NEXT-GEN EMPLOYABILITY PROGRAM

CREATING A FUTURE-READY WORKFORCE

Student Name : Katta Bhavana

Student ID : STU641ac0fc340ea1679474940

Mobile No: 9398369179

Mail ID: 22211a6757@bvrit.ac.in

College Name :
B V Raju Institute Of Technology, Narsapur

CAPSTONE PROJECT SHOWCASE

Project Title

P2 Power BI Driven Exhaustive Analysis of Indian Agriculture Sector

Abstract | Problem Statement | Project Overview | Proposed Solution | Technology Used | Modelling & Results | Conclusion | Q&A

Abstract

1. In the first week, I started the journey of mastering the dynamic data visualization tool Power BI. Through practice and teaching, I became familiar with its interface, operation, and basic content.

2. In the second week, I delved deeper into Power BI's capabilities again, focusing on advanced data transformation processes, complex visualizations, and reporting optimization

3. In Week 3, my focus shifted to using Data Analytics (DAX) to perform complex calculations, manage data, and gain deeper insights. I also explored the use of DAX for agricultural market analysis, specifically minimum wage (MSP) data.

4. In the fourth week, I continued my exploration of Power BI, focusing on process visualization and more detailed analysis of Minimum Budget (MSP) data. I also tried to update the look of the poster, specifically changing the background color of all the work done in the past weeks.

Problem Statement

- In four weeks, we raced to master the data visualization power of BI and harness its ability to analyze real-world data and provide insight. This includes knowledge of fundamental concepts, advanced data transformation techniques, and the application of Data Analysis (DAX) for numerical calculations. It is also aimed to analyze detailed information about the agricultural market using the minimum information system (MSP). Additionally, challenges remain to improve the visibility and usability of reports by using custom visuals and improving the quality of report songs, including background color changes. The ultimate goal is to develop data analysis and visualization skills to support informed decision-making in a variety of fields.

Project Overview

- In four weeks, this project aims to realize the potential of Power BI for effective data visualization and analysis by truly focusing on data in the world. The journey begins with the first few weeks of building a solid foundation in Power BI, including basic concepts, communication, and data connections.
- The project then dives into cool topics like data transformation processes, custom visualizations, and DAX applications for data analysis. A significant part of this project involves a detailed analysis of the agricultural economy using a minimum information system (MSP), analyzing trends and understanding the impact on farmers' income and economic dynamics.
- In addition, work is done by using visual rules, optimizing posts, and doing nice things such as changing colors later. The overall aim of the project is to develop strong data analysis and visualization skills to support informed decision-making in many areas, thus enabling people to gain insight from information and make positive decisions.

Proposed Solution

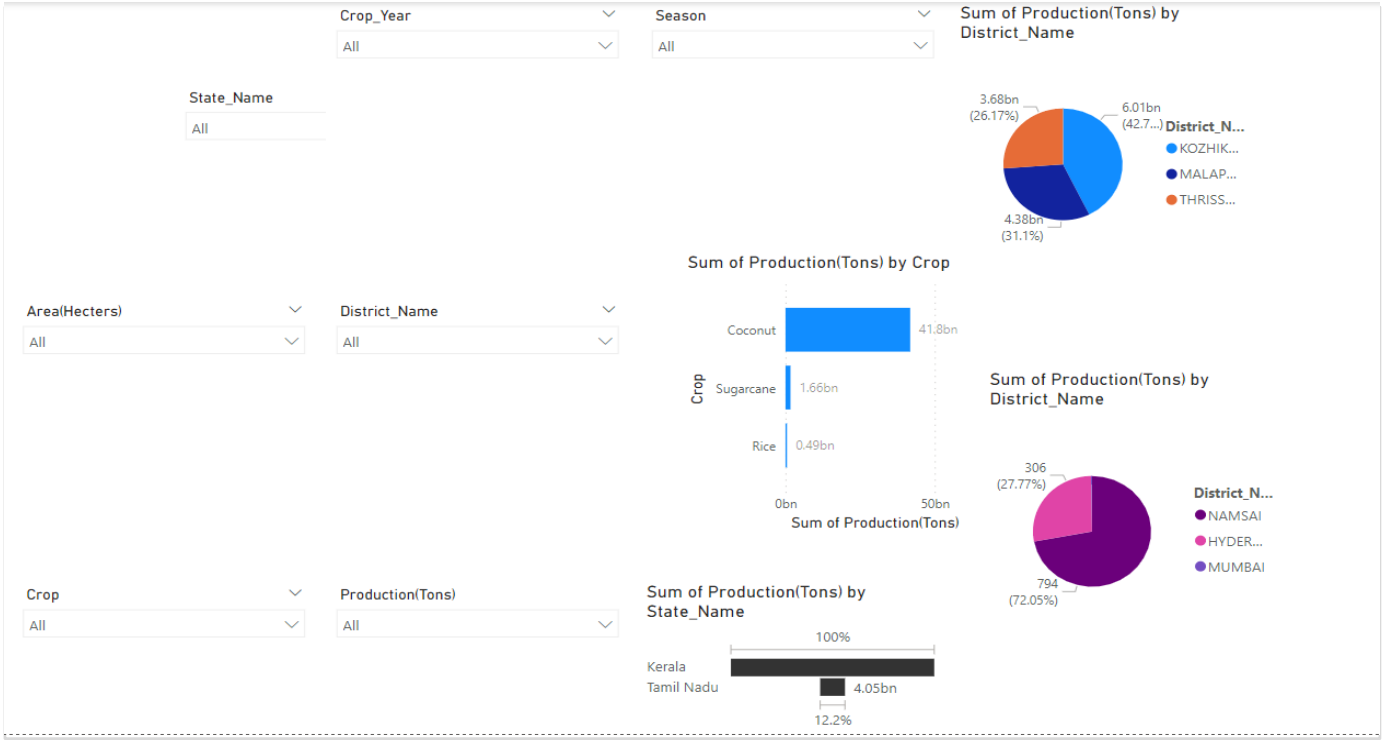
Over four weeks, these solutions include ways to improve Power BI's data visualization and analysis capabilities, eventually gaining real-world validation.

