# Smartphone industry

Business, Industries



#### Executive summary

Smartphones have ushered in a new generation of moderncommunication. The report investigates the computing capabilities of smartphones, and their ability to support several multimedia applications. The report discusses that fact the smartphone industry has rapidly grown over the last two decades. Currently, rapid transformation is taking place and competition to control the lucrative market has increased.

The report considers whether the market segment is controlled by a few major players . The reports investigates patent issues amongst the major players

The PESTLE framework is used to analyse the businessenvironment the smartphone market. Porter's Five Forces is also used to evaluate the rivalry and power of the individual players within the smartphone industry.

#### Introduction

According to Ahson and Ilayas (2006), a smartphone is a form of mobile device that integrates the characteristics of a phone and a PDA. A smartphone offers more advanced connectivity and computing capabilities. Smartphones have the ability to access the Internet and support several multimedia applications. Smartphones achieve the capabilities of a Personal Computertechnologyand a traditional phone (Ahson and Ilayas, 2006). They enable users to add, install, and delete hundreds of applications. Users can also personalize the interface. They have ushered the present society into an era of ubiquitous information. The report examines the global-local aspects of the smartphone industry, specifically the patent wars. It also provides an

analysis of the smartphone industry using the PESTLE framework. The report further provides an evaluation of the rivalry and power among the smartphone players. It discusses the competitive advantage within the smartphone industry.

Global-local aspects of the smartphone industry.

## **Smartphones**; Markets and growth trends

Park, et al (2011) hypothesize that the mobile phone industry has witnessed a significant change in the last 15 years. In the last decade, Nokia was the world's leading manufacturer of mobile phones. Since then, Nokia has been dislodged from the leading position by the new smartphone companies such as Apple, Samsung, and LG. The success of these companies is due to the introduction of new modern and innovative approaches to the ease of use of hardware and an improved user interface design (Park et al 2011). Himmelsbach (2013) argues that, in the recent years, the smartphone industry has witnessed radical transformation and altered competitive situation. The major players in the market segment include Samsung, Apple, Huawei, Sony, LG, HTC, Nokia, Research in Motion, Microsoft, andGoogle(Park et al 2011). There are also other indirect players such as Qualcomm and Cirrus Logic. The intense competition among the market players has led to large volumes of complex and mostly multi-jurisdiction patent litigation (Himmelsbach, 2013).

The economic downturn caused the traditional global phone market to enter recession (Ahson and Ilayas, 2006). However, the smartphone market has been growing rapidly (Himmelsbach 2013). Major players have expanded

their total sales due to the growing number of smartphone users and the reduced prices.

Smartphone industry PESTLE analysis (Henry, 2008).

Factor Analysis

## Political analysis

Political environment in some countries enable smartphone markers to flourish

Political challenge in some countries, for instance, China, and India raised security concerns over some features provided by RIM's BlackBerry.

Roaming fees is relatively high in several countries

Economic analysis The current prices of smartphones devices are fair although devices from some major manufacturers such as Apple are still considered to be expensive

Slow economic growth and recession can affect the sale of smartphone devices

Social analysis Some major smartphones brands symbolize high status.

# Innovation is increasing getting hard.

Technological analysis The main rivalry is between Apple's iOS and Android operating systems.

Innovation is rapidly growing and each day, a new technology is invented.

Environmental analysis Manufacturers are required to comply with various environmental standards.

Legal analysis Patent lawsuits is increasing among the smartphone industry players.

### Patents in the smartphone industry.

According to Hill et al (2014), the smartphone industry has experienced patent litigation for several years. In the past, voice telephony services such as speech compression technologies, network management and radio transmission were the main focus of patent litigation. More recently, patent litigation has broadened across a wider range of cellphone and mobile computing technologies. The major market players are continuously suing each other over a variety of smartphone patents.

The role of patents in the smartphone industry is to protect a company's investment in research and development (Hill et al 2014). After an examination of a patent, the owner is granted a monopoly license for the patented invention which is usually 20 years. Patents provide incentive to the owner company for its effort of bringing the innovative technology out of the research lab and into the market after an expensive and risky business. The Network Patent Analysis method indicates that large portion of the patent portfolio is held by Apple (Ferell and Fraedrich, 2014). Apple is slightly ahead of IBM and Microsoft. According to NPA, 16 out of the 20 patent are owned by Apple. NPA reveals several of the smartphone patent lawsuits are within the 16 unique clusters of inventions that are related.

Hill, Jones and Schilling (2014) note that the majority of smartphones patent wars are related to mobile data access, touch screens and transmission of mobile data. Among the three clusters, each has different company or manufacturer dominating the patent portfolio. According to Hill, Jones and Schilling (2014), the mobile data access cluster is dominated by Research in Motion, while the touch screen cluster is dominated by Apple.

Evaluation of the competitiveness (rivalry) and power of the individual players within the smartphone industry using Porter's five forces.

Smartphone devices have become part of many people's lives. The market has been largely fractionalized. The transformation of the smartphone market has led to increased competition and rivalry. Different players are

Porter's Five Forces can be used to understand the forces affecting the smartphones market from the manufacturers and users perspectives.

The five components of Porter's framework in relation to the smartphone industry is as follows.

producing devices tailored for different market segments.

The threat of new entrants is low because the investment on the required technology needed to compete in this industry is high. Consumers purchase phones from incumbent companies with good reputation. This explains why Apple, and Samsung smartphones are the most popular in the market. The threat of substitutes is low because smartphones contain added functionalities from other digital electronic devices such as watches, digital cameras, cell phones, pager, and organizers, and laptops. The service provided by smartphones are sufficient as expected from a mobile device. The bargaining power of buyers is rated to be medium because the present smartphones market contains a variety of products from major brands for consumers to choose. The prices of smartphones have become relatively low.

The bargaining power of suppliers is medium because of the reliance of mobile phone manufacturers on their suppliers. The manufactures acquire quality components from suppliers at competitive prices. Some smartphone

operating systems such Android is open source.

The smartphone industry is competitive with a few strong competitors (Boyes and Melvin, 2012). New entrants find it challenging to compete and gain in the market share which is dominated by major brands. However, some new smartphones manufacturers such as Sony and ZTE are rapidly gaining popularity and market share.

Competitive advantage within the smartphone industry.

The smartphone market is highly competitive, and it has experienced dramatic changes in the recent past. In 2007, Apple defeated BlackBerry from the leading position as the dominant smartphone maker Laffey (2011). Smartphone market competition has also been based on the two main operating systems, Google's Android and Apples' IOS (Park et al 2011). Apple has managed to take the leading position in the market because of its high specification products, integrated operating system and quality hardware (Laffey, 2011). Apple's success is also attributed to its luxury brand image established during the reign of Steve Jobs Apple provides the ecosystem of apps available online on Apple's app-store platform (Park et al 2011).

The Kindle Fire, an Amazon product is expected to challenge Apple by offering readerse new opportunities to access to Amazon's online e-books store (Laffey, 2011). Amazon's relationship with content providers will enable it secure the delivery of its apps and video content providing a new competition across the market segment (Laffey, 2011).

The difference in pricing between Android and IOS phones has impacts on competition (Laffey, 2011). Most Android smartphones are affordable while

some devices from Apple are less affordable. Apple benefits from a higher income from this (Laffey, 2011).

#### Conclusion

In summary, the current smartphone is no longer exclusive for early adopters. Streamlining of new innovations has led to increased competition and patent litigation. It is evident that the smartphone market is controlled by a few major smartphones makers. Smartphones have heralded a new era in the communication industry and changed several aspects of human lifestyle. New software makers need to develop an operating system to make a unique distinction in the current market.

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