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CHAPTER 1

INTRODUCTION

The Indian economy is based primarily on agriculture. Many factors contribute to the majority of Indian farmers not receiving the anticipated crop output. The weather has a major impact on agricultural yield. The amount of rainfall impacts rice cultivation as well. The farmers in this situation unavoidably need prompt assistance to forecast future crop productivity, and an analysis must be done to assist the farmers in maximizing crop production in their crops. A significant issue in agriculture is yield prediction. Every farmer wants to analysis how much of a yield to anticipate. In the past crop , yield prediction was done by taking into account a farmer's prior experience with a specific crop. The amount of data in Indian agriculture is huge.

An integrated web-based business intelligence package from IBM is maybe called Cognos Business Intelligence.. It provides a data analytics, score crop carding, and observance of the events .The software package consists of many elements designed to satisfy the various data needs in a very company. IBM Cognos have the elements like that IBM Cognos , IBM Cognos Designer, IBM Cognos user device.The Cognos Analysis is helps farmer,business to quick delivery to business-queries and reportage studio permits and perfect reports for your organization. Cognos studio permits is assign a particular crop event that sends to the user of neutral organization. The Cognos Metric permits you to watch and analyze the user production of business metrics in which your organization by building a record atmosphere.

1.1 PROJECT OVERVIEW:

Crop production in Asian country is one in every of the foremost vital sources of financial gain and India is one in every of the highest countries to provide crops. As per this project we are going to be analyzing some vital visual image, making a dashboard and by looking these we are going to get most of the insights of Crop production in India.

1.2 PURPOSE:

Analytics is that the interpretation of information pattern that assist decision- creating and performance improvement .Crop yield analytics in agriculture aid in the analysis of certain key images, the creation of a dashboard, and the investigation of these to gain the majority of the insights of Crop output in Asian nation. Through the integration of coverage, modelling, analysis, exploration, dashboards, stories, and event management, IBM Cognos Analytics enables us to understand the knowledge within our business and make wise decisions. By offering important insights and analysis pertaining to our knowledge on one or more pages or screens, a dashboard aids the North American nation in keeping track of events or activities at a glance. Making a dashboard during this project has become our go to method for visualizing, analyzing, and gaining the majority of the insights.

Keywords:IBM Cognos, Crop Production, Analytics and Agriculture.

CHAPTER 2

LITERATURE SURVEY 2.1 EXISTING PROBLEM

[1] FUZZY INTERFERNCE SYSTEMS FOR CROP PREDICTION

Fuzzy interference systems for crop prediction, A. Jayaram and Netra Marad, Journal of Intelligent Systems, 2013, 21(4), pp.363-372. To satisfy market demands precisely and to effectively manage agricultural activities aimed at increasing yield, crop yield prediction is important. When determining the yield, many factors, including the climate, pests, and biophysical and morphological characteristics, should be taken into account. The determined amount of yield is approximate because these characteristics are inherently unpredictable.

[2] AGRICULTURAL ANALYSISFORNEXTGENERATION HIGH TECH FARMINGIN DATA MINING

Trichy's Anna University in Tamil Nadu, India "Agricultural Analysis for Next Generation High Tech Farming in Data Mining," by P. Vindya, published on May 5, 2012. Crop yield prediction has become an intriguing research issue as a result of recent significant advancements in the field of agricultural information technology. Today, more and more data is being recorded, but most of it is unstructured and cannot be processed in any way to provide useful data using mining techniques.

[3] RICE CROP YIELD PREDICTIONUSINGDATAMINING TECHNIQUE

The overview of the predicted rice crop production is presented in this study. Examines A variety of data mining approaches are used to predict rice crop productivity. With a 40%+ contribution to overall yield output, the rice crop plays a crucial role in India's food security. A favorable climate is necessary for high harvest generation. Edit yield can be significantly reduced by unfavorable recurring

atmospheric conditions, like as poor precipitation or temperature extremes. In terms of agronomy and harvest decision-making, using better ways to predict edit efficiency in various weather situations can aid ranchers and various stakeholders. This research describes the use of several information mining techniques to forecast the output of rice trim in the Indian state of Maharashtra. Based on readily available data, 27 Maharashtra regions were chosen for this assessment.

[4] THE USEOF SATELLITE DATA FOR CROP YIELD GAP ANALYSIS

Field experiments and simulation models are useful tools for analyzing agricultural production gaps, but scaling up these techniques to understand entire regions over time has remained a substantial challenge. It has repeatedly been shown that satellite data, either by itself or in combination with other data and models, can provide information that can accurately calculate agricultural yields in farmers' fields. The produced yield maps provide a unique opportunity to comprehend crop yield disparities by overcoming both geographical and temporal scaling limitations. We discuss the measurement of yield gaps and their causes using remote sensing in this work. Although there are still a lot of untapped potential application areas, examples from previous study serve to highlight the significance of remote sensing.

[5] LEAF DISEASE PREDICTION USING DATA ANALYTICS

V Kranthi Sai Reddy's research was conducted at the Hyderabad, Indiabased Sreenidhi Institute of Science and Technology. For farmers, crops are vital, serving as their main source of income. Agriculture productivity is a major factor in the Indian economy. Thus, we may directly assist the farmer as a result of this research. Farmers can provide possibly better and more accurate productivity estimates by

adopting automated agricultural inspection. The various items can be produced with higher quality. The ability to identify the sick crop is crucial for agriculture. We are indirectly assisting in the improvement of crop quality through the job we are doing. It is a recognition system that uses machine learning and will support the Indian economy. The paper will propose the technique to classify and identify the different disease affected plant. Digital Analysis of crop color is the important. Now it's becoming popular day by day. It is also of the cost effective method. Because changed in the color are a valuable indicator of crop health and efficiency and suitability. Then it can be measured with visual scales and

inexpensive crop color.

