

Smart Phones Vs Tablets: A Review

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Abstract

Smart phones and tablets are two different devices having little bit difference in their configuration, design, etc. Both of these two devices also have some same features but due to their MRP, size and hardware configuration make difference in them. There are many models of different companies available in market but our discussion is on either to choose smart phone or tablets. There is no doubt that smart phones are small in its area as well as in screen resolution. There are many merits and demerits of smart phones over tablets and vice versa. This paper will provide merits and demerits of smart phone and as well as of tablets, difference between them and which one is more efficient.

Keywords

Smart Phones, Tablets, Multimedia Devices

I. Introduction

Smart phones and tablets are two different devices having little bit difference in their configuration, design, etc. In this paper, both smart phones and tablets are discussed.

A. Smart Phones

Smart phones are mobile phones which are faster in processing and having better hardware and software configuration than our normal cell phones. Smart phones are smart than our conventional cell phones. In short we can say that smart phones are phones which enable user to access internet and other applications. Due to its features and performance smart phones overcome the normal cell phones and making the new standard in wireless communication. According to a recent IPOs Reid survey of Canadian Internet users, there was a 50 per cent increase in smart phone purchases in just one year [1]. Now days mostly half of mobile users have smart phone and most of them used smart phones for not only calling purpose but for other activities such as using social networking sites like face book, twitter, and messengers like ebuddy, nimbuzz, etc. These Smartphone’s also used for e-mails also. Fig.1 shows different types of smart phones.



Fig. 1: Different Smart Phones

B. Tablets

A tablet is combination of mobile and small computer or we can also call it as large smart phone. Tablets have many additional features in hardware as well in software. Tablets have in built keyboard and many features .having more screen resolution than smart phone and it work as computer so we also called it as small computer. In 2010 the electronic giant apple launches their first known as i-pad having operating system same to as in there smart phones [2]. In 2012, Maximum people have tablets for surfing internet etc. the percentage will be near to 31% in US [3]. Fig. 2 shows the picture of Tablets.



Fig. 2: Tablets

II. Confusion with Smartphones and Tablets

Now there is wide confusions over that which one is best, which will be suit your demands. In general view both is best and depending upon our demand we can select smart phone or tablet.



Fig. 3: Confusion Between Smartphones and Tablets

Year 2011 we can say that is a year of tablets. Many unknown manufacturer and also known brands launches their tablets in

wide range. But in this year manufacturers are focusing on smart phones as till now various smart phones are also launched. A tablet is considered as a leisure device, it is basically used for multimedia, internet browsing and many such uses because of its bigger screen as compared to smart phones, The bigger display of the tablet is the USP and they will continue to have bigger screens to meet customers' expectations in the future as well.[4.] Google, incidentally, will soon release new mobile operating software that integrates functionalities of both tablets and Smart phone devices. This OS would be right for hybrid devices — that combine tablets and smart phones. And, presumably, that's what Google is betting on [5]. In the end of June 2012 sale of blackberry smart phones was 7.8 billion on the other hand sales of play book tablets was 260,000. In end of march 2012 sales of apple smart phone which we call i phone was 35.1 million and there tablet i pad was 11.8 million [6, 8]. The above figures show that there is decline in sales of tablets.

III. Advantages of Tablets over Smart Phone

A. Replica to Computer

Tablet is replica of computer or we can say that tablet is best substitute to computer. Tablets perform many functions at same time and are faster than smart phone in functions like browsing, computing etc. So we can conclude that tablets are substitutes to computer.

B. Battery Life

Tablets are more economical in case of battery life. We can perform many different tasks for about 8-9 hours continuously, but we cannot perform tasks 8-9 hours continuously on our smart phone as smart phones have less battery life.

C. External Features

Tablets have many outstanding features like wide screens and high resolutions which can used for viewing videos, images, playing games etc. with better zoom and better picture quality than smart phones.

D. Internal Features

Tablets have also advance internal features than that of smart phones. The main thing which we want is storage capacity. Storage capacity of tablets is more than smart phones. Tablets also have powerful processor than smart phones have.

E. Smart Reader

Tablets are smart reader as we can read news, important document, etc. with better quality.

F. Gaming Device

Tablets are best for playing games than our smart phone.

IV. Advantages of Smartphone over Tablets

A. Mobility

Tablets also offer mobility but smart phones offer more mobility and easy to carry than tablets.

B. Calling Purpose

Smart phones have calling facility and also provide same features also.

C. Price

Smart phones have become best option for those whose budget is low as tablets are more costly than some good smart phones.

D. Wide Variety

Smart phones have wide number of variety in market than tablets have, so we have many options while purchasing smart phone.

E. Less Traffic

Tablets generate more traffic than smart phone .As tablet have larger screen resolution and due to this data consumption is more than smart phone. I-Pad users were found to browse an average 33 web pages each session, and that's a 160% more than iPhone users [7].

