

Why Are CD-ROMs Disappearing from Modern Computers?

Posted on January 6, 2024

In the early days of personal computing, it was common that most Personal Computer systems relied on portable floppy disks to store large amounts of data. Later, with the advancement, computer systems shipped hard drives by default, but they were not portable. In the recent past, CD and DVD drives took up the space to store precious data only by inserting a small disc into an optical drive (Scheible, 2002). However, modern computers do not come with an integrated CD-ROM anymore, even though it is becoming more difficult to find a PC that includes any sort of optical drive for storing large amounts of data. This article answers a burning question with reasons why CD-ROMs are no more built-in to modern computers.

CD-ROMs are Dying

It is a fact that CD-ROMs are gradually becoming obsolete. They tend to occupy more space, but do not have enough storage capacity like USB flash drives or any external hard drives do. Moreover, CD-ROMs make personal computers bulky, which is why they are not attractive anymore to modern computer users. Below is a curated list of reasons why CD-ROMs are no longer a built-in feature in modern computers:

Less Storage Capacity

The storage capacity of a CD-ROM in a personal computer is approximately 700 megabytes, which is not enough for people to store data in such a medium these days. Contemporary users of modern personal computers opt for USB flash drives to store a large amount of data in one place (Al-Zarouni, 2006). In a nutshell, CD-ROMs no longer satisfy the digital storage needs of contemporary computer users; a 16-gigabyte USB flash drive performs the same function for just \$12 to \$14, even with the greater storage capacity.

The size of the CD-ROM is Important

The first major reason why modern Personal Computers do not have CD-ROMs is straightforward so far, and that is the size of it. Although CD-ROMs were small, they still took up a considerable physical space in the old computers. Approximately 4.7 inches in diameter is the space CD-ROM covers on the computer system. Therefore, the size as compared to modern-day personal computers and laptops is relatively big, which is why the manufacturers have stopped including CD-ROMs in the computer

systems (Scheible, 2002). Nowadays, people prefer such devices that are lightweight, smaller in size, take up a small physical space, and are great in functionality as well as portability. Thus, if modern computers had CD-ROMs, the addition of extra components such as CD-ROMs, hard drives, and other optical drives would make carrying the PC a little bothersome. Therefore, many computer manufacturers decided to remove the CD-ROMs from personal computers altogether, as they are too big for the modern, slimmer design of computers.

Decreased Demand for Physical Media

In the past, physical media of the computer system saw a boom when everybody preferred CDs, DVDs, MP3 players, etc, but the trend changed with advancements in the field as well as according to consumers' needs. In recent days of computing, physical media was compact and provided enough storage to accommodate everything that a user of a personal computer would need. However, in order to meet digital users' needs in terms of more storage capacity and less physical space, CD-ROMs are being neglected in modern computers. In the modern era, more and more people are inclined towards minimalism, and CD-ROMs are the media that occupy significant physical space. Moreover, an average user can install any software from the web without spending a single dime on buying a CD or borrowing it from a friend. So, as technology progresses, demand for physical media, including CD-ROMs, has become obsolete (Al-Zarouni, 2006).

Ease of Access to Downloadable Data

Another significant reason that contributes to the decline of CD-ROMs' use in modern personal computers is the ease of access to downloadable data. Most of the programs, software, and content people used to store on CDs and use later are now available on the Internet in an on-demand format. A digital media user can access the content in seconds. Therefore, digital media users do not pay for a pile of CDs for their technical software and playing purposes, and therefore, CD-ROMs are no longer in demand.

Cost and Design

One of the possible reasons why manufacturers have neglected CD-ROMs in modern-day personal computers is that they are keen to make computers as cheap as possible and can market their products as ultra-light and super-slim. CD-ROMs add cost, weight, and size to the machine. Also, CDs are more expensive compared to USB flash drives for their capabilities. Thus, external hard drives such as USB flash drives have replaced CD-ROMs based on these external drives' durability, functionality, low power consumption, and lower prices.

Conclusion

Flash memory, such as USB flash drives, has made floppy technology obsolete. Many personal computer manufacturers in modern times opt not to include CD-ROMs to conserve space. With more people using laptops, mobile phones, tablets, etc. for computing purposes, they do not need accommodation of CD-ROMs in modern computers as there is less space to accommodate such drives in a slimmer modern computer. Modern PCs no longer ship with built-in physical installation media, including CD-ROMs and hard drives; instead, they use separate storage media while making optical media increasingly irrelevant.

References

Al-Zarouni, M. (2006). *The reality of risks from consented use of USB devices*.

Scheible, J. P. (2002). A survey of storage options. *Computer*, 35(12), 42–46.