## Storage on a Mobile Device

#### **Mobile Device Storage**

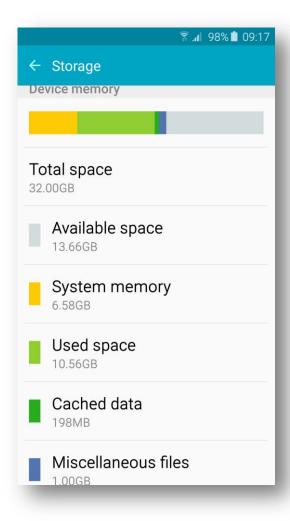
One of the most important question your friends and relatives (see: mom) will probably ask you is "how much storage do I need for my new mobile device?" Then, you will give them that look, that 'erm...' and that cautionary start, "Well, it depends... what do you want to do with it?", before suddenly turning shopping advisor for the rest of the day at the gadget store.

Choosing the amount of storage you need for your device is more often than not decided by how much you are willing to splurge on your new gadget. For instance, if you are looking for an iPad, this is the price range you will probably be looking at – a \$300 difference for an extra 112GB.

## **Storage Options**

But do you really need that much storage space? 128GB is quite absurd for a mobile device, considering that you can do so much more with it on a 128GB solid state drive in a laptop. Then again, it depends on what you put in it.

Let's take a look at the optimum amount of storage space you need.



Memory storage on Samsung S6

One of the major problems many smartphone and tablet users experience is running out of space to store their content, content such as:

#### 1. Photos

Everyone takes photos with their smartphones: kids, pets, airplane window shots, selfies, food, a new purchase etc. The point is it is so easy to take a snapshot these days that we almost always overdo it. Plus, photos taken with smartphones are improving in quality, which is why you might see them to reach 4MB per photo.

Using that as an estimate benchmark, 1GB would hold about 256 photos:

- 16GB = 4096 photos
- 32GB = 8192 photos
- 64GB = 16384 photos
- 128GB = 32768 photos

To make it simpler, if you take 10 photos a day, you'll fill up 16GB in a little over a year.

iPad

## But If You Are A: "Photographer"

Photography Addicts, instagrammers and new parents be warned, the photos you take can take up a lot of storage space, very quickly. By housekeeping your device once in a while, you can probably survive on 16GB but if you create albums after albums of retakes, this is going to run out pretty quickly.

Note however that housekeeping doesn't mean that you have to delete all your photos (ok, some of the failed ones), it just means you should transfer them to your computer or to a larger storage space for better safekeeping.

Verdict: 16GB or 32GB – 16GB is quite enough for smartphone quality photos. If this is a professional route for you, try shifting to using a digital camera instead.

## 2. Game Apps & Videos

Apps have also grown in size since its birth. These days high-ranked games can go from between 40MB to over the 1GB mark per game. Nicer graphics, faster response time, more complicated gameplay, storylines etc, contribute to the hallmark of popular games played by a global audience, and a lot of these games rake in millions every year. But I digress.

Here are some of the more addictive games you would probably find on the random iPad.

- Angry Birds Star Wars 2 44.3MB
- Plants vs. Zombies 2 44.7MB
- Minion Rush 45.5MB
- Candy Crush Saga 45.6MB
- Temple Run 2 46.8MB
- Fruit Ninja HD 49.3MB
- Asphalt 8: Airborne 884MB
- FIFA14 1.17GB
- Infinity Blade 3 1.4GB

## But If You Are A: 2010s Parent

The iPad is a great tool to keep kids (and sometimes adults) entranced and sitting still in a corner. Parents these days know the effect Angry Birds can have on a rowdy child, and if you happen to come across this dynamo duo on your 3-hour flight, you may probably object less to a child being enamoured with colourful and fun games that will keep them entertained until touchdown.

A savvy parent's tablet might also include some video content like cartoons for the kids to watch and probably an abundance of learning apps. Videos can take up a lot of space (around 300MB), but a few videos can easily provide hours of entertainment, so long as they don't bore of it quickly.

Bear in mind, while there are replacements required, you might want to keep the older apps intact in case there is a demand for an encore out of the blue.

Verdict: 16GB – It is not like photo-snapping where you stockpile snap after snap on a daily basis. One well-designed app can keep the other apps at bay for a relatively long time.

#### 3. Music

Music can help kill time while commuting on public transport, studying, jogging or even swimming. If you're one who cannot go a day without music, there are bound to be music files on your mobile device – and the need for ample storage.

However, when you crunch the numbers, based on a 4-min song being 5MB heavy, 1GB would give you roughly 200 songs (most of which you will skip through) aka 13 hours of continuous playback aka way more than your battery can survive through per charge.

#### **But If You Are A: Music Junkie**

Opt for online radio services like Pandora and Spotify instead. With these radio services, you don't have to lug around your entire song collection on your device anymore, leaving space for other materials. If data connection is a problem where you are, Spotify's premium service also lets you create personal playlists and download songs to play offline.

## Spotify

If, however, you're an audiophile that enjoys only top quality music, more than anything else, you might prefer FLAC files stored on your device, in which case 32GB should be more than enough.

Verdict: 16GB or 32GB – Alternatively, you can always tune in to a regular radio station like how we did in the 90's.

#### 4. Documents & Reading Material

People who enjoy reading are in luck as reading materials do not take up much storage. Unless it's a comic or very visually laden, carrying around 1GB of free ebooks is equivalent to a library that fits in your tablet or smartphone.

# **But If You Are: Always Taking Work Home**

There might be a need for higher capacity storage if the device needs to be filled with business related apps, utilities and large PDF manuals that load faster outside of the cloud, but if you can charge it to the company, 128GB sounds like a good deal. (We kid. We have solutions if you happen to need more than 32GB.)

Verdict: 16GB or 32GB

### Cloud, Cards & Cables

All the above are common culprits of space hoggers in your mobile device so while 32GB will more than suffice, if you need more storage later on, you can always fall back on cloud storage apps, micro SD cards and OTG cables.

## **Cloud Storage**

Our favorite cloud storage app for music, video, ebooks and doc files is Dropbox with its many desktop Dropbox tools and apps that support many file types. There are of course other alternatives, depending on your requirements e.g. the Google Drive app is handy for document editing.

## **Micro SD Cards**

Certain Android and Windows devices provide the option of expanding your storage space with a micro SD card. This is a very inexpensive option to give you another 32GB (or sometimes 64GB if it's supported) that will cost less than \$20.

#### On The Go USB Cables

These OTG USB cables for Android devices allow users to transfer data in and out from the Android device to a USB flash drive, an external hard disk, or other storage form. This allows another form of storage expansion and to access files outside of the device's internal storage.

Apple also has an iPad camera connection kit for you to export pictures from your photo gallery. This gives you the option of housekeeping without a computer and freeing more space for more photos.