

Smart phone

Which is smarter?

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Executive Summary

This report outlines the effects of smart phones. The smart phone is a revolutionary innovation that has made a dominant impact in our lives. From its ancestral existence as the Personal Digital Assistant (PDA), the smart phone has made a significant prominence in the society. The smart phone having the power of appeal to a wide consumer market has its positivity and negativity coming for itself. The change from the past to the present and looking into the future, the smart phone has a potential of being an extra terrestrial innovation.

Introduction

What kind of cell phones are there in the market today? What about a phone that is more than a phone; more of a computer? In America today, 42% of cell phone owners have a phone that is more than a phone (Smith, 2011); they have smart phones.

Although the prominence of smart phones is accelerated in the past 5 years, smart phones have a rich history. International Business Machines (IBM) recognizes itself as the pioneer in creating the world's first smart phone in 1993 with the birth of IBM Simon Personal Communicator. (Reed, 2010) IBM Simon became the inspiration for mobile phone makers to develop smart phones. The idea fundamentally is a device with the ability to operate like a regular cell phone and at the same time has the capability to operate like a computer; a device that has built-in applications and internet access (PCMag.com, 2011).

The road for the smart phone industry has had its work cut out because as technology progresses, the consumers' expectations of a smart phone have increased. Since the development of IBM Simon, many cell phone firms have tried to successfully breakthrough in the market as the leading smart phone maker. It wasn't until Apple released the first generation of iPhone that smart phone made an impact in the world as a revolutionary innovation (Reed, 2010). The iPhone became the benchmark that mobile phone makers have to surpass in order to gain a share of the smart phone market.

Today, cell phone makers have shifted their focus into producing smart phones, each competing with another to own the best smart phones. Each smart phone has improved functionality and design which entices the eager smart phone owners.

Historical Perspective

The smart phone industry was under much scrutiny as smart phones were not up to the consumers' expectations. Many failed to perfectly combine the functions of a smart phone, instead many developed the Personal Digital Assistants (PDA) which works well as a handheld computer but misses the functionality as a cell phone.

When IBM Simon¹ first peeked into the market, the world was mesmerized by the ability of it to successfully combine both the function of a cell phone and a PDA. Back then in 1994, it was touted as “the most communicative PDA” (O'Malley, 1994); the term smart phone was not popularized until the early 21st century. It was the most interesting machine to have been invented then. IBM Simon could perform almost all of the essential operations that a regular person could need from a smart phone². Furthermore, it was not an invention that is far different from a regular cell phone or PDA, the familiarity allows people to get acquainted quickly to the IBM Simon (O'Malley, 1994). Yet, IBM Simon was not the best specimen of a smart phone.

At its current release, IBM Simon resembles the first cell phone invented; it was heavy and bulky and had no varying designs (O'Malley, 1994). It seemed as though IBM Simon was appealing to the vintage collectors of handheld phones. However, IBM Simon had a different interface that made it stand out from its predecessors. In fact, it was such an appeal that it was highly demanded, unfortunately by a small market of working professionals (Access Intelligence, LLC, 1994). IBM Simon was listed at the price of \$899, which was only the price when a consumer purchases it from an authorized dealer

¹ Refer to Figure 1.1 in Appendix 1 for the pictorial depiction.

² Refer to Figure 1.2 in Appendix 1 for description.

(O'Malley, 1994). Not forgetting the cost of subscribing to a mobile plan at that time, any regular person could not possibly afford to own the world's first smart phone.

In fact, the appearance and the cost of smart phones were the problems faced by many future cell phone makers. Each time, they tried to outdo each other and improve on the status of a good smart phone, but they did not stick in the market longer than 2 years. IBM Simon was discontinued production just as its competitors (Retrocom, 2011).

However that was not the end of the smart phone era. Cell phone makers continued to perform research and development. Progressively, a better smart phone took over the IBM Simon and the subsequent smart phones (Reed, 2010). They were smaller, cheaper and looked appealing enough for the consumers to buy. Still, slight glitches persisted which were insufficient to gain much attention in the cell phone community.

