

PRODUCT REVIEW / ANALYSE DE PRODUITS

Android Tablet – Google Asus Nexus 7 with Android OS 4.2 (Jellybean)

Product Information: <http://www.google.com/nexus/7/>

Purpose: 7" tablet computer, marketed primarily as an entertainment and gaming device but also excellent for general computing

Cost: \$209 (16 GB, Wifi), \$269 (32 GB, Wifi), \$309 (32 GB, 3G)

Introduction

Apple's iPad is immensely popular among health professionals and librarians. With its array of specialized medical and productivity apps, it has proven to be extremely useful as a reference and information management tool.

Although the iPad holds a large share of the tablet computing market, tablets from other manufacturers have also been slowly gaining in popularity, with those running the Android operating system now emerging as the iPad's main competition [1].

Google's flagship 7" tablet, the Nexus 7, is one such competitor, having received very favourable reviews [2–6]. Most reviews have focused on the Nexus 7 as a consumer device, except for notable reviews from a physician [7] and a librarian [8]. This review will therefore focus on the Android tablet's utility as a mobile computing tool for health professionals and librarians and on its overall usefulness in health libraries.

Product description

The Nexus 7 is a tablet computer with an Nvidia Tegra 3 quad-core processor and a 7" 1280 pixel × 800 pixel screen. A 16 GB Wifi-only version was released in June 2012, with an updated 32 GB and 3G version released in November 2012. Although there were many Android tablet computers available at the time of its release, it was the first official "Google Nexus" branded tablet and the first Android device to be released with the Jellybean operating system (OS). Google developed the tablet in partnership with Asus, who also manufactures several non-Nexus Android tablets. There is also a newer full-size Nexus 10 tablet produced in partnership with LG.

Strengths

The Nexus 7 tablet is one of the best tablets in its price range. It has excellent hardware and a higher resolution screen compared with other small tablets (including the recently released iPad mini). Overall, it runs very smoothly. The tablet is very light, making it much more comfortable to carry one-handed than the iPad. It is comparable in size to

the iPad mini, but with a slightly narrower screen. Although I wondered whether the smaller screen would be suited for reading PDF articles, e-books, and other documents, in practice it works quite well, because the high pixel density of the screen makes the text quite readable. As the physician reviewer noted, the slightly smaller size makes also makes the Nexus 7 fit neatly into a doctor's white coat pocket [7].

The major benefit of using an Android tablet over an iPad is flexibility. With the iPad, you are often forced to use the default app – for example, you must use the Mail app as the default mail client and with Safari as the default Web browser. In Android, you can choose whichever program you like, which is extremely useful if you have a program you prefer (e.g., Firefox or Chrome).

Android also allows you to directly access the device's file system, using a free app such as Astro File Manager or ES File Explorer. On an iPad, files are often stored in a particular app and are limited in which apps can access them. Android comes much closer to resembling a regular computer when it comes to browsing, storing, and accessing files, which makes it much easier to leave one's laptop behind when travelling.

If you are a heavy user of Google products, apps such as Chrome, Gmail, Google Docs/Drive, and Google Maps are seamlessly integrated with the Android operating system, and settings are synced across your devices via your Google account.

Weaknesses

One of the physical differences between iPads and Android tablets is battery life; the Nexus 7 advertises battery life comparable to an iPad, but in practice it seems to run out slightly sooner, because it uses more energy in stand-by mode. Even with heavy use, it easily lasts through the day for me and most often lasts two days.

For health professionals and health libraries, the major weakness of the Nexus 7 and any other Android device is the lack of certain apps. Most new and innovative medical apps appear as Apple iOS apps first, with Android versions appearing later, if at all [7]. Scholarly reading and PDF management apps such as Papers, Mendeley, and Browzine are currently only available for iOS, as are journal apps such as BMJ and Pediatrics, and point of care apps such as First Consult and Nursing Reference Centre.

However, the Android app ecosystem has improved drastically over the last couple years and will likely continue to improve as Android increases in popularity. Many clinical tools such as UpToDate, Lexicomp, DynaMed, and Stat!Ref are currently available, and there are some great PDF annotation apps such as EZpdf Reader which allow for note-taking.

If your organization uses Microsoft Exchange, you may find the default email client to be lacking, so you will probably want to download one of the more feature-rich email apps that work with Exchange.

Usability

The Nexus 7, as one of Google's flagship devices, does not suffer from many of the usability issues affecting Android devices. It is running the current operating system, has excellent hardware, and is very well made.

One of the major problems with Android is a disparate hardware base and a lack of a consistent and stable user experience. Unlike the iOS software which is only found on Apple devices, the Android OS is installed on several thousand different devices from a variety of manufacturers [9]. Many models are underpowered or running older versions of the OS. Consumers must do some research before investing in an Android device to ensure they are buying a device that will receive timely updates and be able to run apps smoothly and error-free.

Earlier versions of Android (OS 2.3 and under) were much less polished than other mobile operating systems. Touchscreen scrolling and keyboard typing were relatively clunky and unattractive. However, Google has made great strides in improving the user experience in recent versions. Android OS 4.2 (Jellybean) is almost on par with Apple devices for ease of use and overall design. If you are going to get an Android device, make sure it is either running at least OS 4.0 or can be upgraded to it.

Comparison with similar products

There are benefits to owning a Google Nexus-branded device over other Android devices, including faster OS updates and unlocked 3G versions that are compatible with any 3G cellular network. Unlike many Android tablets, the Nexus 7 does not have expandable memory, video-out, or a rear-facing camera, which may be a concern for those who plan on using it for video or photos.

Many of the comparisons with the iPad have been discussed. In general, if you are frustrated by the some of the limitations of an iPad (such as a lack of an accessible file system) and are looking for something with more options, you may want to try using an Android tablet, although they are slightly less user-friendly. As the owner of both an iPad 2 and a Nexus 7, I find I use the Nexus 7 much more, especially when it comes to reading and browsing the Web.

If your library is considering running a tablet lending program and you have a decent budget to support it, you are probably better off lending iPads. Library users are more likely to be familiar with the ubiquitous iOS interface, there are more apps of relevance to health library users, and other libraries have already established best practices in running iPad lending programs. Nevertheless, the price of the Nexus 7 is very attractive, and it would be an excellent choice if you need to stretch your budget.

Cost and value

As many reviews have noted [2–6], this is an excellent tablet for the price, incorporating a high-end processor and

high-resolution screen in a very compact and attractive package. As a comparison, the iPad mini is over \$100 more for much less impressive hardware.

Conclusion

The Nexus 7 is fast, responsive, and easy to use, offering excellent value for its price. Overall, the Android platform is much improved over earlier versions, and the number of available apps has also increased, making it a viable competitor to Apple's iPad (and definitely to the iPad mini).

Android (4.0 and up) comes recommended to those who are heavy Google app users and who do not mind missing out on the occasional iPad-only app. The Nexus 7 is recommended for anyone looking for a smaller 7–8" tablet.

References

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