



# **CRYPTOCURRENCY ANALYSIS DASHBOARD USING POWER-BI IN BUSINESS ANALYSIS**

SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF  
**MASTER OF COMPUTER APPLICATION**  
BY

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UNDER THE GUIDANCE OF  
***Dr. PABITRA KUMAR DEY*** , HEAD OF THE DEPARTMENT ,  
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**DR. B. C. ROY ENGINEERING COLLEGE**

Fuljhore, Jemua Road, Durgapur – 713206

West Bengal, India

2021 – 2023



**To Whom It May Be Concern**

This is to certify that, **Shreya Ghosh, Roll No: 12071021008, Himadri Datta, Roll No: 12071021062**, students of 2<sup>nd</sup> year, final semester in the Department of Computer Applications [2021– 2023], Dr. B.C. Roy Engineering College, Durgapur – 713206, worked on the major project entitled.

**“Cryptocurrency Analysis Dashboard Using Power Bi In Business Analysis”**

They have worked sincerely, dedicatedly and enthusiastically under my supervision. To the best of my knowledge, this is an original and technically accurate work. I hereby recommend that the report prepared by them may be accepted as partial fulfillment of the requirement for the degree of **Master of Computer Application (MCA) from Maulana Abul Kalam Azad University of Technology, West Bengal.**

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**Prof. (Dr.) Pabitra Kumar Dey**

**Head, Department of Computer Applications**

**Dr. B. C. Roy Engineering College, Durgapur**

Forwarded by:

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**Prof. (Dr.) Pabitra Kumar Dey**

**Head, Department of Computer Applications**

**Dr. B. C. Roy Engineering College, Durgapur**

## DECLARATION

We hereby declare that this project work entitled “**Cryptocurrency Analysis Dashboard Using Power-BI in Business Analysis**” submitted to **Dr. B. C. Roy Engineering College, Durgapur** is a record of an original work, done by our group under the guidance of **Prof. (Dr.) Pabitra Kumar Dey , Master of Computer Application Department** and this project work is submitted in the partial fulfillment of the requirements for the award of the degree of MCA.

The results embodied in this project have not been submitted to any other university or institute for the award of any degree or Diploma.

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## Acknowledgement

No work is possible due to the efforts of one or a few individuals. This project is no exception. I am immensely grateful to many people for their invaluable help and support without which It would not have been possible to prepare this technical project report. Working on these technical project on “**Cryptocurrency Analysis Dashboard Using Power Bi In Business Analysis** ” was a source of immense knowledge to us. I acknowledge to thanks the kind of patronage, loving inspiration and timely guidance. Which I have received from my project supervisor **Prof Dr. PABITRA KUAMR DEY**. Without his kind direction and proper guidance this technical report would have been little success. In every phase of this report his supervision and guidance, shaped this report to be completed successfully.

I also wish to express my deep since or gratitude to our departmental professor, seniors and friends who rendered their help during the period of the technical report.

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## Abstract

The vast amount of data available on the Internet has led to the development of analysis systems. This project proposes the use of Microsoft Power Bi tool to develop analysis systems. It gives the Data Visualization & Business Intelligence that converts data from various sources to attractive dashboard.

This report provides a detailed summary of the project **“Cryptocurrency Analysis Dashboard In Power Bi”** as part of fulfillment of the Major Project, **MCA Department, Dr. B.C Roy Engineering College**. The report includes a description of the topic, system architecture, and provides a detailed description of the work done till point. Included in the report are the detailed descriptions of the work done: snapshots of the implementations, various approaches, and tools used so far. The report also includes the project schedule.

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## Introduction

Power BI is an increasingly popular business intelligence and visualization tool from Microsoft that enables data analytics and data visualization. Ron George initially designed Power BI in the summer of 2010. The initial release was available for public download the following year. Power BI Desktop, Power BI Service, Power BI Gateway, Power BI Report Server, and Power BI Mobile Apps are the key components of the platform. In this article, we'll discuss the basics of Power BI Desktop and how to create a Power BI dashboard using Power BI Desktop. Then, we'll publish this dashboard on Power BI Service. Power BI is a Data Visualization and Business Intelligence tool that converts data from different data sources to interactive dashboards and BI reports. Power BI suite provides multiple software, connector, and services - Power BI desktop, Power BI service based on SaaS, and mobile Power BI apps available for different platforms. These set of services are used by business users to consume data and build BI reports. Power BI desktop app is used to create reports, while Power BI Services (Software as a Service - SaaS) is used to publish the reports, and Power BI mobile app is used to view the reports and dashboards.

## College Profile

**Dr. B. C. Roy Engineering College (BCREC)** is a private engineering college in Durgapur named after legendary physician Dr. Bidhan Chandra Roy, located in Paschim Bardhaman district, West Bengal, about 200 kilometers from the city of Kolkata, India. It was established on 21 August 2000 with its first batch of students. It offers undergraduate and postgraduate courses in Engineering, Technology and Management. The college is affiliated under **All India Council for Technical Education and Maulana Abul Kalam Azad University of Technology** formerly known as **West Bengal University of Technology (WBUT)**. Courses offered by the institute are: B. Tech, M. Tech, MBA and MCA. Admission to these courses will be done on the basis of Entrance Exams - WBJEE/ JEE Main (B.Tech.), MAKAUT-PGCET/ GATE (M. Tech.), JEMAT/ MAT (MBA) and WB- JECA (MCA).

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## Overview

Cryptocurrency analysis is the process of using data to understand the performance of cryptocurrencies. This can be done to track the price of a cryptocurrency, identify trends, and make predictions about future prices. Power BI is a business intelligence (BI) tool that can be used to analyze cryptocurrency data. Power BI provides a variety of features that can be used to clean, transform, and visualize data. This makes it a powerful tool for cryptocurrency analysis. To analyze cryptocurrency data using Power BI, you will need to gather data from a variety of sources. This data can include historical price data, market capitalization data, and social media sentiment data. Once you have gathered your data, you can import it into Power BI. Once your data is imported into Power BI, you can start cleaning and transforming it. This may involve removing duplicate values, correcting errors, or formatting the data in a way that is easier to read and understand. Once your data is clean and transformed, you can start creating visualizations. Visualizations are a great way to present your data in a way that is easy to understand and interpret. There are a variety of different visualizations available in Power BI, such as charts, tables, and maps. Once you have created your visualizations, you can start creating reports. A report is a collection of visualizations that are organized together to tell a story. You can add text, images, and other elements to your report to make it more informative and engaging. Finally, you can share your report with others. You can share your report by publishing it to the Power BI service, or by exporting it to a variety of different formats.