Some had stalled the idea of making the perfect smart phone and diverted their attention to develop the PDA. Unlike the smart phones, PDA had a longer history. Interestingly, the term Personal Digital Assistant was coined by Apple when it released its own product, the Apple Newton (Hormby, 2006). Like any other device, the Apple Newton was not the best PDA, but it was a groundbreaking reinvention of personal computing. It had its highs and lows and was much inferior to other PDAs. Yet, the brains behind Apple were not defeated by the fact that their products were not in pace with the best PDAs. Loyal customers pressured Apple to produce more PDAs which Apple discovered was to obtain data. Apple felt that cell phones have the potential to perform this function (Kennedy, 2004). Therefore, Apple diverted their focus from producing the Newton to developing their own line of smart phone, the iPhone.

Current Situation

In the market today, the most prominent type of cell phones offered by dealers and manufacturers are smart phones. Comparing the years of 2009 and 2010³, the shipment of smart phones has increased 74.4% (IDC, 2011). In the community, smart phone owners are also aplenty. In the United of America (USA) alone, 42% of cell phone owners have a smart phone (Smith, 2011).

It is apparent that smart phones have come a long way to reach its prominence today.

When compared to their predecessors back in the 90's, consumers are more grateful that their smart phones are lighter, have appealing design and more affordable. When comparing the price of the IBM Simon and today's iPhone, even with inflation, the iPhone is way cheaper (Reed, 2010).

In fact, the iPhone was the culprit which started the smart phone frenzy. Apple played a well planned game to keep mystery of the iPhone but hinted its superiority (The First Post, 2007).

It received a lot of media attention and people want to own one of this decade defining smart phones (The First Post, 2007). The first iPhone sold a close to 6.1 million units, and subsequent generations of iPhone outdoing its predecessors in sales⁴. It is no wonder why other cell phone makers want a piece of the smart phone market. Many companies have released their own series of smart phones, following the iPhone's success.

The smart phone is an invention that makes life easier for users. Today's smart phones are so advanced that a person could do almost anything just as he wants. Especially with the accessibility to the internet, the opportunities with a smart phone are vast.

³ Refer to Appendix 2 for the chart of Smart phone shipment of 2009 and 2010.

⁴ Refer to Appendix 3 for the sales data of iPhone.

Positive Effects

Information is crucial in gaining knowledge. The internet has provided a quick and easy platform for anyone who has access to provide and receive information. The days before smart phones were popularized, having access to the internet was a hassle as people would need to locate an access to the computer before they can find the information they are looking for.

Today's smart phones are different than the smart phones compared to the era of IBM Simon; we can access the World Wide Web instantly. With the advancement in wireless technology and smart phones, the internet is literally on your fingertips. This really shows how much progress the smart phone industry has made ever since its first existence.

Third party companies have also exploited the opportunities provided by the smart phones. Some have created operating systems; others have created applications that are widely used by smart phone owners. These companies may have the objective of earning profits from being involved in the smart phone industry; however they are also creating these smart phone complements to enhance the satisfaction of smart phone users.

The smart phone is a well of opportunities. It helps provide internet access for people to gather information; allows entrepreneurial avenues for third party companies; brings entertainment and convenience to the users. Yet, the smart phone is not at all the gift of life. It has side effects that are detrimental when not investigated.

Negative effects

Before the smart phones, cell phones has already created social problem which have the public worry about the effects that these gadgets have on our lives. The vast opportunities that the smart phones have can also result in devastating outcomes. Technically, a smart phone is a better cousin of the cell phone; it should be understandable that the poor shortcomings of the cell phone apply to the smart phones, or possibly heightened by the advanced functions.

Communication is ultimately the purpose of a phone, and with the smart phone, the avenues for communication is broadened to more than just texts and calls. The concrete social anticipation with the chemical reward when users interact with their smart phones has become so addictive that they become crippled with instant gratification (Robinson, 2010). This addiction is primarily the cause of a few problems such as reduced rest and lowered productivity (Socyberty, 2011). The constant reminder and distraction from the smart phone has resulted in users to neglect their priorities and shift their attention towards fulfilling their addiction. In worst case scenario, users have pulled themselves out of real life interactions to respond to their smart phones (USA Today, 2011).