[6] DATA ANALYSIS AND PREDICTION FOR AGRICULTURAL PRODUCTION

The foundation of the Indian economy is agriculture. The term "conventional farming in the regular months has been perverted and harvests have been wrecked" is one that is frequently used today. Besides causing financial losses, this is the primary cause of farmer suicide. Now that agriculture requires assistance, it is time for technology to lead the shift. Favorable soil conditions, ambient rainfall, and temperature are required for a crop to grow. As a result, it is now difficult for farmers and the public to predict the months that crops will be planted and their yield due to irregularities in temperature and rainfall caused by climate change. As an example, rains in December and January or irregular

temperatures.

[7] AGRICULTURE DATA ANALYTICS IN CROP YIELD ESTIMATION

Agriculture fulfill a fundamental need, which makes it crucial for human survival. It is a well-known fact that in India, agriculture employs the bulk of the

population (about 55%). There are obstacles to expanding crop production in India because of weather changes. The task of achieving desired crop yield goals has grown difficult. It is important to take into account factors that directly affect the production and productivity of crops, such as climate, geographic conditions, economic conditions, and political conditions. One of the crucial aspects of agricultural techniques is the forecast of crop production. Before planting seeds in their fields, farmers require knowledge about crop yield in order to increase agricultural output. Data analytics is one such trend that has entered the agriculture area and is being utilities for management of crop yield and monitoring crop health. The usage of technology in agriculture has risen in recent years. People now appreciate the importance of Big data thanks to recent developments in the agricultural sector.

[8] ANALYSIS OF AGRICULTURAL DATA USING USING DATA MINING TECHNIQUE

Farmers and agribusinesses must make countless decisions every day in the agriculture sector, where there are many complicated aspects influencing such decisions. The precise yield estimation for the several crops included in the planning is a critical concern for agricultural planning intentions. Data mining techniques are a critical component of any strategy for achieving realistic and efficient solutions to this issue. Big data has a clear target in agriculture. It is now even more important for farmers to use information and get assistance when making important farming decisions due to environmental factors, soil variability, input level and combination variations, and commodity price fluctuations.

This study uses data mining techniques and multiple linear regression to analyze agricultural data and identify the best parameters to maximize crop production. Agriculture is optimized for production and made more resistant to

climate change by analyzing fresh, non-experimental data and mining the vast amount of existing crop, soil, and meteorological data.

[9] ESTIMATING CROP YIELDS WITH REMOTE SENSING

Increasing crop yield predictions' accuracy may lead to improvements throughout the entire agricultural production chain, improved harvest planning on the part of farmers, and a better understanding of production risk on the part of insurers, to mention a few benefits. The majority of existing machine learning models use NDVI data to make their predictions, which can be challenging to employ because of clouds and their shadows in obtained images as well as the lack of trustworthy crop masks for broad areas, particularly in poor nations. In this study, we show a deep learning model that can forecast five different crops both before and during the growing season. Our algorithm generates precise production estimates using crop calendars, easily accessible remote sensing data, and weather information.

[10] CROP YIELD PREDICTION USING MACHINE LEARNING

Machine learning is a crucial decision-support tool for predicting crop yields, enabling choices about which crops to grow and what to do while they are in the growing season. The research on agricultural production prediction has been supported by the application of several machine learning techniques. In order to extract and synthesize the techniques and features that have been employed in agricultural yield prediction research, we conducted a Systematic Literature Review (SLR) for this work. Utilizing inclusion and exclusion criteria, we chose 50 papers from a total of 567 that met our search criteria for relevance from six internet databases.

2.2 REFERENCES

[1].M. A. Jayaram and Netra Marad, “Fuzzy interference Systems for Crop Prediction”, Journal of Intelligent Systems, 2013, 21(4), pp.363-372.

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[8]. Analysis of agricultural data using data mining techniques.G. Sarmistanjali M. Sudeepthi Swathi K. Phanindra Kumar S. Gowtham Kumar, 2020.

[9]. Estimating crop yields with Remote sensing and deep learning Estimating crop yields with Remote sensing and deep learning, Bruno Silva , 2021

[10]. Crop yield prediction using machine learning Thomas van Klompenburg, ayalew Kassahun, cagatay cat,2019.

2.3 PROBLEM STATEMENT DEFINITION

Analytics is that the interpretation of information pattern that assist decisioncreating and performance improvement. Agriculture knowledge analytics in crop yield helps in analyzing some vital image, making a dashboard and by researching these we'll get most of the insights of Crop production in Asian nation. IBM Cognos Analytics integrates coverage, modelling, analysis, exploration, dashboards, stories, and event management thus we are able to perceive our organization's knowledge, and build effective selections. A dashboard helps North American nation to watch events or activities at a look by providing key insights and analysis concerning our knowledge on one or additional pages or screens. during this project, we tend to visualize, analyze and gain most of the insights by making a dashboard.

