Comparative Research On Windows Vs Mackintosh Operating System

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Introduction

In this contemporary society, the use of computers has become mandatory for progress in every field of life. The computer is an electronic device that consists of software and hardware. Any electronic device's software depends upon its operating system. A computer requires efficient cooperation of hardware and software to function properly. An operating system is a program that acts as an interface between the computer hardware and its user to control the implementation of all kinds of programs and applications.

The two main operating systems that compete are the Macintosh Operating System (Mac) and Windows. Apple Macintosh and Microsoft Windows are the most common and competitive operating systems in this technological era. Choosing the appropriate operating system requires several components, such as convenience, interface, security, boot time, budget, compatibility, and upgradability. This research paper explores the comparative elements of the Mac operating system and Windows operating system, primarily focusing on the most suitable operating system within the economic paradigms.

Statement Of The Problem

The competitive race between the Mac and Windows is the most contentious issue in this global world of technology. There has always been a tough competition between the Mac and Windows users. The most common argument within the IT departments is the cost issues and advantages of the Mac operating system and Windows operating system.

Sample Data

Computer users pursue a fulfilling experience with software products. These users require the latest features, compatibility, cost-effectiveness, privacy, and a comforting user interface.

Microsoft Office is the most common requirement for most businesses and professionals. This need forces many people to buy Windows OS in addition to their Mac OS.

The Windows operating system was developed by Microsoft in the 1980s. The compatibility features in Windows are high concerning open-source applications such as Mozilla Firefox and OpenOffice. This increased compatibility with open-source technological applications has strategically given Windows users lower switching costs. This compatibility and lower cost value strengthen the ecosystem of the Windows operating system. However, there are some demerits to open-source compatibility, which leads to privacy/ security issues. The Microsoft Windows operating system is extremely vulnerable to security breaches, Trojans, and viruses because of its open-source compatibility and flexible programming as compared to Mac. In past years, Microsoft has achieved immense improvements within the paradigm of security in their operating systems and applications. However, their operating system remains the most exposed system to malware and viruses.

On the other hand, the Macintosh OS was established in 1984 by the Apple Corporation. Mac is the only operating system that does not support any BIOS (Basic Input/ Output System). This operating system has its own mechanism for the booting process. Mac has a creative user interface that includes a customizable floating dock and Launchpad. The Mac OS has strict protocols. It does not provide compatibility with open-source applications to reflect security protocol. The Mac team has strict follow-ups and standard protocols for its operating systems. In this advanced world of cyberbullying and hacking, people are more inclined towards Mac and its products because of their efficient anti-malware and secure software. Mac has primarily fewer security breaches than Windows. According to various studies and surveys conducted by Stack Overflow, the number of Windows users is decreasing. On the other hand, the number of Mac OS users is increasing because of its efficient software, security protocols, and quality assurance. (Hasnain and Rafi). Furthermore, Mac offers more efficient processing steps to transfer files, applications, and data from one Mac system to a new one than data transferring in the Windows OS. Mac offers concise and easy steps to create the exact state of the older Mac system on a new one. It provides preinstalled powerful multimedia apps for its users. The most cardinal point of this operating system is that it is expensive and cannot be installed on anything other than Apple laptops.

According to Scot Finnie, the MacBook Pro 15 and Macintosh operating systems have become an industry standard. However, the economic analysis of MacBook and Mac OS is quite expensive to use in offices. (“Mac vs. PC Cost Analysis Revisited”). Mac systems are broadly used in professional areas and creative offices due to their high-security protocols. They are less vulnerable to viruses and malware Trojans. Mostly, Mac computers are used by photographers, graphic designers, and videographers for video editing, audio editing, and creative tasks. The Mac system provides efficient applications and graphical processing power due to its powerful graphics processing unit (GPU) and central processing units (CPU).

Economic Application

The economic premise is a considerable point when choosing the right operating system suitable to our needs. The basic price value of a simple MacBook is roughly around 2000$. This cost value is

pretty expensive for many companies to substantiate. The cost of the Mack mini desktop starts from around 1300$. All of the Mackintosh products and operating systems (MacBook, MacBook Air notebook, etc.) are very expensive compared to the Windows OS. On the other hand, Microsoft Windows is economical and user-friendly for novice users. The Windows operating system's license copy costs $100.00 to $200.00. Two PCs can be purchased for the cost value of one Mac, which is a prominent economic aspect of Windows OS. The Windows OS is suitable for small businesses, home/ personal users, and beginners. Microsoft Windows is also used for video editing, audio editing, and research purposes. The most extensively used application of the Windows OS is Microsoft Office. PCs with Windows are also used for gaming purposes due to their wide variety of gaming platforms.

Conclusion

Computers have brought a massive revolution in every field of professionalism. In this research paper, the comparative research on Microsoft Windows and Apple Macintosh reflects more practical and economic prospects of Microsoft Windows. However, Mackintosh OS has a better graphical processing unit, powerful software and tight security protocols against viruses. Regardless of the clear differences between Mac and Windows, they exhibit efficient and user-friendly setup processes. Both OS are popular among computer users and provide the latest user-friendly interfaces with the latest log-in features (Booting processes) and multimedia applications. In a nutshell, the winning ground has always been shared by both operating systems. Sometimes, Mac beats Windows within the paradigms of efficient features, security protocols, and performance. Windows beats Mackintosh based on price and compatibility. Each of these two OS provides diverse features of different levels in the market. However, Microsoft Windows triumphs to be a challenging opponent against Mac in terms of affordability, availability, customizability, and practicality.

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