The addiction is not only limited to how quickly users can communicate using their smart phones. Smart phones having the ability to access internet and install applications creates another form of addiction, over dependence. "There's an app for that" is the catchphrase for smart phones. Indeed, there is practically an application for anything that you need; from calculating the distance that one has walked to the amount of bill shared between his friends. This reliance on their smart phones is an outrage because slowly users could

potentially lose their real world skills (USA Today, 2011). Just as how using a calculator degrades one's ability to mentally calculate mathematic problems, the smart phone may eventually cause people to not know their purpose in life without them.

Smart phone is a tool to enhance our daily life, just as how they are intended to do. The addiction arising from over usage of the smart phone is a cause unprecedented by the society. Does this potentially mean that the smart phone is actually evil?

Future Consideration

The trend of smart phones presently has been so positive that it looks like there might still be a future for the development of smart phones. The present specimens are already so good yet more can still be done to improve them.

While focusing on the positivity, smart phone makers have big dreams for their innovations. Just as the world of technology advances, these companies are developing smart phones that incorporate these technologies. Just as today's smart phones are lighter and smaller compared to that of the IBM Simon, future smart phones can be expected to be much thinner and lighter as companies invest in the nanotechnology (Miles, 2011). Smartphone users can also expect their new smart phones to have slicker design and functions such as flexibility, three-dimensional interface and build in projectors (Nazarian, 2011). It is not impossible for smart phone to be more than it should be because as long as science continues to serve better technology, any development can be done on a smart phone.

However, as much as one will like to dream and wish for their smart phones, the drawback from using smart phones needs to be addressed while their development is in process.

Addiction is a serious problem that smart phone makers should consider to address with their new line of products. Technically, over dependence on smart phones was an unexpected repercussion that even the smart phone makers were not anticipating. They could a little responsibility for the devastation that occur because their products.

Perhaps, smart phone makers should consider developing a tool that restricts over usage of smart phones. Probably, nothing detrimental to their sales, but something that can put their product an edge above their competitors.

Smart phone users should also change their behavior. Despite the wonders that these smart phones provide, they should take a step back from their gadgets some times to just reorganize their life the old way. It is crucial that they learn to perform real world skills again just in case when technology begins to fail, they will not fall down as well. Furthermore with the expectation that smart phones are becoming more advanced, they should be more cautious when interacting with their handheld devices; addiction is a disease that is hard to shake off.

Conclusions

The smart phone is an invention that has had a rough journey to reach its present status. It is a groundbreaking technology that has changed the way people communicate today. Starting out as IBM Simon, a handheld brick of a smart phone that cost more than a regular person earns, it should be proud that its legacy has been kept till the 21st century and still be recognized as the pioneer that shook the world of communication.

The smart phone had its breakthrough finally when Apple decides to move away from producing PDAs and reintroduce the smart phone as the new form of communication device. Its success with the iPhone sparked a motivation for other cell phone makers to identify with the smart phones. The smart phone industry grew exponentially ever since iPhone was released.

The smart phone has had positive effects and negative effects on the society. Yet, the smart phone still has a future. As it develops to integrate better technology, it shall also consider addressing the problem of addiction with regards to over usage of smart phones.

Smart phones are developed to enhance the lives of its users, as expectations in the development of smart phones progress, there is a potential that both the gadget and the users are smart.

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Appendix

Appendix 1



Figure 1.1: Actual photograph of IBM Simon (Ha, 2010)



Figure 1.2: A print advertisement of IBM Simon (Retrocom, 2011)

Appendix 2

Top Five Smart phone Vendors, Shipments, and Market Share, Calendar Year 2010 (Units in Millions)

Vendor	2010 Units Shipped	2010 Market Share	2009 Units Shipped	2009 Market Share	Year-over-year growth
Nokia	100.3	33.1%	67.7	39.0%	48.2%
Research In Motion	48.8	16.1%	34.5	19.9%	41.4%
Apple	47.5	15.7%	25.1	14.5%	89.2%
Samsung	23	7.6%	5.5	3.2%	318.2%
HTC	21.5	7.1%	8.1	4.7%	165.4%
Others	61.5	20.3%	32.6	18.8%	88.7%
Total	302.6	100.0%	173.5	100.0%	74.4%

Source: IDC Worldwide Quarterly Mobile Phone Tracker, January 27, 2011.

Note: Vendor shipments are branded shipments and exclude OEM sales for all vendors.