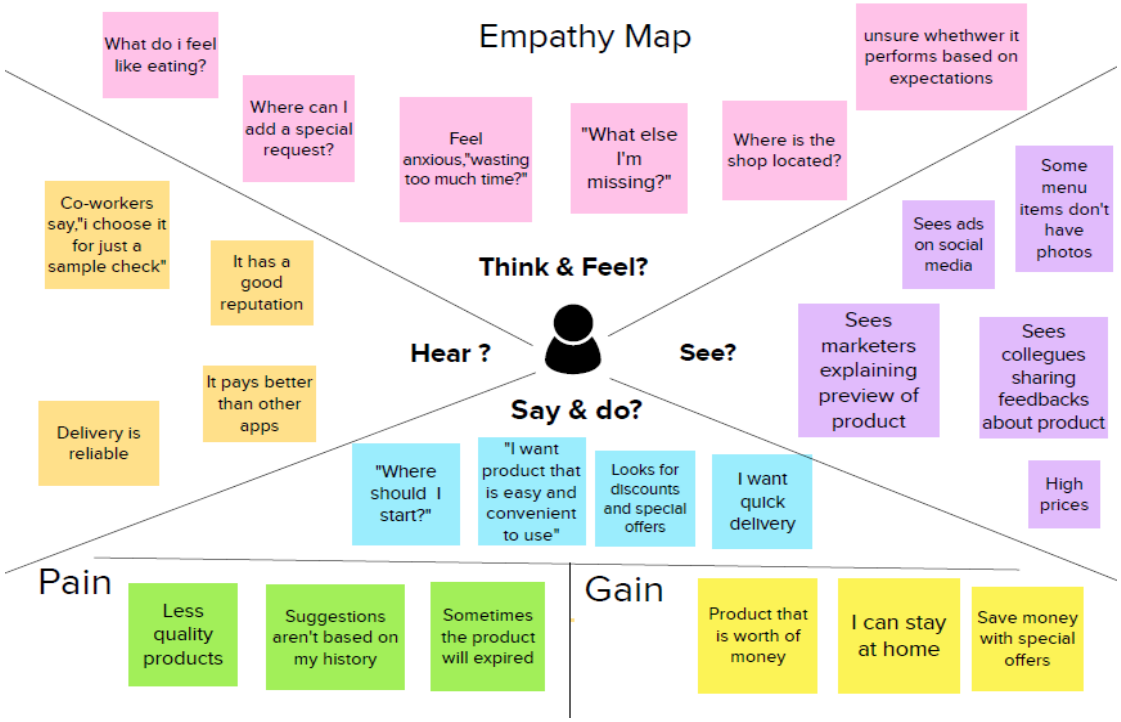
IBM Cognos Business Intelligence could be a web-based integrated business intelligence suite by IBM. It provides a tool set for reportage, analytics, score carding, and observation of events and metrics. The software system consists of many elements designed to satisfy the various data necessities in a very company. IBM Cognos has elements like IBM Cognos Framework Manager, IBM Cognos Cube Designer, IBM Cognos electrical device. Cognos Analysis Studio helps business users get quick answers to business-related queries.

CHAPTER 3

IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS

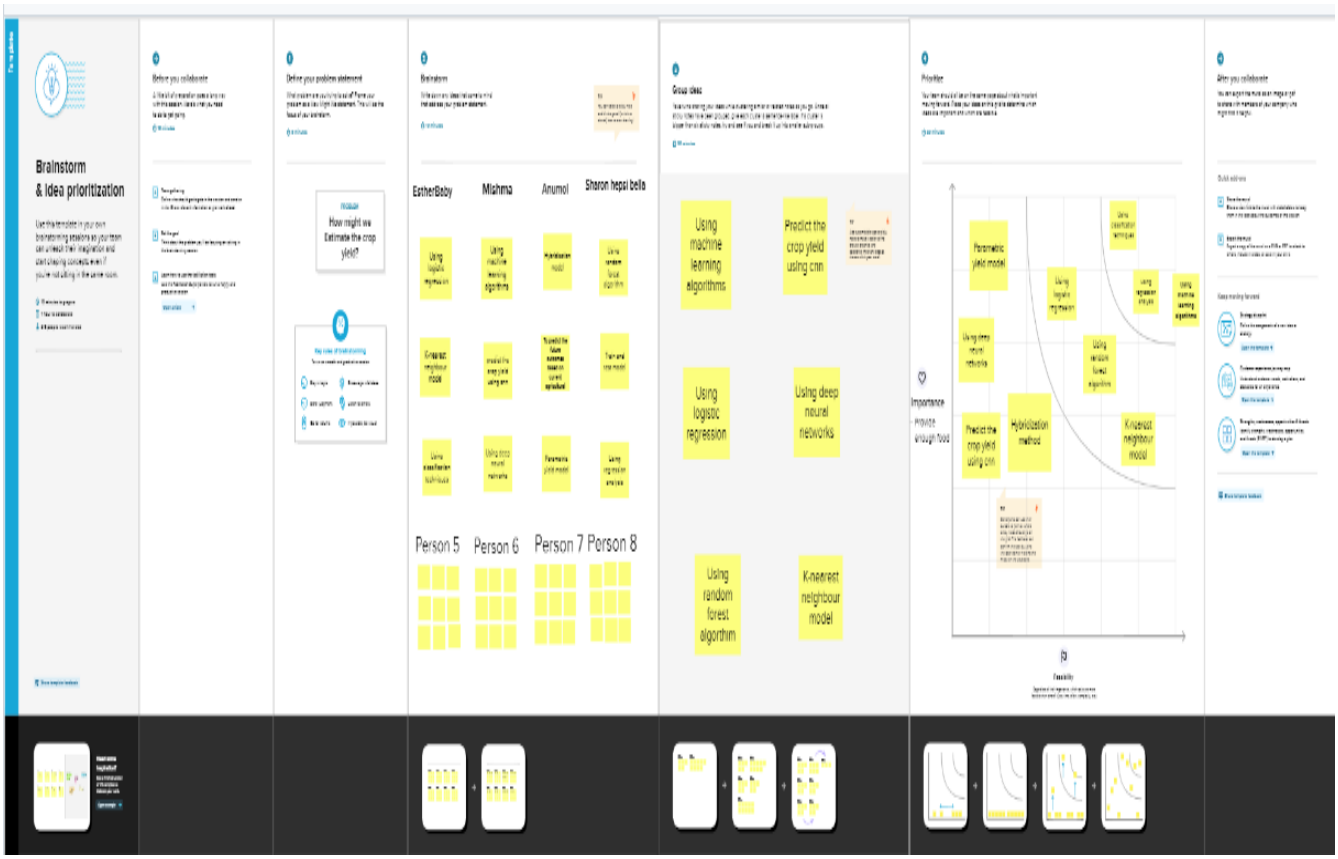
An empathy map is a simple, easy-to-digest visual that captures data a couple of user's behaviors and attitudes. it's a great tool to helps groups higher perceive their users. making a good answer needs understanding truth drawback and therefore the one that is experiencing it. The exercise of making the map helps participants take into account things from the user's perspective in conjunction with his or her goals and challenges.



3.2 IDEATION & BRAINSTORMING

During a brainstorming session, everyone on the team is encouraged to engage in the creative process that leads to problem solving. Instead of putting value over quantity, our participants are encouraged to work together to produce a

wealth of original ideas.



3.3 PROPOSED SOLUTION

Project team shall fill the following information in proposed solution template.

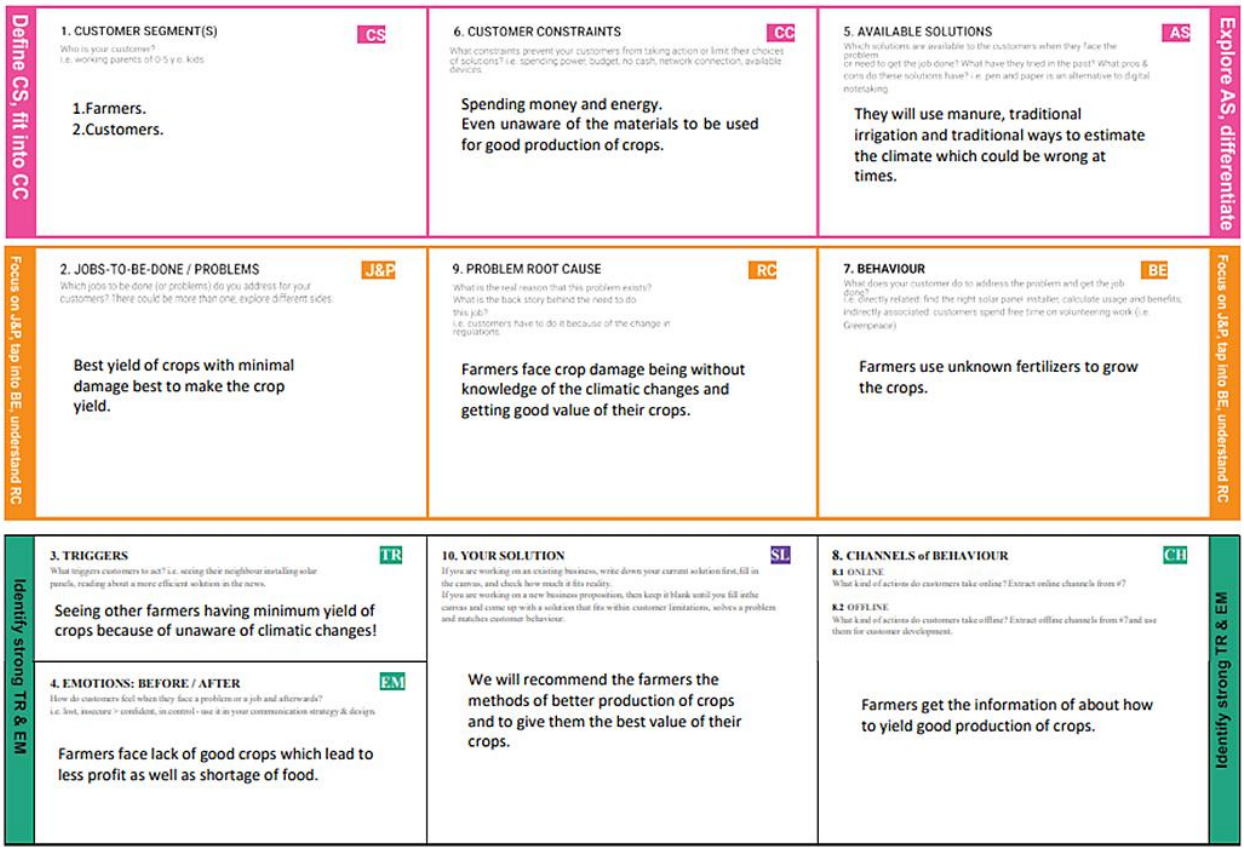
S.NO	PARAMETER	DESCRIPTION

1.	Problem statement (problem to be solved)	This project deals with the estimation of the crop yield in INDIA based on the area,season,state something else to do.
2.	Idea / Solution description	The data's can be visualized using IBM Cognos analytics in various methods. Season with average production. With year usage of area and production. State with crop production . State with crop production along with season.
3.	Novelty / Uniqueness	The uniqueness present in our project is we can easily identify the crop yield based on the seasonal changes and based on the area. Farmers can easily understand the crop sowing
4.	Social Impact / Customer Satisfaction	From the public perception as worst impacts of present data visualization system which does not gave any additional impacts and they have faced many losses.
5.	Business Model (Revenue Model)	It helps farmers to understand easily so that, the organization will earn profit by getting more responses and feedback. We can digitally market because the bar, pie charts are easy to understand it reduces time for organization.
6.	Scalability of the Solution	We can estimate the crop yield by season, area, and yearly production. So, the farmers can easily predict the suitable crop.

3.4 PROBLEM SOLUTION FIT

The problem-solution approach Fit simply means that the problem you've identified with your consumer is solved by the solution you've created.Customer employed an analysis technique on data from crop

yield and crop production.Farmers' practices of using fertilizers to grow crops when the climate changes.



CHAPTER 4

REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Profile	Users Details
FR-4	Required Data	The crop yield figures from the previous year agricultural yield management Regional and seasonal information
	Analysis	Data cleansing and analysis for crop yields from the previous year. Making use of IBM Cognos to visualize the dataset.
	Estimation	Making the ideal data module with eyecatching tales, dashboards, and reports to improve the understand ability of data

