

Object: Laptop

A laptop is considered a portable computer intended for convenience in movement and has the capability of performing tasks that range from mere internet research to creating documents, coding, or even gaming. It consists of a few hardware components, including but not limited to the screen, keyboard, trackpad, processor, RAM, and battery. Most laptops possess the facility of Wi-Fi, thus allowing access to the internet, while most also come with an operating system pre-installed, such as Windows, macOS, or Linux. Laptops fall among the high-demanding computer gadgets that have widely been used by students, professionals, and gamers in the modern world. In fact, their usage has been facilitated mainly by their portability; hence, they are applied at many locations such as cafes, offices, and homes. Variables:

Description:

1. Screen size
2. CPU speed
3. RAM capacity
4. Storage type
5. Storage capacity
6. Battery life
7. Weight
8. Operating system
9. Wi-Fi compatibility

Research Question:

How does a laptop's processor speed, RAM capacity, and storage type affect its price across different brands?

Phenomenon: Internet Connectivity in Public Spaces

Description:

In fact, public space internet connectivity has become one of the key facilities of this digital age: in parks, cafes, airports, and libraries. Public Wi-Fi enables people to stay online outside their homes and workplaces; thus, it enables people to work mobile, communicate with others, and access information. However, the quality and reliability of public Wi-Fi may be very different depending on a location, provider, and network

capacity. Among these are signal strength, network congestion, security risks, and internet speed. This is most applicable in urban areas where there is easier access to public internet; it is often contested by issues of privacy and bandwidth limits.

Variables:

10. Location type
11. Wi-Fi provider
12. Number of connected users
13. Signal strength
14. Download speed
15. Upload speed
16. Data limit (GB)
17. Wi-Fi security
18. Network latency
19. Cost of access

Research Question:

How does the number of connected users and the location type affect the download speed of public Wi-Fi networks in urban areas?