## Objective

The project is a valuable resource for anyone who wants to learn more about cryptocurrency analysis. It can be used by investors, traders, and anyone else who is interested in the cryptocurrency market. The project includes a variety of visualizations, including charts, tables, and maps. The visualizations are used to present the data in a way that is easy to understand and interpret. The project uses a variety of data sources, including historical price data, market capitalization data, and social media sentiment data. The data is imported into Power BI and then cleaned and analyzed. The project also includes a dashboard that provides a summary of the key findings. The dashboard can be used to track the performance of different cryptocurrencies and identify trends.

# Hardware and software used

## Hardware Used:

### Processor & Chipset:

- a) Processor Manufacturer: Intel EVO
- b) Processor Model: i5-8250U
- c) Processor Speed: 1.80 GHz
- d) Processor Core: i5

### Screen Size:

- a) Screen Size: 39.6 cm (15.6")
- b) Display Screen Type: LCD

### Memory:

- a) Standard Memory: 16 GB
- b) Memory Technology: DDR3 SDRAM

### Storage:

- a) Total SSD: 512GB Software Used.

Operating System: Windows 10.

Editor: VS Code (used for coding of Website).

Data visualization Tool: Power BI

Power Query Editor: Excle

Browser: Mozilla Firefox, Google Chrome.

Front-end technologies: Html, CSS .

## Background Study:

- **Used Domain: BA (Business Analysis)**

- **About BA:**

Business analysis is a combination of gaining insight from data using specific techniques, and performing tasks to identify the needs of a business—then, recommending changes and providing solutions that produce value for the stakeholders. Many of the solutions potentially have software and digital data-based components, but can also incorporate organizational changes, like improving processes, developing new policies, and engaging in strategic planning.

Some organizations also use the term “IT Business Analyst.” Although there seems to be no clear consensus regarding the differences between the two positions (and, in fact, many organizations use them interchangeably), some circles note that the IT Business Analyst works more with software methodologies.

Once the business analysis definition is locked down, the more curiosity-driven reader may follow up by asking, “In that case, what is business impact analysis?” Business impact analysis is a practice that’s of particular relevance in these days of pandemic-induced business shutdowns. Business impact analysis, or BIA, aims to predict and identify the financial and operational impacts of business disruption. You can be sure that before many businesses closed temporarily due to the coronavirus, they launched business impact analysis studies.

Now that we have gone through to understand what is business analysis, let us next look at the difference between business analysis and business analytics.

- **Difference Between Business Analysis and Business Analytics:**

We should take a moment and clarify the distinction between these two concepts. Business analysis is more concerned with functions and processes, while business analytics covers data and reporting. Still, many organizations use the terms interchangeably. As we have learned what a business analyst is, let us understand business analysis uses.

- **How Does a Company Benefit from Business Analysis?**

Business analysts bring a disciplined approach to creating and managing change within an organization. They identify vulnerabilities, define needs based on feedback and stakeholder communication, organize and implement solutions, and monitor the results.

In today's competitive environment, businesses of all sizes need every possible advantage that they can get, and the business analyst is a valuable resource for identifying the best moves to make, on both a tactical and strategic scale.

Furthermore, business analysts make ideal project managers. By employing a business analyst, companies gain a better understanding of themselves and their needs, and how best to meet them. As we have learned what is a business analyst, the various techniques, the business analysis process, and more let us look into the benefits of getting certified.

- **Used Tool:(Power BI)**

- **What is Power BI?**

Microsoft Power BI is a business intelligence (BI) platform that provides users with tools for analyzing and visualizing data. Power BI can be used to connect to a variety of data sources, including Excel spreadsheets, cloud-based databases, and on-premises data warehouses. Once data is connected, Power BI users can create interactive dashboards and reports that can be shared with others. Power BI is a powerful tool that can be used to make better business decisions. By providing users with a visual representation of data, Power BI can help them to identify trends, patterns, and outliers. This information can then be used to make informed decisions about how to improve operations, increase sales, or reduce costs. Power BI is a versatile tool that can be used by businesses of all sizes. It is easy to use, even for users with limited technical experience. Power BI is also affordable, making it a cost-effective solution for businesses of all budgets. Here are some of the key features of Power BI:

- Connect to a variety of data sources
- Create interactive dashboards and reports
- Share reports with others
- Analyze data with powerful tools
- Make better business decisions

If you are looking for a powerful and affordable BI platform, then Power BI is a great option. With its easy-to-use interface and versatile features, Power BI can help you to make better business decisions. Here are some of the benefits of using Power BI:

- **Increased visibility into data:** Power BI provides users with a single view of their data, which can help them to identify trends, patterns, and outliers.

- **Improved decision-making:** By providing users with a visual representation of their data, Power BI can help them to make informed decisions about how to improve operations, increase sales, or reduce costs.
- **Increased collaboration:** Power BI makes it easy to share reports with others, which can help to improve communication and collaboration within an organization.
- **Reduced costs:** Power BI is a cost-effective BI solution, which can help businesses to save money on expensive BI software.

If you are looking for a BI platform that can help you to improve your business, then Power BI is a great option.

### ▪ **Why Power-BI Used Over Excel ?**

Power BI is a business intelligence platform that helps you analyze data and create interactive dashboards and reports.

It is a more powerful tool than Excel for data analysis and visualization.

Here are some of the reasons why Power BI is used over Excel:

- Power BI can handle larger amounts of data. Excel can only handle up to 1 million rows of data, while Power BI can handle up to 100 GB of data.
- Power BI has more powerful data analysis features. Power BI includes features such as data modeling, forecasting, and machine learning that are not available in Excel.
- Power BI can create more interactive dashboards and reports. Power BI dashboards and reports can be embedded in websites and apps, and they can be shared with others.
- Power BI is easier to use than Excel. Power BI has a user-friendly interface that makes it easy to create and share dashboards and reports.

Overall, Power BI is a more powerful and versatile tool than Excel for data analysis and visualization.

If you need to analyze large amounts of data or create interactive dashboards and reports, Power BI is the better choice.

▪ **Here are some additional details about the advantages of Power BI over Excel:**

- Power BI can connect to a wider range of data sources. Excel can only connect to a limited number of data sources, such as Microsoft SQL Server and Excel spreadsheets. Power BI can connect to a wider range of data sources, including cloud-based data sources, such as Azure SQL Database and Amazon Redshift.  
Power BI has more powerful visualization features. Excel has a limited number of visualization options, such as charts and graphs.
- Power BI has a wider range of visualization options, including interactive dashboards and reports.
- Power BI is more collaborative. Excel is a desktop application that can only be used by one person at a time.
- Power BI is a cloud-based application that can be used by multiple people at the same time. It is more scalable. Excel can only handle a limited amount of data. It can handle much larger amounts of data.