4.2 NON-FUNCTIONAL REQUIREMENT

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description

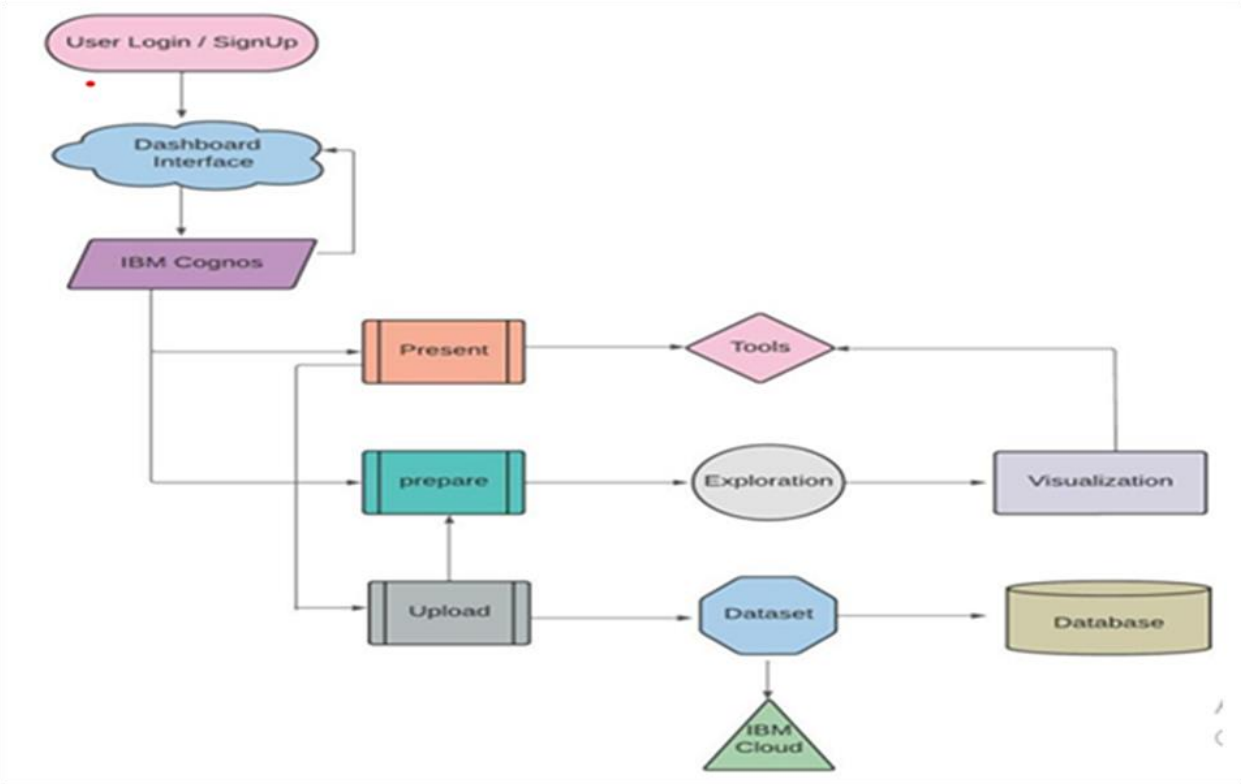
NFR-1	Usability	A data report is generated based on previous data. This recommendation will advise or consult on crop sowing.
NFR-2	Security	IBM Cognosis is designed to meet the security needs of various environments.
NFR-3	Reliability	The dashboard's interactive data visualizations make it simple to understand the data or insights
NFR-4	Performance	The use of data analytics in agriculture increases profitability while also improving crop integrity and quality.
NFR-5	Availability	The dashboard should be simple to use and accessible from any web browser.
NFR-6	Scalability	This allows you to forecast the crop for the coming year.

CHAPTER 5 PROJECT DESIGN

5.1 DATA FLOW DIAGRAM

A data flow chart shows however data flows through a method or system..

This includes data input/output, data storage, and various sub processes through which data moves. DFDs area unit created mistreatment standardized symbols and notations to explain varied entities and their relationships.

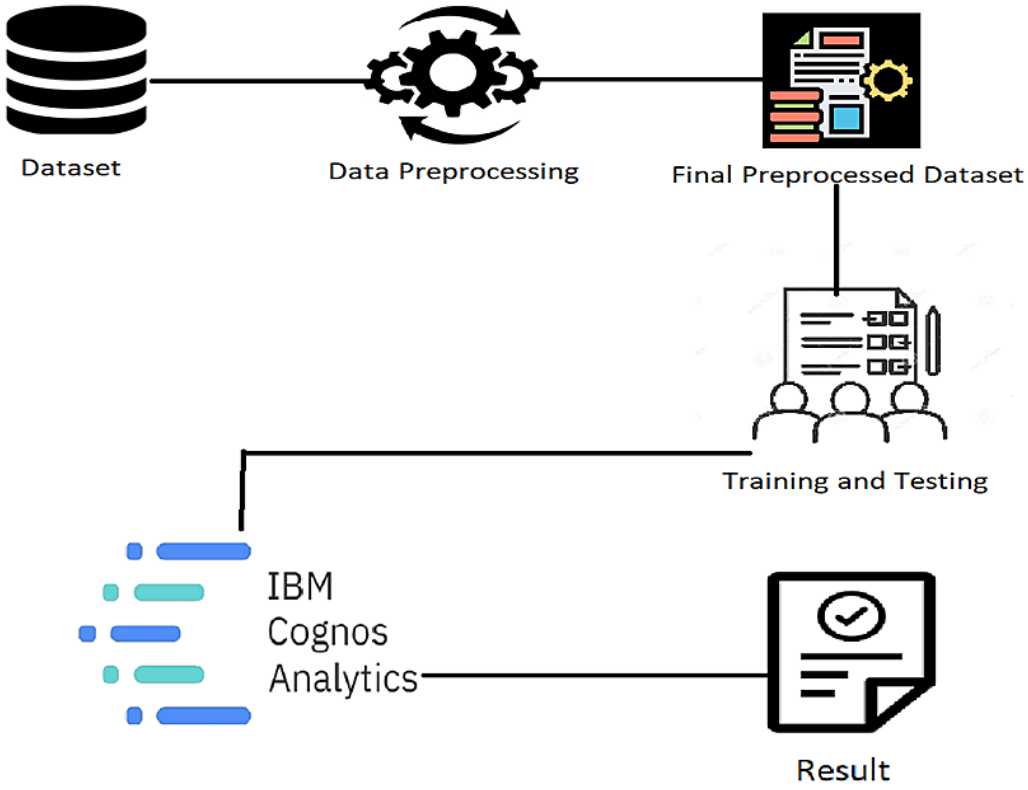


5.2 SOLUTION & TECHNICAL ARCHITRCTURE

To present your insights and analysis, IBM Cognos Analytics offers dashboards and stories. A view that includes visualizations, such as a graph, chart, plot, table, map, or any other type of visual representation of data, can be put together.

Discover trends and correlations that have an influence on your business by exploring stunning data visualizations in IBM Cognos Analytics.

A display helps you keep track of events or activities quickly by displaying important data insights and analyses on one or more pages or screens.

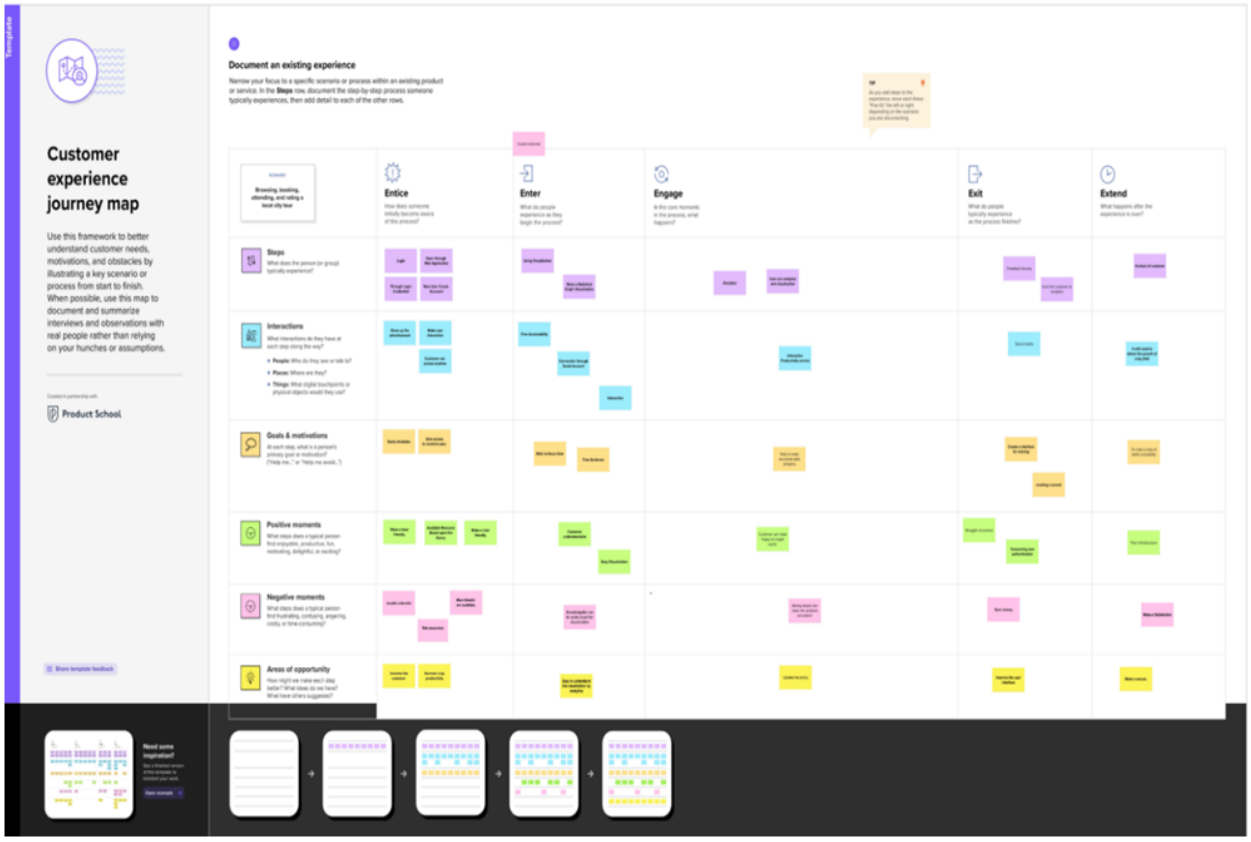


5.3 USER STORIES

A "user narrative" is an informal, generalized description of a software feature written from the client's or end user's point of view. A story demonstrates how a piece of work provides the client with a certain of value.

The user can observe how the dataset is used to produce a farming graph showing crop yield.

The farmer can know a crop's yield of production and if it is positive or negative.



CHAPTER 6

PROJECT PLANNING & SCHEDULING 6.1 SPRINT PLANNING & ESTIMATION

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members

Sprint-1	Registration	1	User canregister for by entering my Crop yield.	2	High	Nithesh A
		2	User can register for the application through G mail	2	Medium	Sugumaran S
	Login	3	User can request and response fordataset	2	High	Tamizh SelvanN
	Working with the Dataset	4	To workon through thedataset and go through the dataset	2	High	Mohanraj S
		5	Load the dataset through the Ibm cognos platform to perform the analytics.	10	High	Ragul S

Sprint-2	Data Visualization Chart	6	Using theirdataset to maintain the visualization and also to create a visualization according their condition.	4	Medium	Ragul S
			Display year-wise usage of Area in Crop Production.	4	Medium	Mohanraj S
			Build a visualization top 10 States in Crop Yield Production by Area.	4	Medium	Nithesh A
			Build theVisualization the CropProduction by State.	4	Medium	SugumaranS
			Build represent States with Seasonal Crop Production usinga Text representation.	4	Medium	Tamizh SelvanN

