

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202331035646 A

(19) INDIA

(22) Date of filing of Application :23/05/2023

(43) Publication Date : 26/05/2023

(54) Title of the invention : DEVELOPMENT OF A WEB-BASED CALCULATOR FOR DATA CENTER EFFICIENCY ANALYSIS AND OPTIMIZATION

(51) International classification :G06Q30/02
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)Brainware University, Kolkata

Address of Applicant :398, Ramkrishnapur Rd, Near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Dr. Rajesh Bose

Address of Applicant :Professor and Director Research, Dept. of Computational Science, Brainware University, 398 Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata, West Bengal 700125. -----

2)Mr. Krishanu Mandal

Address of Applicant :Student, Dept. of Computational Science, Brainware University, 398 Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata, West Bengal 700125. -----

3)Ms. Shrabani Sutradhar

Address of Applicant :Assistant Professor, Dept. of Computational Science, Brainware University, 398 Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata, West Bengal 700125. -----

4)Dr. Sandip Roy

Address of Applicant :Professor and HOD, Dept. of Computational Science, Brainware University, 398 Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata, West Bengal 700125. -----

(57) Abstract :

The proposed invention is a web-based calculator designed to revolutionize data centre efficiency analysis and optimization. It offers a comprehensive and user-friendly interface accessible through standard web browsers, allowing data centre operators, IT administrators, and facility managers to assess and improve energy efficiency. Real-time monitoring capabilities enable the tracking and analysis of key metrics such as power consumption, cooling effectiveness, server utilization, and infrastructure layout. The calculator incorporates scenario simulation functionality, empowering users to evaluate the impact of different optimization strategies. Collaboration features foster knowledge sharing among data center professionals, creating a community committed to driving efficiency and sustainability. The calculator is adaptable to different data center environments, accommodating varying configurations and integrating with existing infrastructure and management systems. By generating detailed reports and visualizations, it promotes transparency and accountability. Aligning with industry standards, the calculator enables benchmarking and goal setting for continuous improvement. The proposed web-based calculator for data center efficiency analysis and optimization provides a versatile and integrative solution to enhance data center performance, reduce energy consumption, lower operational costs, and contribute to a more sustainable future. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 24 No. of Claims : 10