INTERACTIVE DASHBOARD WITH DATA VISUALIZATION USING POWER BI

A PROJECT REPORT

Submitted by

ABIRAMI S (422619104002)

DINESH S (422619104010)

VINISHA V D (422619104048)

In partial fulfillment for the award of the degree

Of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

UNIVERSITY COLLEGE OF ENGINEERING, PANRUTI

ANNA UNIVERSITY: CHENNAI 600 025

MAY 2023

ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this project report **"INTERACTIVE DASHBOARD WITH DATA VISUALIZATION USING POWER BI"** is the bonafide work of **"ABIRAMI S (422619104002), DINESH S (422619104010), VINISHA V D (422619104048)"** who carried out the project work under my supervision.

SIGNATURE

Dr. D. MURUGANANDAM,
M.Tech, Ph.D.,
Assistant Professor

HEAD OF THE DEPARTMENT
Computer Science & Engineering
University College of Engineering
Panruti – 607106

SIGNATURE

Dr. A. RAMACHANDRAN,
M.E., M.B.A., Ph.D.,
Assistant Professor

SUPERVISOR
Computer Science & Engineering
University College of Engineering
Panruti – 607106

EXAMINATION HELD ON _____

INTERNAL EXAMINER **EXTERNAL EXAMINER**

DECLARATION

We hereby declare that the work entitled "**INTERACTIVE DASHBOARD WITH DATA VISUALIZATION USING POWER BI**" is submitted in partial fulfillment for the award of the degree in Bachelor of Engineering in Computer Science & Engineering. University College of Engineering, Panruti is a record of our own work carried out by us during the academic year 2022-2023. Under the supervision and guidance of **Dr. A. RAMACHANDRAN M.E., M.B.A., Ph.D., Assistant Professor/CSE**, Department of Computer Science and Engineering, UNIVERSITY COLLEGE OF ENGINEERING PANRUTI. The extent and source of information are derived from the existing literature and have been indicated through dissertation at the appropriate places. The matter embodied in this work is original and has not been submitted for the award of any other degree or diploma, either in this or any other university.

REGISTER NUMBER	NAME	SIGNATURE
422619104002	Abirami S	
422619104010	Dinesh S	
422619104048	Vinisha V D	

I certify that the declaration made above by the candidate is true

SIGNATURE
Dr. A. RAMACHANDRAN,
M.E., M.B.A., Ph.D.,
Assistant Professor
SUPERVISOR
Computer Science & Engineering
University College of Engineering
Panruti – 607106

ABSTRACT

An interactive dashboard in Power BI is a data visualization tool that allows users to interact with data and gain insights into business operations. The dashboard presents data from multiple sources and displays it in an easily understandable format, making it simple for users to make informed decisions. Power BI provides a variety of visualization tools such as charts, graphs, and tables, making it easy to represent data in an intuitive way. The interactive dashboard allows users to filter, sort, and drill down to more detailed information. This enables businesses to analyze trends and make informed decisions. Power BI's user-friendly interface allows users to create and customize dashboards with ease. It also allows businesses to share dashboards with stakeholders and collaborate with team members in real-time. Power BI provides seamless data integration with Microsoft Excel, SharePoint, and SQL Server, which allows businesses to connect to multiple data sources and integrate them into a single dashboard. This makes it easy to track key performance indicators (KPIs) and gain insights into business operations. Creating an interactive dashboard using Power BI involves four key steps: data integration, data cleaning, data modeling, and data visualization. First, data from various sources is extracted and loaded into Power BI. Next, data cleaning tools are used to remove duplicates, missing data, and inconsistencies. After cleaning the data, data modeling is performed to transform the data into a format that can be easily visualized. Finally, data visualization tools are used to create interactive dashboards and reports. In conclusion, an interactive dashboard using Power BI is a powerful tool for businesses to gain insights into their operations. It enables users to interact with data and visualize it in an intuitive way, making it easy to identify trends and make informed decisions. Power BI's seamless data integration, data cleaning, data modeling, and data visualization capabilities make it an ideal tool for businesses looking to optimize their operations.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES