

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM-590 002**



A Project Report on

**“ANALYZING POWER CONSUMPTION IN DESKTOP COMPUTER
SYSTEMS TO DESIGN OPTIMIZED POWER CONSUMPTION
TECHNIQUES”**

(KSCST Sponsored: Project Proposal Reference no.: 37S0715)

**Submitted to Visvesvaraya Technological University, Belgaum in partial fulfillment of
requirements for the award of degree**

**BACHELOR OF ENGINEERING
IN
COMPUTER SCIENCE & ENGINEERING
By
Project Associates**

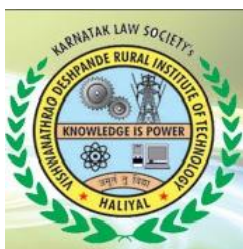
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ABSTRACT

We are in an era where it is nearly impossible to live without computers in our day to day life. On one side we are so dependent on these systems which work on electricity and make use of resources which are non renewable and also, all the phases from the development to the disposal of these systems, the environment is getting affected drastically. Hence at this very juncture it's very necessary to review the power consumption of these systems and thereby try to optimize it.

This project thesis includes the survey of the computer systems in our college and analysis of power consumption of each component depending upon the usage patterns and specifications. It gives us the total power consumed by each system for the given duration of time period. Using the power consumptions computed, it depicts the power consumption patterns of each component. And it also computes the actual duration of time each component is actually working and hence computes the idle time of the components. Based on this the engine tries to minimize the overall power consumption and draws some suggestion about each and every component which was analyzed. Then it tries to optimize the computer power usage and thereby reduce the computer power consumption as well as the electricity cost incurred due to the regular practices of the user.