Appendix 3

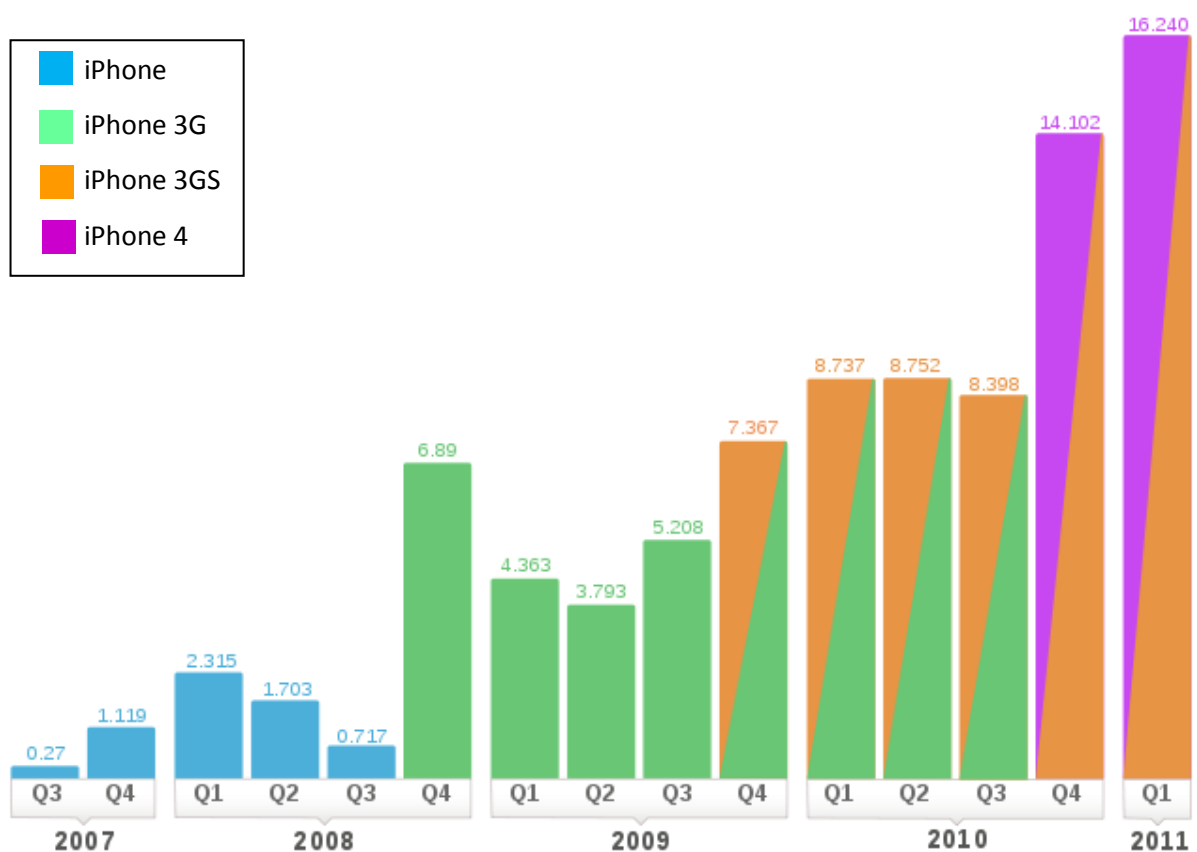


Fig 3.1: Chart of sales of iPhone.

Fiscal Year	Q1 [Oct-Dec]	Q2 [Jan-Mar]	Q3 [Apr-Jun]	Q4 [Jul-Sep]	Total sold
2007			270,000 ^[1]	1,119,000 ^[2]	1,389,000
2008	2,315,000 ^[3]	1,703,000 ^[4]	717,000 ^[5]	6,890,000 ^[6]	11,625,000
2009	4,363,000 ^[7]	3,793,000 ^[8]	5,208,000 ^[9]	7,367,000 ^[10]	20,731,000
2010	8,737,000 ^[11]	8,752,000 ^[12]	8,398,000 ^[13]	14,102,000 ^[14]	39,989,000
2011	16,240,000 ^[15]	18,650,000 ^[16]	20,340,000 ^[17]		55,230,000
Fiscal Year	Q1	Q2	Q3	Q4	128,964,000

Table 3.1: Table of Sales of iPhones by Quarter compiled by Wikipedia.

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