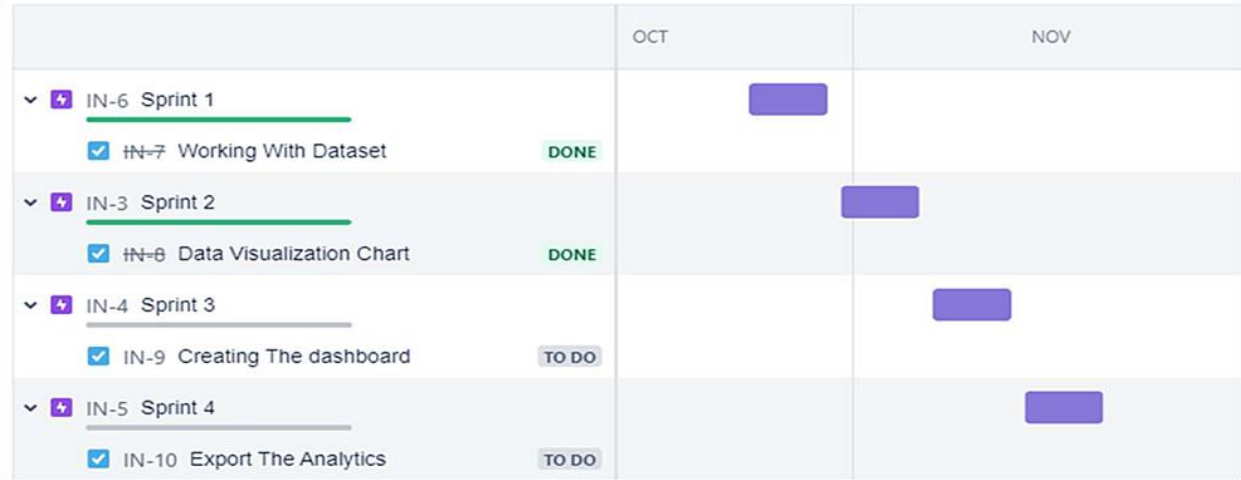
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Creating The dashboard	7	Create the Dashboard by using the created visualizations..	20	High	TamizhSelvan N Ragul S Nithesh A Mohanraj S Sugumaran S
Sprint-4	Export The Analytics	8	Export the created Dashboard	20	High	TamizhSelvan N Ragul S Nithesh A Mohanraj S Sugumaran S

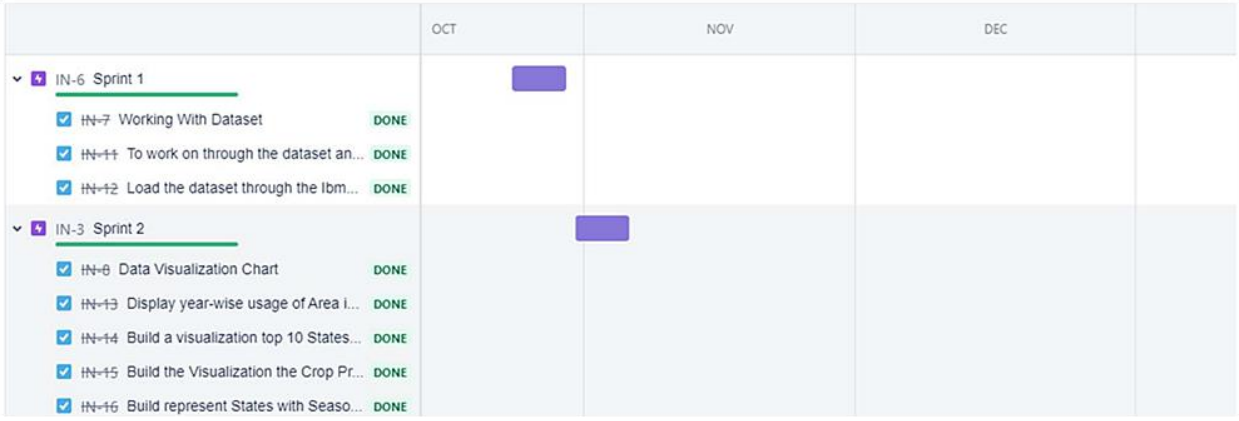
6.2 SPRINT DELIVERY SCHEDULE

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned EndDate)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov2022	12 Nov2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov2022	19 Nov2022	20	19 Nov 2022

6.2 REPORTS FROM JIRA

Jira brings teams together for everything from agile software development and customer support to start-ups and enterprises. Jira assists teams in planning, assigning, tracking, reporting, and managing work.


OCT
NOV
IN-6 Sprint 1
IN-7 Working With Dataset
DONE
IN-3 Sprint 2
IN-8 Data Visualization Chart
DONE
IN-4 Sprint 3
IN-9 Creating The dashboard
TO DO
IN-5 Sprint 4
IN-10 Export The Analytics
TO DO


OCT
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DEC
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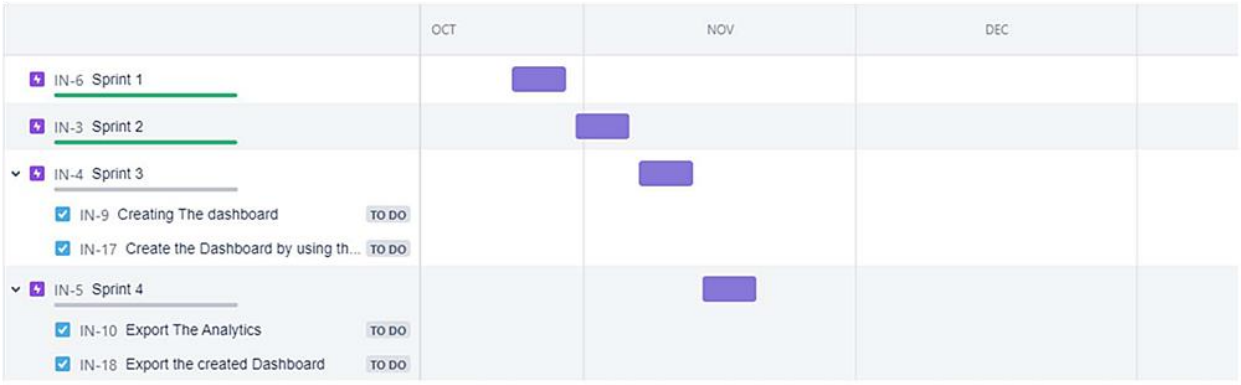
IN-7 Working With Dataset
DONE
IN-11 To work on through the dataset an...
DONE
IN-12 Load the dataset through the Ibm...
DONE
IN-3 Sprint 2
IN-8 Data Visualization Chart
DONE
IN-13 Display year-wise usage of Area i...
DONE
IN-14 Build a visualization top 10 States...
DONE
IN-15 Build the Visualization the Crop Pr...
DONE
IN-16 Build represent States with Seaso...
DONE