- 1. **Basic Learning**: The first few weeks will focus on general learning to understand basic concepts, communication, and data connections in Power BI. This will create a solid foundation for future projects.
- 2. **Advanced Technology Research**: After the basic course, the project will cover advanced topics such as complex data transformation techniques, visualization, and applying Data Analysis Expressions (DAX) for complex data analysis. Applying and trying these ideas will encourage deeper understanding.
- 3. **Market Analysis**: The bulk of the program will involve a detailed analysis of the agricultural market using the minimum information system (MSP). Through data research, analysis, and recommendations, the aim is to understand the impact of MSP on farmers' income and economy and provide good information for decision-making in agriculture.
- 4. **Improved Visualization and Reporting**: As we analyze data, we will work to improve the visibility and usability of the data. This includes using custom visuals, optimizing document layouts, and incorporating aesthetic improvements (such as background color changes) to improve users' readability and experience.
- **5. Skills Building and Development:** Ultimately, the overall goal of the program is to provide participants with powerful knowledge and insights into supporting apologies in many ways. The program aims to encourage people to achieve great results in their skills by enabling them to make sense of information and make informed decisions.

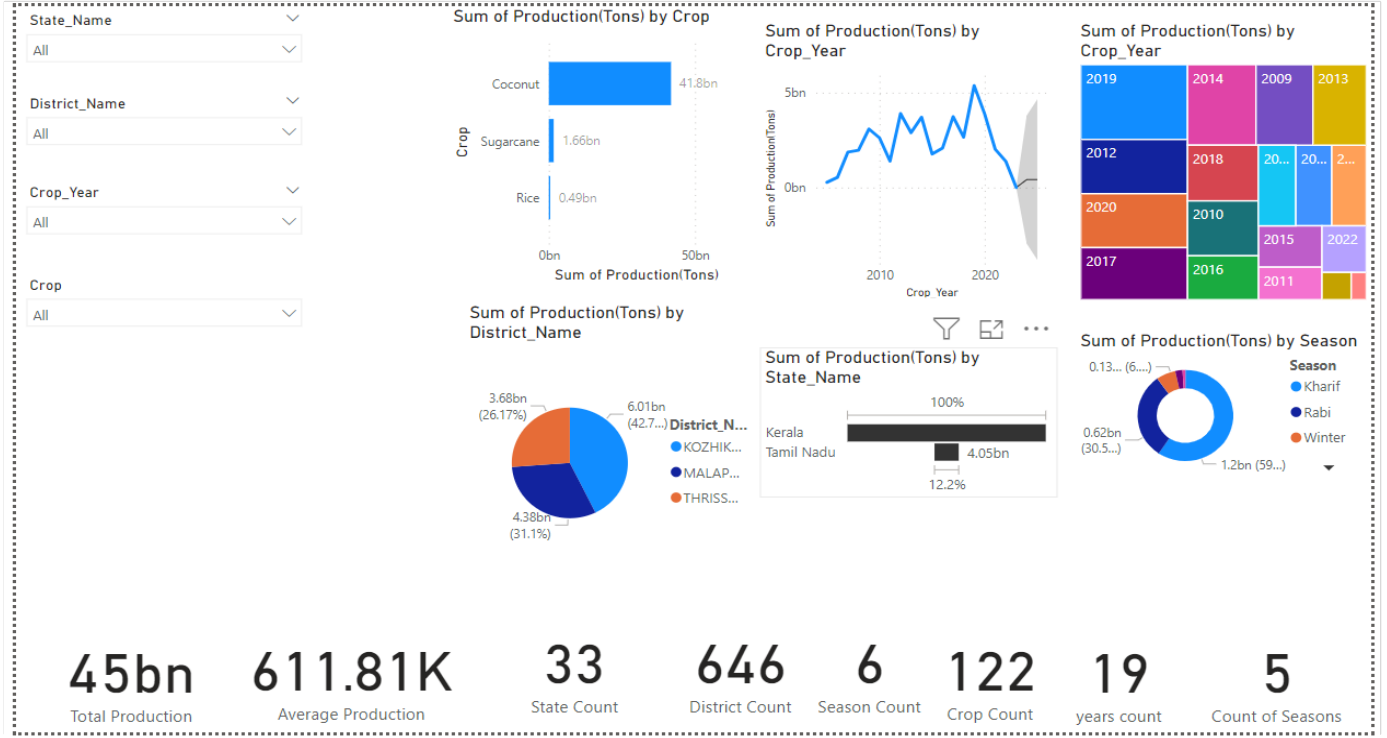
Technology used

- **Power BI:** For four weeks, Power BI will be used as data visualization and analysis technology. Participants will use Power BI Desktop to create interactive data, perform data transformations, and analyze data. Online training: To promote training and professional development, participants will use Power's online training platform, lectures, BI materials, and other training resources. This resource provides a comprehensive overview of various Power BI features and advanced technologies.