If you are looking for a more powerful and versatile tool for data analysis and visualization, Power BI is the better choice.

### **Why Power-BI Use Over MATLAB?**

Here are some reasons why Power BI is used over MATLAB:

**Ease of use:** Power BI is designed to be easy to use, even for non-technical users. MATLAB, on the other hand, is a more complex programming language that requires some technical knowledge.

**Cost:** Power BI is a freemium product, with a free version that offers basic functionality and a paid version that offers more features. MATLAB is a commercial product that is more expensive.

**Collaboration:** Power BI is designed for collaboration, making it easy to share reports and dashboards with others. MATLAB is not as well-suited for collaboration.

**Data visualization:** Power BI offers a wide range of data visualization options, making it easy to create visually appealing reports and dashboards. MATLAB does not offer as many data visualization options.

**Integration with other Microsoft products:** Power BI integrates seamlessly with other Microsoft products, such as Excel, SharePoint, and Azure. MATLAB does not integrate as well with other Microsoft products.

Overall, Power BI is a more user-friendly, affordable, and collaborative option than MATLAB for business intelligence and data visualization.

### **Here are some additional details about each product:**

#### **Power BI**

Power BI is a business intelligence (BI) platform developed by Microsoft. It helps users to collect data from a variety of sources, analyze it, and create interactive dashboards and reports. Power BI can be used by businesses of all sizes to make better decisions based on data.

#### **MATLAB**

MATLAB is a programming language and numerical computing environment developed by MathWorks. It is used by engineers, scientists, and other technical professionals to solve a wide range of problems, including data analysis, machine learning, and signal processing. MATLAB is a powerful tool, but it can be complex to learn and use.

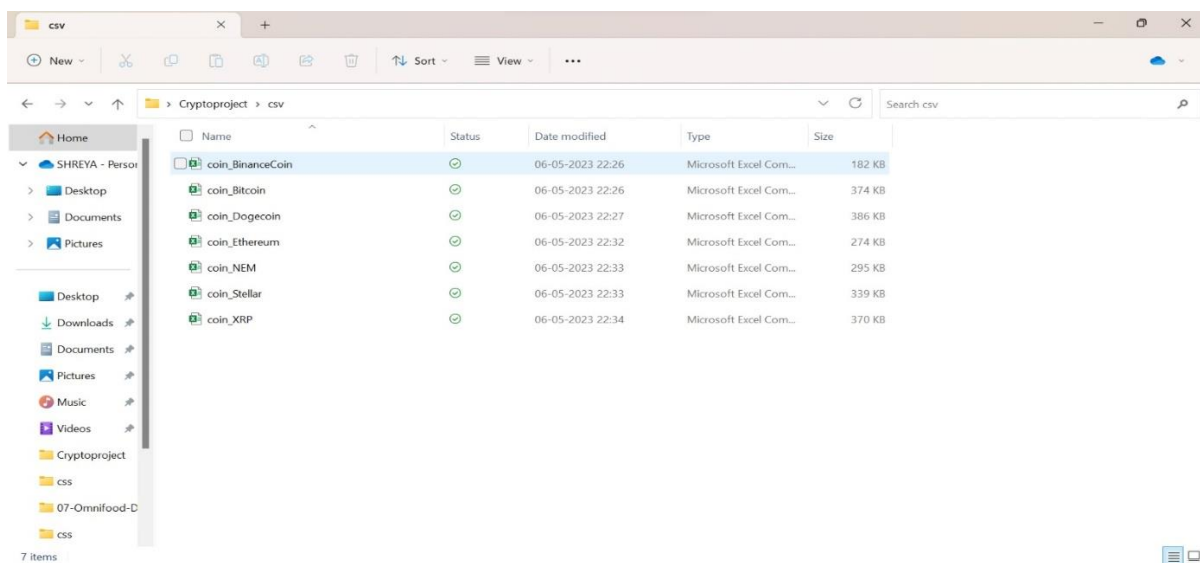
Ultimately, the best choice for you will depend on your specific needs and requirements. If you are looking for a user-friendly BI platform that is easy to learn and use, then Power BI is a good option. If you need a more powerful programming language for data analysis and machine learning, then MATLAB is a good option.



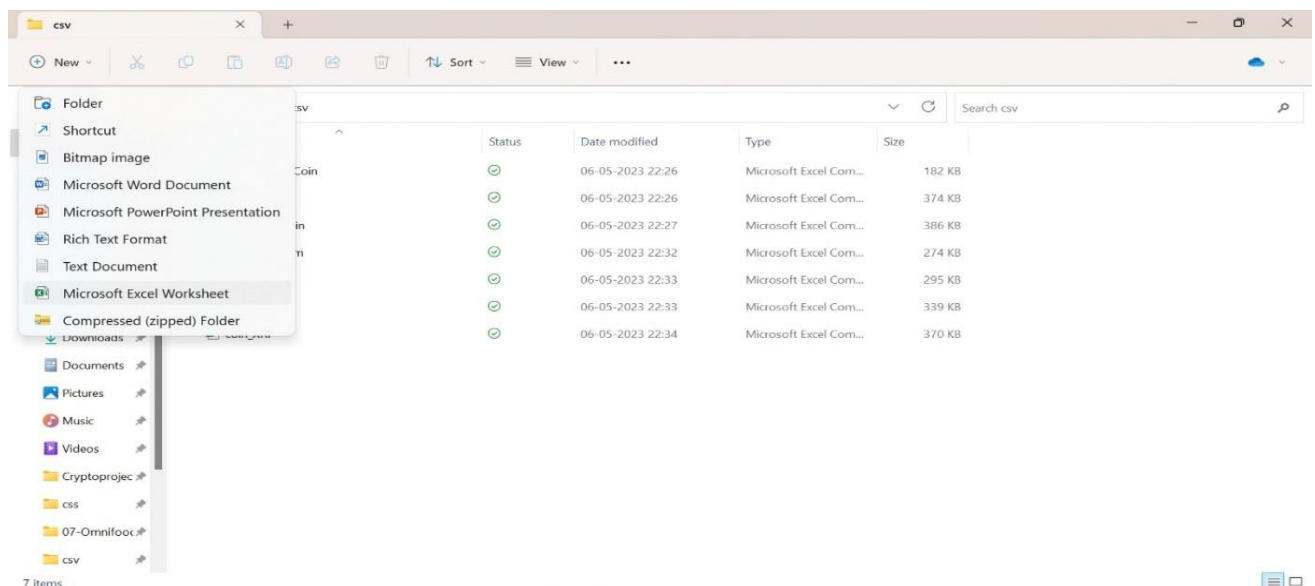
## ■ How Power BI Works?

