer	Xerox, IBM	Canon	Follower
Flash memory	Toshiba	Samsung, Intel	Followers
E-book reader	Sony (Digital Reader)	Amazon (Kindle)	Follower
Social networking	SixDegrees.com	Facebook	Follower

Source: Updated from D. Teece, *The Competitive Challenge: Strategies for Industrial Innovation and Renewal* (Cambridge: Ballinger, 1987): 186–8.

Question 2: Based on the table above (Table 9.2 from Grant), what conclusions do you draw regarding the factors that determine whether leaders or followers win out in the markets for new products?

- Answer 1: When it comes to capturing values innovation, different companies have their strategic windows. These windows are based on a few factors: 1.Protection of property rights and lead-time provides exclusivity of the innovation and subsequent gap in time when the innovator or its appropriator can build complementary resources. 2. Complementary resources support and generate value for the innovation through finance, production, and marketing. 3. Establishing standard within an emerging industry can set the expectation, gain market momentum, and install leadership. These factors general build two approaches for small and large firms. Small innovators tend to move fast with pioneering innovation and immediately capturing first-mover advantage to develop complementary resources. On the other hand, large firms with strong resources delay its entry until when it would have maximum impact. (e.g. IBM delaying entry in the personal computer sector despite apple's innovations)
- Answer 2: There are a few factors that determine whether leaders or followers win out in the markets for new products. These factors are how much protection property rights or lead time offers, the importance of complementary resources, and the potential to establish a standard (terms from text). When property rights or lead time offers a lot of protection, it is favorable for the leader to become the winner in the industry. This is demonstrated by the instant camera industry, as there was sufficient protection offered for Polaroid to become the leader. The

importance of complementary resources to an industry is also very important in determining who wins out. When complementary resources are very important, then a follower has a greater chance of winning if they have greater access to the necessary complementary resources. This favors followers because as an industry grows, more suppliers emerge. This was demonstrated by Sony and Nintendo's ability to "win" the video game industry as they were larger and could purchase the complementary resources necessary more easily than Atari could. Finally, the potential to establish a standard is hugely important in determining who wins out in the markets for new products. This means that if a company has the ability to set a standard or expectation with their innovation, it will be very difficult for followers to overtake them. This is shown very clearly in the float glass industry's domination by Pilkington. Pilkington introduced a new method to produce float glass and this set a new standard in the glass making industry, as it was much cheaper and more effective. The companies that followed Pilkington really could not overtake them as they could not properly emulate the new technological standard Pilkington had set. However, Pilkington's success could also be partly attributed to the tacitness and complexity of its processes.

- Answer 3: The results in the table strongly support the idea that complementary resources, intellectual property protections and potential to establish a standard are all critical to determining who wins in new markets. One problem for innovators are the huge costs of developing technology and infrastructure to support a product that has never existed. We see that the innovations in personal computing, such as social media, internet search engines and personal computers struggled compared to what came afterwards, because the internet and our computing infrastructure has existed for a relatively short period of time. On the other hand, industries in which a technical standard does not present a meaningful advantage, such as VCR's or X-Ray Scanners also saw the followers beat out the first movers. Protection of intellectual property seems to be the strongest guarantee of effective use of a first-mover advantage. The main example of this would be Pilkington Glass.
- Answer 4: The table shows that while both leaders and followers can win out in the market, followers tend to take the lead in the listed emerging and technologically intensive industries. The advantage of being a leader depends on the extent to which innovation can be protected by property rights or lead-time advantages. Patents and copyrights protect new creations and can delay competition. If there is high potential to establish a standard, early movers have an advantage to influence the standards and gain market momentum to establish leadership. It is often difficult to displace a standard once it has been set. Optimal timing is one of the most important factors in determining market success for both leaders and followers. In Office PCs Apple was a pioneer and IBM a follower. Apple’s resources allowed it to pioneer to become a leading player. IBM delayed its entry until the market had developed to the point where IBM’s strengths would have their maximum impact. Delayed entrance also allows followers to learn from the mistakes of leaders, and potentially find ways to grow the niche market into a mass market.

Question 3: Do Video Game companies make more money from console or game sales?

- Answer 1: The video game business model has recently become more dependent on game sales rather than console sales. The console market is characterized by a high level of competition, with an oligopolistic divide of market share in the largest markets (US, Asia-Pacific). The issue that arises with firms like Nintendo is the shortening of product life cycles coupled with industry-wide price increases to counter declining console sales. At the same time, brand switching is quite high as switching costs are relatively low which forces most firm's console-revenue mature in the earlier stages of the product/revenue cycle. This pressures firms to innovate on their game offerings with Nintendo being a prime example. Nintendo was able to product extraordinary simply games that attracted a demographic group that is keen to the more traditional "classic" games. However, on the console side, the demand for their flagship console, the Nintendo 64, has been a driving force for Nintendo's declining profitability. As such, video game firms like Nintendo shifting strategy to focusing on the development and marketing of new game offerings to combat the sluggish console demand.
- Answer 2: Generally, video game companies now make more money from game sales than consoles. The video game market has undergone a significant change in the past few decades. There has been a shift from using consoles to using mobile devices, and a shift from distributing games through packaged software to distributing games through downloads, subscriptions, and cloud access. Nowadays, consoles have started to become obsolete. Furthermore, console makers no longer benefit from exclusivity of games, since most popular games are now cross-platform. However, video game companies (namely video game publishers and video game developers) can still make money from popular games, just through a different distribution channel. Software sales now make up for virtually all of the industry's profit.
- Answer 3: They make more money from game sales. Only 40% of American households owned consoles, while 67% played video games. This is largely due to the emergence of mobile devices and the internet, which allowed games to be played without a special software. The more successful video game companies have survived not just because they made excellent hardware, but because they carefully monitored and were of aware of the relationship between the hardware and the software. Focusing too much on the hardware is limiting. Consumers want something that is convenient and that they can play whenever and wherever. They want the GAME to be convenient, and thus the hardware too. It is the EXPERIENCE that the consumers are seeking, not the medium through which that experience happens (the console).