Table 1 shows the difference between Smart Phones and Tablets on the basis of different features.

Table 1: Difference Between Smart Phones and Tablets

Features	Smart Phones	Tablets
Screen Size (inches)	2 to 4.3	7 to 11
Make Phone Calls	Yes	Yes
Keyboard	Qwerty Keyboard on Touch Screen	Qwerty Keyboard on touch screen
CD/DVD Drive	No	No
Storage Space	2 to 32GB	16 to 64 GB
Operating System	IOS, Android, Blackberry, Windows Phone	IOS, Android, Blackberry
Typing	Poor	Fair
Content Creation	Poor	Fair
Reading	Poor	Excellent
Web Browsing	Fair	Excellent
Applications	Excellent	Excellent
Portability	Excellent	Good
Photo/Video Display	Fair (small display)	Excellent
Price (Max) in Rs.	Rs 45000	Rs 50000

There is great confusion over there which one is best. There is strong fight in market but it depend upon consumer perception what he/she wants. Fig. 4, shows the Use of smart phone and tablets according to various people.

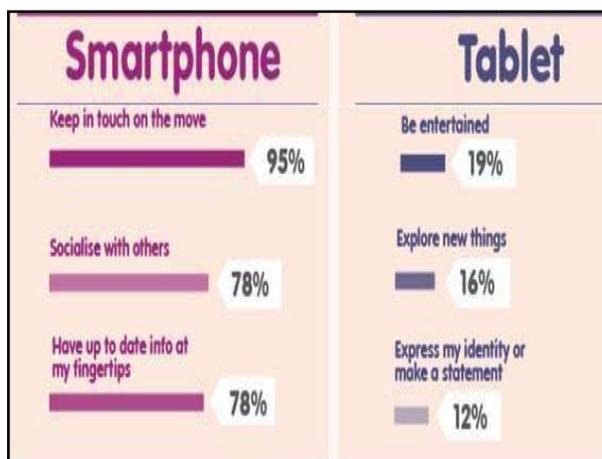


Fig 4: Use of Smart Phone and Tablets According to Various People

Fig. 5 shows the percentage of ease in case of smartphones and tablets having different parameters.

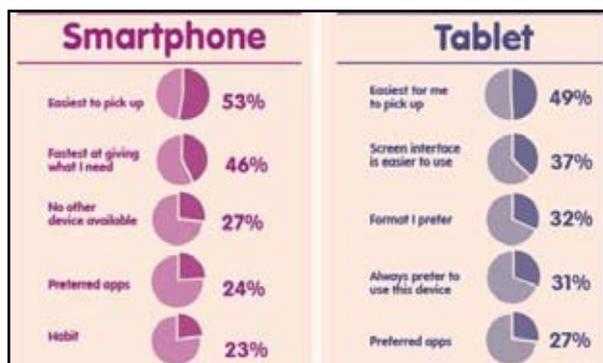


Fig. 5: The Percentage of Ease in Case of Smartphones and Tablets Having Different Parameters

VI. Conclusion

In the end we can conclude that smart phone is primary communication device. Having highly portable, highly capable, short on display tablets are primary consumption device, created for heavy duty work as well entertainment for all situations long battery life.

References

- [1] CBC News, June 2, 2011, [Online] Available: <http://www.cbc.ca/news/business/story/2011/06/02/technology-comscore-smartphone.html>
- [2] Wikipedia, M-Learning, [Online] Available: <http://en.wikipedia.org/wiki/MLearning>
- [3] Angela Moscaritolo, PC Magazine, June 18, 2012, [Online] Available: <http://www.pcmag.com/article2/0,2817,2405960,00.asp>
- [4] S Rajendran, Acer India, [Online] Available: <http://www.tele.net.in/face-2-face/item/10106-interview-with-s-rajendran-chief-marketing-officer-acer-india>
- [5] Rahul Gupta, The Mobile Indian, New Delhi, September 13, 2011, [Online] Available: http://www.themobileindian.com/reviews/141_App-Review:-Android-Boost+-performance
- [6] ABC News, Apple's Smartphone and Tablet Shipments by Quarter, Associated Press, 25 July 2012, [Online] Available: <http://abcnews.go.com/Technology/wireStory/apples-smartphone-tablet-shipments-quarter-16848503#.UBUn0ZIYLto>
- [7] Phone Arena, Tablets generate 3 times more traffic than smartphones, [Online] Available: http://www.phonearena.com/news/Tablets-generate-3-times-more-traffic-than-smartphones_id30176
- [8] SMH.com.au, Apple's smartphone and tablet shipments by quarter, [Online] Available: <http://news.smh.com.au/breaking-news-technology/apples-smartphone-and-tablet-shipments-by-quarter-20120725-22okl.html>



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