- **Real World Dataset**: The project will use real-world data, including Minimum Support Price (MSP) data for agricultural market analysis. Participants will use this information to collaborate on data analysis and visualization in Power BI.
- **Custom visualizations and plugins**: Participants can explore custom visualizations and plugins available in Power BI to enhance visualization and reporting. These tools can be used to create visual reports and dashboards that improve data presentation and user experience.
- **Collaboration tools**: Collaboration tools such as online meetings, interactive forums, and shared documents will be used throughout the project. It is used to facilitate communication and information sharing among participants. These tools will facilitate collaborative learning and problem-solving.

Modelling & Result



Modelling & Result



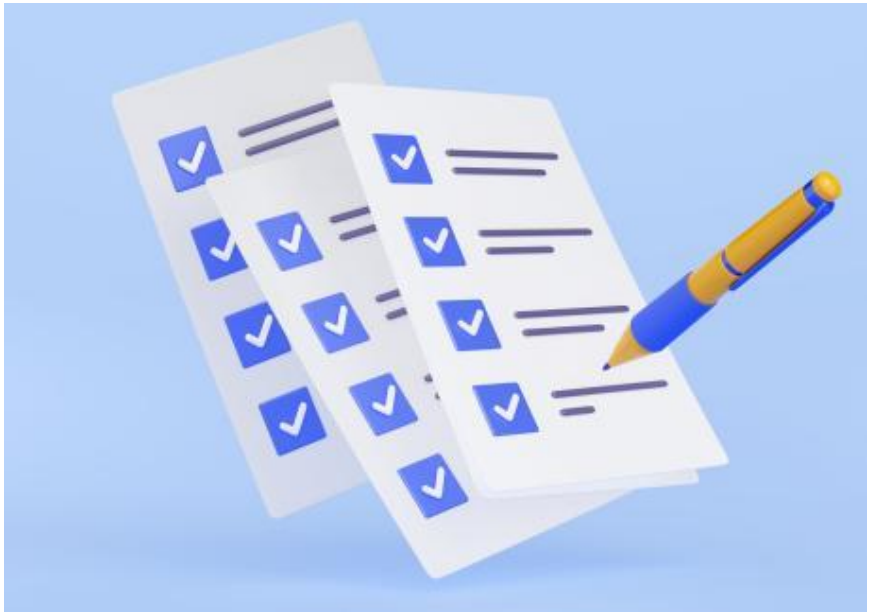
Modelling & Result

Conclusion

Overall, my four-week Power BI journey was a transformational experience that made me more productive with data visualization and analysis. From building a solid foundation in Power BI principles to advanced techniques like data transformation and custom visualization, each week brings new challenges and growth opportunities.

The importance of this study is undoubtedly the in-depth analysis of agricultural dynamics using the minimum data set (MSP). With the implementation of DAX operations, I gained a better understanding of the complex processes that influence agricultural decisions, especially the impact of MSP trends on farmers' incomes.

Overall, this program not only improved my skills; It made me understand the importance of information in decision-making. Thanks to these new skills and insights, I feel that I can deal with complex cases and achieve great results in many areas. I will take the learning and confidence I gained from this rich Power BI experience with me when I start my future job.



edunet
foundation