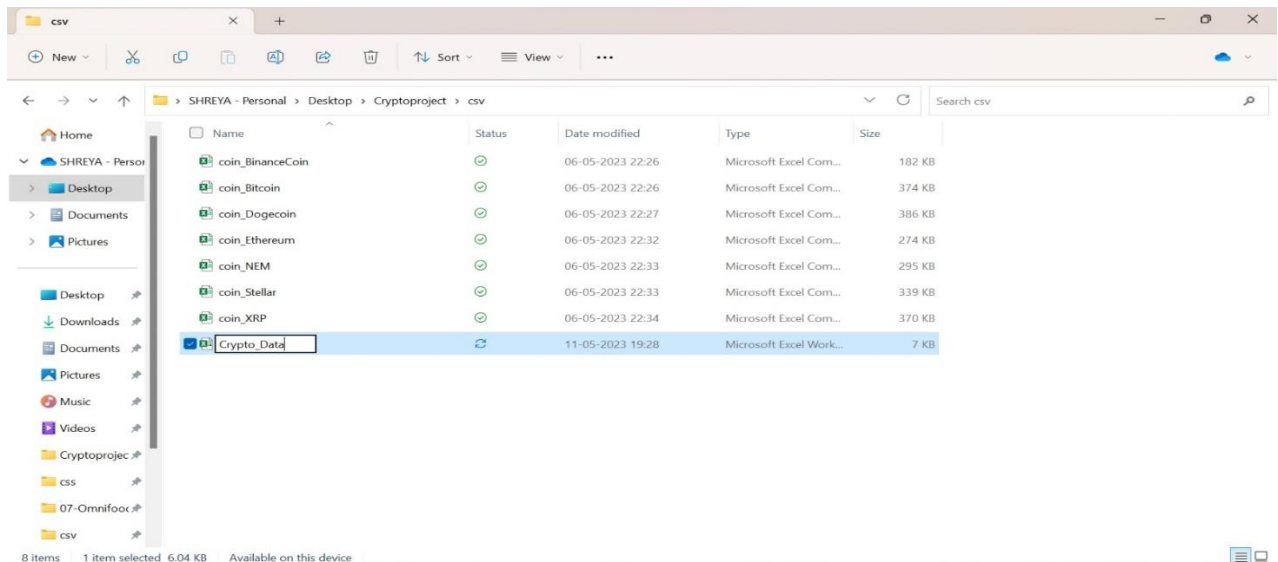
Here are some of the steps involved in using Power BI for business analysis:

- **Collect The Data:** The first step is to connect Power BI to your data source. Power BI can connect to a wide variety of data sources, including databases, files, and cloud-based services.



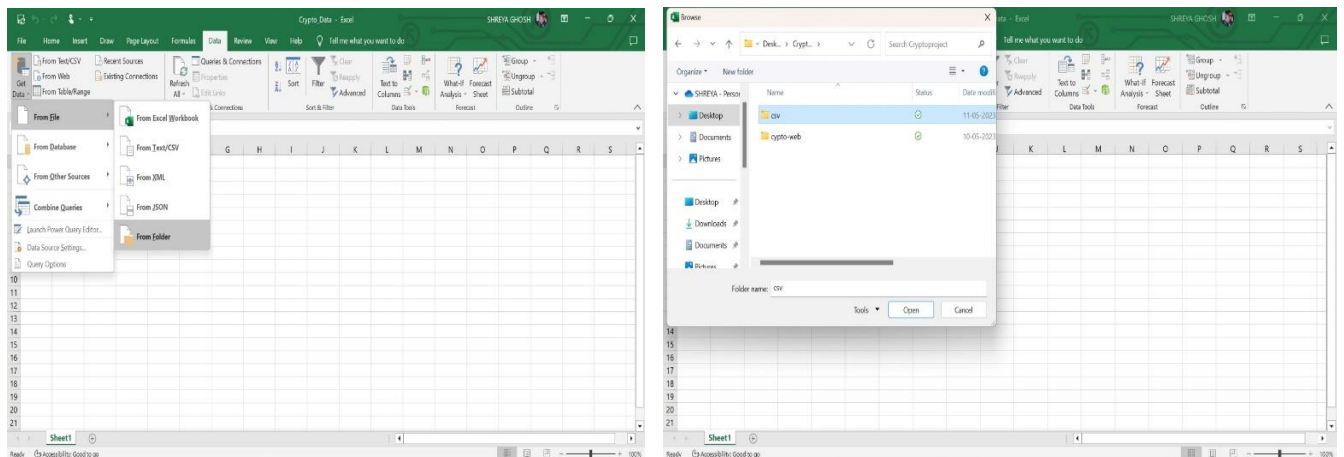
Here in our project we at first collect our data from Kaggle. It comes in a zip file. Then we have extracted the zip and got these **CSV** format file.





Then we combine these all **CSV** file into a new single **EXCEL** file by running **Power Query** to handle those data easily. It comes in an all new folder.

- **Merging The Data:** Once your data is connected, you may need to clean and prepare it before you can start analyzing it. This may involve removing duplicate data, correcting errors, and transforming the data into a format that Power BI can understand.



After making the new single excel file from the csv files, we extract the data from the CSV file.

C:\Users\SHREYA\OneDrive\Desktop\Cryptoproject\csv

Content	Name	Extension	Data accessed	Date modified	Date created	Attributes	Folder Path
Binary	coin_BinanceCoin.csv	.csv	07-05-2023 18:16:29	06-05-2023 22:26:07	06-05-2023 22:26:05	Record	C:\Users\SHREYA\OneDrive\Desktop\Cryptoproject\csv
Binary	coin_Bitcoin.csv	.csv	07-05-2023 18:16:29	06-05-2023 22:26:13	06-05-2023 22:26:11	Record	C:\Users\SHREYA\OneDrive\Desktop\Cryptoproject\csv
Binary	coin_Dogecoin.csv	.csv	07-05-2023 18:16:29	06-05-2023 22:27:22	06-05-2023 22:27:20	Record	C:\Users\SHREYA\OneDrive\Desktop\Cryptoproject\csv
Binary	coin_Etherum.csv	.csv	07-05-2023 18:16:29	06-05-2023 22:32:23	06-05-2023 22:32:21	Record	C:\Users\SHREYA\OneDrive\Desktop\Cryptoproject\csv
Binary	coin_NEM.csv	.csv	07-05-2023 18:16:29	06-05-2023 22:33:18	06-05-2023 22:33:16	Record	C:\Users\SHREYA\OneDrive\Desktop\Cryptoproject\csv
Binary	coin_Stellar.csv	.csv	07-05-2023 18:16:29	06-05-2023 22:33:42	06-05-2023 22:33:40	Record	C:\Users\SHREYA\OneDrive\Desktop\Cryptoproject\csv
Binary	coin_XRP.csv	.csv	07-05-2023 18:16:29	06-05-2023 22:34:06	06-05-2023 22:34:04	Record	C:\Users\SHREYA\OneDrive\Desktop\Cryptoproject\csv
Binary	Crypto_Data.xlsx	.xlsx	11-05-2023 19:29:32	11-05-2023 19:29:29	11-05-2023 19:28:53	Record	C:\Users\SHREYA\OneDrive\Desktop\Cryptoproject\csv

Combine & Transform Data    Combine & Load    Combine & Load To...

Combine Files

Specify the settings for each file. Learn more

Sample File: First file

File Origin: 1252: Western European (Windows)    Delimiter: Comma    Data Type Detection: Based on entire dataset

SNo	Name	Symbol	Date	High	Low	Open	Close	Volume	Marketcap
1	Binance Coin	BNB	26-07-2017 23:59:59	0.109012999	0.099265501	0.105893001	0.105137996	203395	10513800
2	Binance Coin	BNB	27-07-2017 23:59:59	0.108479001	0.100887999	0.105108	0.107736997	344459	10773700
3	Binance Coin	BNB	28-07-2017 23:59:59	0.109018996	0.101473004	0.107632004	0.104066998	342588	10406700
4	Binance Coin	BNB	29-07-2017 23:59:59	0.111263998	0.101108	0.104782	0.107810996	340218	10781100
5	Binance Coin	BNB	30-07-2017 23:59:59	0.108138002	0.103161998	0.107934996	0.106413999	224261	10641400
6	Binance Coin	BNB	31-07-2017 23:59:59	0.108349003	0.101599999	0.106827997	0.104249999	240309	10425000
7	Binance Coin	BNB	01-08-2017 23:59:59	0.106265999	0.096109398	0.104594998	0.09986698	300413	99866800
8	Binance Coin	BNB	02-08-2017 23:59:59	0.101210997	0.0973612	0.099721201	0.100451998	256793	10045200
9	Binance Coin	BNB	03-08-2017 23:59:59	0.106977999	0.0991197	0.100327998	0.106642	293008	10664200
10	Binance Coin	BNB	04-08-2017 23:59:59	0.107755996	0.102698997	0.106684998	0.107493997	287521	10749400
11	Binance Coin	BNB	05-08-2017 23:59:59	0.144653007	0.107069999	0.107418001	0.128870994	542878	12887100
12	Binance Coin	BNB	06-08-2017 23:59:59	0.132988006	0.127379999	0.129292995	0.130998999	393681	13099900
13	Binance Coin	BNB	07-08-2017 23:59:59	0.149765	0.133300006	0.133957997	0.148847997	748177	14884800
14	Binance Coin	BNB	08-08-2017 23:59:59	0.226925001	0.147765994	0.148998007	0.224420995	2617340	22442100
15	Binance Coin	BNB	09-08-2017 23:59:59	0.260625005	0.222158	0.224748001	0.242911994	3075320	24291200
16	Binance Coin	BNB	10-08-2017 23:59:59	0.349976003	0.245051995	0.251827002	0.349079901	4118070	34907900
17	Binance Coin	BNB	11-08-2017 23:59:59	0.409653991	0.311066985	0.348785013	0.392571986	4413920	39257200
18	Binance Coin	BNB	12-08-2017 23:59:59	0.475991994	0.337588996	0.392192999	0.446364999	5080760	44636500

☐ Skip files with errors    OK    Cancel

After getting the data from CSV files , we transform & load the data into **microsoft excel Power Query**. After that , we have got this page of **microsoft excel Power Query**.

csv - Power Query Editor

File Home Transform Add Column View

Close & Load    Refresh    Advanced Editor    Choose Columns    Remove Columns    Keep Rows    Remove Rows    Sort    Split Column    Group By    Data Type: Whole Number    Use First Row as Headers    Replace Values    Merge Queries    Append Queries    Combine Files    Manage Parameters    Data source settings    New Source    Recent Sources

Queries [5]    Transform File from...    Helper Queries [3]    Parameter1 (Sample File)    Sample File    Transform Sample...    Other Queries [1]    csv

Table: RemoveColumns("#'Changed Type'",{"Source.Name"})

SNo	Name	Symbol	Date	High	Low	Open	Close
1	Binance Coin	BNB	26-07-2017 23:59:59	0.109012999	0.099265501	0.105893001	0.105137996
2	Binance Coin	BNB	27-07-2017 23:59:59	0.108479001	0.100887999	0.105108	0.107736997
3	Binance Coin	BNB	28-07-2017 23:59:59	0.109018996	0.101473004	0.107632004	0.104066998
4	Binance Coin	BNB	29-07-2017 23:59:59	0.111263998	0.101108	0.104782	0.107810996
5	Binance Coin	BNB	30-07-2017 23:59:59	0.108138002	0.103161998	0.107934996	0.106413999
6	Binance Coin	BNB	31-07-2017 23:59:59	0.108349003	0.101599999	0.106827997	0.104249999
7	Binance Coin	BNB	01-08-2017 23:59:59	0.106265999	0.096109398	0.104594998	0.09986698
8	Binance Coin	BNB	02-08-2017 23:59:59	0.101210997	0.0973612	0.099721201	0.100451998
9	Binance Coin	BNB	03-08-2017 23:59:59	0.106977999	0.0991197	0.100327998	0.106642
10	Binance Coin	BNB	04-08-2017 23:59:59	0.107755996	0.102698997	0.106684998	0.107493997
11	Binance Coin	BNB	05-08-2017 23:59:59	0.144653007	0.107069999	0.107418001	0.128870994
12	Binance Coin	BNB	06-08-2017 23:59:59	0.132988006	0.127379999	0.129292995	0.130998999
13	Binance Coin	BNB	07-08-2017 23:59:59	0.149765	0.133300006	0.133957997	0.148847997
14	Binance Coin	BNB	08-08-2017 23:59:59	0.226925001	0.147765994	0.148998007	0.224420995
15	Binance Coin	BNB	09-08-2017 23:59:59	0.260625005	0.222158	0.224748001	0.242911994
16	Binance Coin	BNB	10-08-2017 23:59:59	0.349976003	0.245051995	0.251827002	0.349079901
17	Binance Coin	BNB	11-08-2017 23:59:59	0.409653991	0.311066985	0.348785013	0.392571986
18	Binance Coin	BNB	12-08-2017 23:59:59	0.475991994	0.337588996	0.392192999	0.446364999
19	Binance Coin	BNB	13-08-2017 23:59:59	0.50263999	0.445989996	0.445989996	0.87682801
20	Binance Coin	BNB	14-08-2017 23:59:59	1.463389993	0.735764027	0.87291801	1.29557001

10 COLUMNS, 999+ ROWS    PREVIEW DOWNLOADED AT 19:33

Query Settings

PROPERTIES

Name: csv

APPLIED STEPS

- Source
- Filtered Hidden Files1
- Invoke Custom Function1
- Renamed Columns1
- Removed Other Columns1
- Expanded Table Column1
- Changed Type
- Removed Columns

- **Get The Data Into Single Excel File:** After running the Power Query we have omitted the unnecessary rows of the csv file & load the file into excel.Finally we got the excel file with the data.

Crypto\_Data - Excel

SHREYA GHOSH

File Home Insert Draw Page Layout Formulas Data Review View Help Tell me what you want to do

M4

SNo	Name	Symbol	Date	High	Low	Open	Close	Volume	Marketcap
1	Aave	AAVE	05-10-2020 23:59	55.11235847	49.78789992	52.67503496	53.21924296	0	89128128.86
2	Aave	AAVE	06-10-2020 23:59	53.40227002	40.73457791	53.29196931	42.40159861	583091.4598	71011441.25
3	Aave	AAVE	07-10-2020 23:59	42.40831364	35.97068975	42.39994711	40.08397561	682834.1863	67130036.9
4	Aave	AAVE	08-10-2020 23:59	44.90251114	36.69605677	39.88526234	43.76446306	1658816.923	220265142.1
5	Aave	AAVE	09-10-2020 23:59	47.56953274	43.29177758	43.76446306	46.81774415	815537.6608	235632208.2
6	Aave	AAVE	10-10-2020 23:59	51.4056548	46.70332768	46.81814554	49.13371767	1074627.028	247288428.8
7	Aave	AAVE	11-10-2020 23:59	51.45337431	48.71603954	49.13312951	49.66072573	692150.6009	249940843.4
8	Aave	AAVE	12-10-2020 23:59	54.42141763	48.75407708	49.66157329	52.23869222	1354836.065	262915666.3
9	Aave	AAVE	13-10-2020 23:59	57.48190422	49.59873521	52.23839242	51.12431679	1386221.207	257307050.4
10	Aave	AAVE	14-10-2020 23:59	57.85394649	49.62952942	51.37289869	51.31651791	3132405.422	258274392.5
11	Aave	AAVE	15-10-2020 23:59	52.08068541	44.01832531	51.38760962	44.01918294	5883146.063	221547139.1
12	Aave	AAVE	16-10-2020 23:59	43.90673033	39.14295677	42.89060653	39.49584426	52855204.94	365071463.3
13	Aave	AAVE	17-10-2020 23:59	43.07737327	38.63361292	39.48619161	41.36699325	43339687.25	382367032.3
14	Aave	AAVE	18-10-2020 23:59	41.7494876	39.53158618	41.38959771	40.74697166	40441163.46	376635994.1
15	Aave	AAVE	19-10-2020 23:59	40.9951837	35.95136399	40.83675675	36.01231739	49289896.51	332872221.2
16	Aave	AAVE	20-10-2020 23:59	36.31907005	32.1010995	36.04378522	32.18001748	60632325.59	297449169.5
17	Aave	AAVE	21-10-2020 23:59	37.07820274	32.04814912	32.25348971	35.16035652	43831234.96	324997301.5
18	Aave	AAVE	22-10-2020 23:59	39.85692062	33.58946348	35.09748742	38.03165056	54717366.38	402396251.5
19	Aave	AAVE	23-10-2020 23:59	42.54665591	36.92467124	37.73059438	41.68663736	76081859.91	445257058
20	Aave	AAVE	24-10-2020 23:59	42.43970617	38.72881265	41.68663733	39.45502214	57658170.29	421421064.3
21	Aave	AAVE	25-10-2020 23:59	40.92850939	37.60120084	39.45502214	37.90476078	43970451.96	404862645.2
22	Aave	AAVE	26-10-2020 23:59	39.16386433	35.07196756	37.90476254	36.03392191	50307222.85	384880121.6
23	Aave	AAVE	27-10-2020 23:59	38.86918184	34.46963521	36.0339136	34.87153083	58581307.85	372464564.4
24	Aave	AAVE	28-10-2020 23:59	35.56402236	32.00005907	34.87153639	32.39408292	60533866.83	346002819.3
25	Aave	AAVE	29-10-2020 23:59	33.1554836	28.24077345	32.39408189	29.09833402	66304785.65	310800760.6

Sheet2

Ready Accessibility: Good to go

- **Create Visualizations:** Once the data is clean and prepared, can start creating visualizations. Visualizations are a great way to communicate the insights that you have gained from the data. Power BI offers a wide variety of visualization options, including charts, graphs, and maps. By using the excel file ,we simply load the excel file into the power bi editor for the creation of the visualization & transforming the data as per our choice .

