

CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

Bernhard H. Shiveley

Project Number

J1317

Project Title

Comprehensive Evaluation of Computer Operating Systems

Abstract

Objectives/Goals

The goal of my experiment was to evaluate three computer operating systems (Windows Vista, Mac OS Leopard and Linux) to determine which operating system is the best system. My hypothesis was that Mac OS Leopard was the best operating system. This experiment required (i) the development of objective criteria to evaluate each system and (ii) a survey of experienced computer users to incorporate practical user experience.

Methods/Materials

Methods included web based and text book research on each operating system, downloading and using each operating system, preparing a user survey and compiling its results. I also determined how experts review operating systems and developed objective evaluation criteria.

Results

My experiment was successful. I found it was possible to develop objective criteria to evaluate operating systems. It was also possible to measure each operating systems performance against the criteria. There was a significant amount of research available to prove my hypothesis.

Conclusions/Discussion

I learned that my hypothesis was incorrect and concluded that Linux was by far the best operating system. I learned that while Mac OS Leopard is a very nice operating system, its advertising on television influenced my hypothesis inaccurately. Linux proves that the power of many people working toward a common goal (developing a completely open operating system technology that is free to the user) is as strong as a big company like Apple or Microsoft. I believe that my project can expand the public awareness of Linux and increase its use.

Summary Statement

My project is to evaluate three popular computer operating systems to determine which one is best.

Help Received

Father and Mother helped with research and preparing presentation board charts