Crypto-Currency\_analysis\_dashboard - Power BI Desktop

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Name CryptoData

Structure

Mark as date table

Manage relationships

New Quick New New

measure measure column table

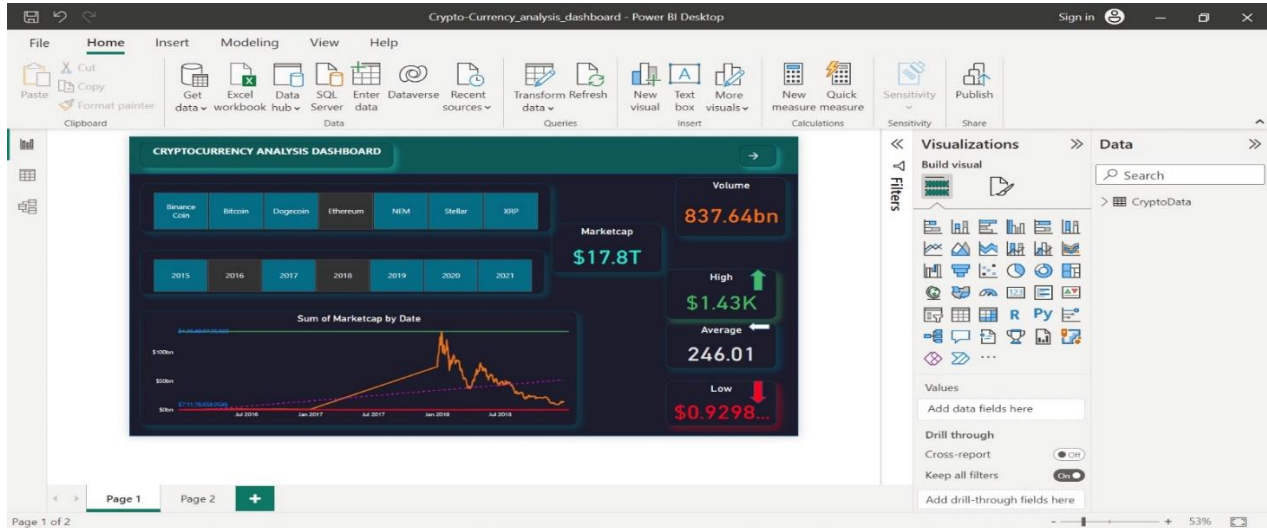
Calendars Relationships Calculations

SNo	Name	Symbol	Date	High	Low	Open	Close	Volume	Marketcap	year
890	Binance Coin	BNB	01-01-2020 23:59:59	\$13.8739457448	\$13.6549419541	\$13.7309616834	\$13.6890834068	172980717.815414	\$2,12,91,55,037.07651	2020
891	Binance Coin	BNB	02-01-2020 23:59:59	\$13.7155483269	\$12.9899737922	\$13.6981255603	\$13.027010708	156376427.464497	\$2,02,61,78,425.73812	2020
892	Binance Coin	BNB	03-01-2020 23:59:59	\$13.7637094353	\$13.0126380007	\$13.0353292711	\$13.6604518566	173683856.862963	\$2,12,47,01,779.87031	2020
893	Binance Coin	BNB	04-01-2020 23:59:59	\$13.9219136898	\$13.5600075899	\$13.6674417203	\$13.8915115002	182230373.65292	\$2,16,06,40,037.34281	2020
894	Binance Coin	BNB	05-01-2020 23:59:59	\$14.4108011583	\$13.8865466804	\$13.8883396753	\$14.111018554	202552703.061158	\$2,19,47,81,442.97117	2020
895	Binance Coin	BNB	06-01-2020 23:59:59	\$15.0035654283	\$14.1112401175	\$14.1112401175	\$14.9578075409	224800409.035682	\$2,32,64,88,218.5982	2020
896	Binance Coin	BNB	07-01-2020 23:59:59	\$15.1352754775	\$14.5684029731	\$14.9662091604	\$15.0092499487	191948559.80021	\$2,33,44,89,401.61622	2020
897	Binance Coin	BNB	08-01-2020 23:59:59	\$15.2422188285	\$14.3379518312	\$15.0222637348	\$14.6029342738	183632221.905469	\$2,27,12,92,397.10189	2020
898	Binance Coin	BNB	09-01-2020 23:59:59	\$14.6110890697	\$14.305363244	\$14.5892023826	\$14.4983140925	169699829.321124	\$2,25,50,20,117.98903	2020
899	Binance Coin	BNB	10-01-2020 23:59:59	\$15.0276892128	\$14.1820854775	\$14.4784089206	\$15.0258258097	200173072.324779	\$2,33,70,67,556.5513	2020
900	Binance Coin	BNB	11-01-2020 23:59:59	\$15.2502366605	\$14.7794741364	\$15.0209846894	\$14.9463275305	201663502.561329	\$2,32,47,02,655.51538	2020
901	Binance Coin	BNB	12-01-2020 23:59:59	\$15.4721086585	\$14.8698905482	\$14.9462009964	\$15.3220831465	231150157.902352	\$2,38,31,46,448.91931	2020
902	Binance Coin	BNB	13-01-2020 23:59:59	\$15.3553687812	\$14.9912155337	\$15.3222609476	\$15.2272723192	211785744.130237	\$2,36,83,99,884.48425	2020
903	Binance Coin	BNB	14-01-2020 23:59:59	\$16.7906600187	\$15.1944008147	\$15.2152867082	\$16.6261215689	299316969.410413	\$2,58,59,72,298.76511	2020
904	Binance Coin	BNB	15-01-2020 23:59:59	\$18.0962697576	\$16.3944229196	\$16.6038666403	\$17.6548117475	380806616.277244	\$2,74,59,71,387.83994	2020
905	Binance Coin	BNB	16-01-2020 23:59:59	\$17.6607941082	\$16.4398483239	\$17.6464029216	\$17.0769455255	260423403.859736	\$2,65,60,91,975.11633	2020
906	Binance Coin	BNB	17-01-2020 23:59:59	\$18.3618311217	\$17.0889311074	\$17.1127983733	\$18.135199083	347229168.494848	\$2,82,06,89,254.97043	2020
907	Binance Coin	BNB	18-01-2020 23:59:59	\$18.3144804785	\$17.5551571483	\$18.129646949	\$17.8239192746	257317647.430094	\$2,77,22,73,816.74863	2020
908	Binance Coin	BNB	19-01-2020 23:59:59	\$18.437758544	\$16.8410734934	\$17.8309888625	\$17.3692535687	266285620.843531	\$2,70,15,56,607.33912	2020
909	Binance Coin	BNB	20-01-2020 23:59:59	\$17.5537379092	\$16.8644226641	\$17.3925241285	\$17.3252760725	245125918.586327	\$2,69,47,16,492.1342	2020

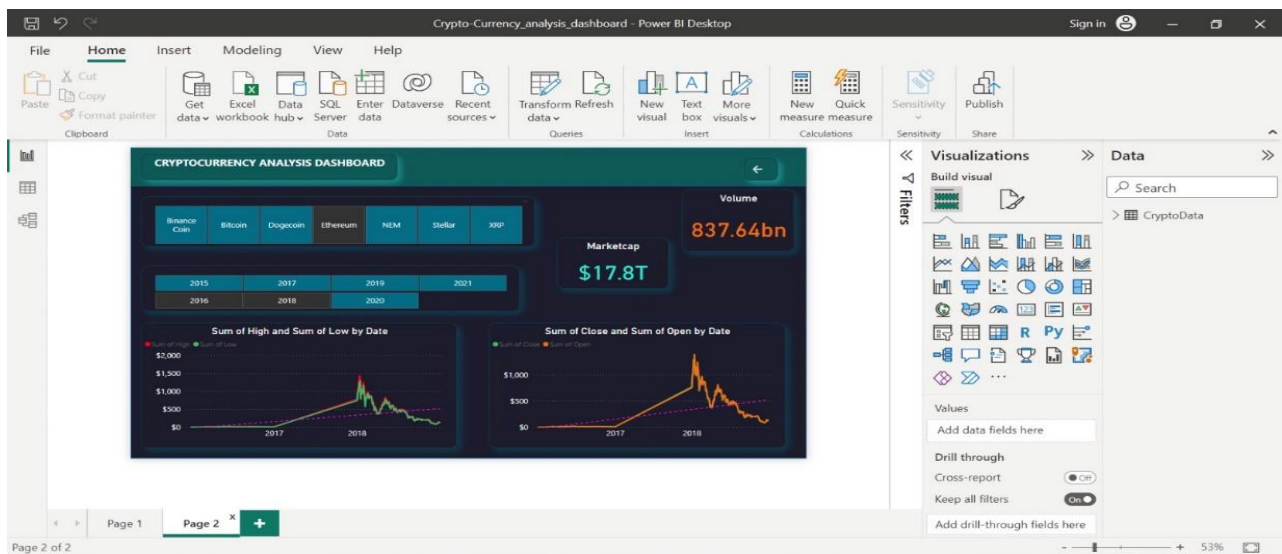
Table: CryptoData (17,061 rows)



- **Create Dashboards & Reports:** Once you have created your visualizations, you can create dashboards and reports. Dashboards and reports are a great way to share your insights with others. Power BI makes it easy to create interactive dashboards and reports that can be easily shared with others.



**PAGE 1**



**PAGE 2**

By using the data , we have created a multipage ; interactive ; informative dashboard , here we have used ‘**Stacked Bar Chart**’ for the presentation some of the market capital by dates.

‘**Forecasting**’ for getting an approximate idea of the price of the crypto currencies.

‘**Card**’ for representing the **market capital** volume high , low and average cost of the particular crypto currency.

**‘Filter’** for representing bitcoins & years in a more presentable way. Here, we can simply select any 2 or 3 years over a particular cryptocurrency.

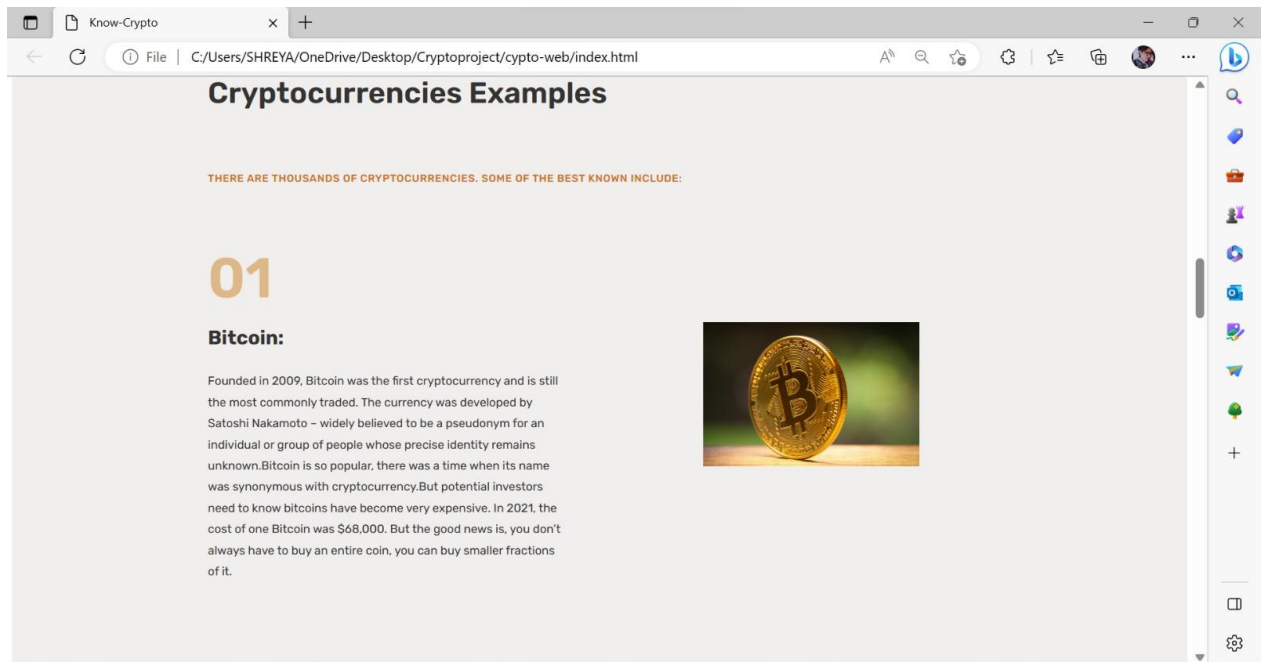
By using the arrow symbol , we make two pages connected by each other so that the same result will be shown in the another page also.

- **Share Our Insights:** Once you have created your dashboards and reports, you can share them with others. Power BI offers a variety of sharing options, including email, file sharing, and publishing to the web.

**By following these steps, you can use Power BI to gain insights into your data and make better decisions for your business.**

- **Create An Informative Website:** By using the HTML & CSS , we have created a simple website . which contains the information about the crypto currencies for creating our dashboard , this website gives an insights about the cryptocurrencies. So that, the people will easily understands how rapidly the popularity of the cryptocurrencies are booming now a days.





## Views Of The Web Page

## **Future Scopes:**

In the upcoming era we plan to build an Analysis on Cryptocurrency which will more accurate and efficient to find out the cost of the mostly known Currencies (i.e. Bitcoin, Ethereum, Ripple, etc.) at a glance for those who are not so much aware about Currencies and invest on those. Digital Currency analysis is a technique that assists investors in making sound financial decisions. As a result, investors are better aware of market trends and investing strategies. Analyzing the crypto market can be done by using technical analysis which will focus on statistical trends and checking on the price changes, historical volume and the activity in order to make forecasts and predictions on the price over the long-term and short-term

## **Conclusion:**

Through this project we have devised a universal medicine recommendation system framework that applies machine learning technologies to help in the medical science domain, which consists of a large amount of dataset. We give a concrete implementation of each module based on an open dataset. With the help of such a project, doctor will be able to make a better informed decision on how to treat a patient. This will make our life easier when an emergency will occur and we need to take an immediate action. To implement this project, we first need to collect some data sets, then data preprocessing and data cleansing will be done by which we can train our Business Analysis algorithm for the proper analysis of Cryptocurrency. By representing in a statistical interface, we make our project more interactive and user friendly and for this thing we use Power BI framework by Microsoft.



# REFERENCES

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