OCT
NOV
DEC
IN-6 Sprint 1
IN-3 Sprint 2
IN-4 Sprint 3
IN-9 Creating The dashboard
TO DO
IN-17 Create the Dashboard by using th...
TO DO
IN-5 Sprint 4
IN-10 Export The Analytics
TO DO
IN-18 Export the created Dashboard
TO DO

CHAPTER 7

CODING &SOLUTION

7.1 FEATURE 1

The Indian economy is based primarily on agriculture. Many factors contribute to the majority of Indian farmers not receiving the anticipated crop output.

The weather has a major impact on agricultural yield. The amount of rainfall impacts rice cultivation as well. The farmers in this situation unavoidably need prompt assistance to forecast future crop productivity, and an analysis must be done to assist the farmers in maximizing crop production in their crops. A significant issue in agriculture is yield prediction.

Every farmer wants to know how much of a yield to anticipate. In the past, yield prediction was done by taking into account a farmer's prior experience with a specific crop. The amount of data in Indian agriculture is huge. information when

7.2 FEATURE 2

In Republic of India crop yield is season dependent and majorly influenced by the biological and economic causes of a private crop. reportage of progressive agricultural yield altogether the seasons is a sample task andan advantageous task for each nation with relation to assesses the overall crop yield prediction and estimation. at this time a typical issue worldwide is, farmers are stressed in manufacturing higher crop yield because of the influence of unpredictable climatic changes and important reduction of water resource

worldwide.

A study was meted out to gather information|the info|the data on world climatic changes and therefore the accessible water resources which might be used to encourage advanced and novel approaches such as massive data analytics to retrieve the information of the previous results to the crop yield prediction and estimation. Study foreign that the choice and usage of the foremost fascinating crop in line with the prevailing conditions, support to attain the upper and increased crop yield.

CHAPTER 8

TESTING 8.1 TEST CASES

The purpose of testing is to find errors. Testing is that the tactic of constructing a shot to search out every conceivable fault or weakness in AN extremely work product. It provides how to envision the practicality of parts, subassemblies, assemblies and/or a finished product. it's the method of physical exertion software package with the intent of guaranteeing that the software package meets its necessities associate degree user expectations and doesn't fail in an unacceptable manner..

8.2 USER ACCEPTANCE TESTING

Acceptance by users Any project's testing phase may be crucial, and the tool user's participation is crucial. Additionally, it guarantees that the system satisfies real-world requirements. At this point, all check cases are executed to ensure that the programmed is accurate and complete.

Before the customer will accept the programmed, the test must be passed successfully. After customer personnel have verified that the preliminary production statistics load is accurate and that the test suite has been completed flawlessly, the customer formally accepts the delivery of this system.

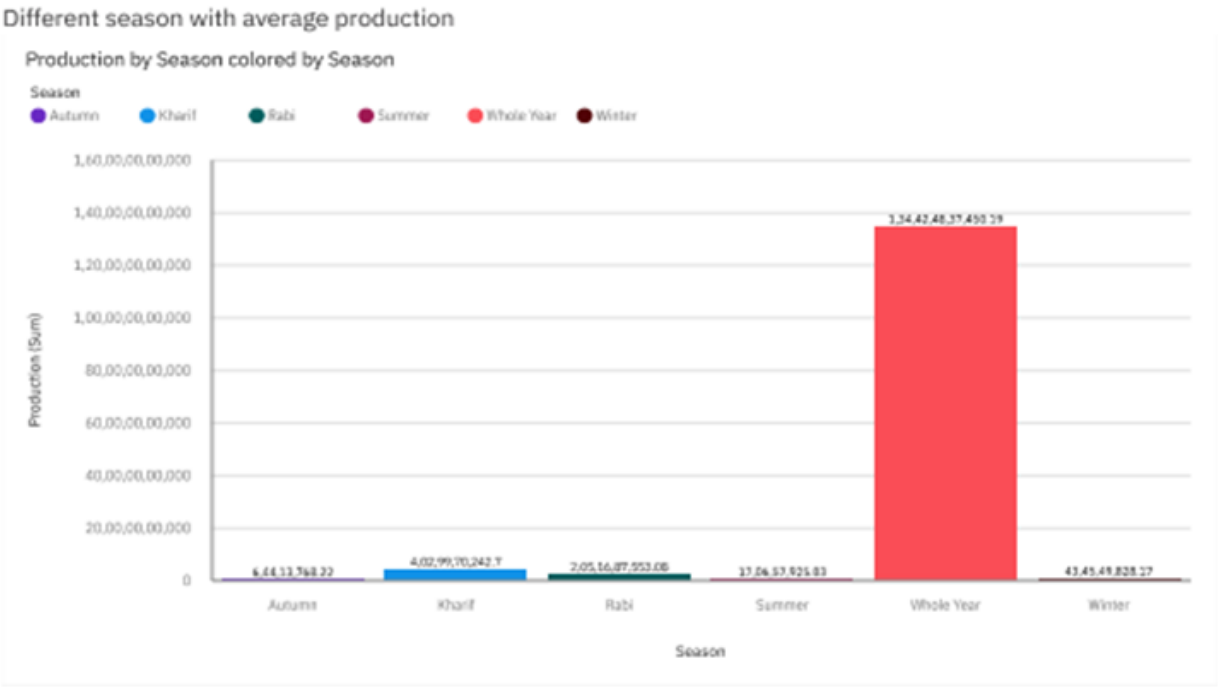
CHAPTER 9

RESULTS

9.1 PERFORMANCE METRICS

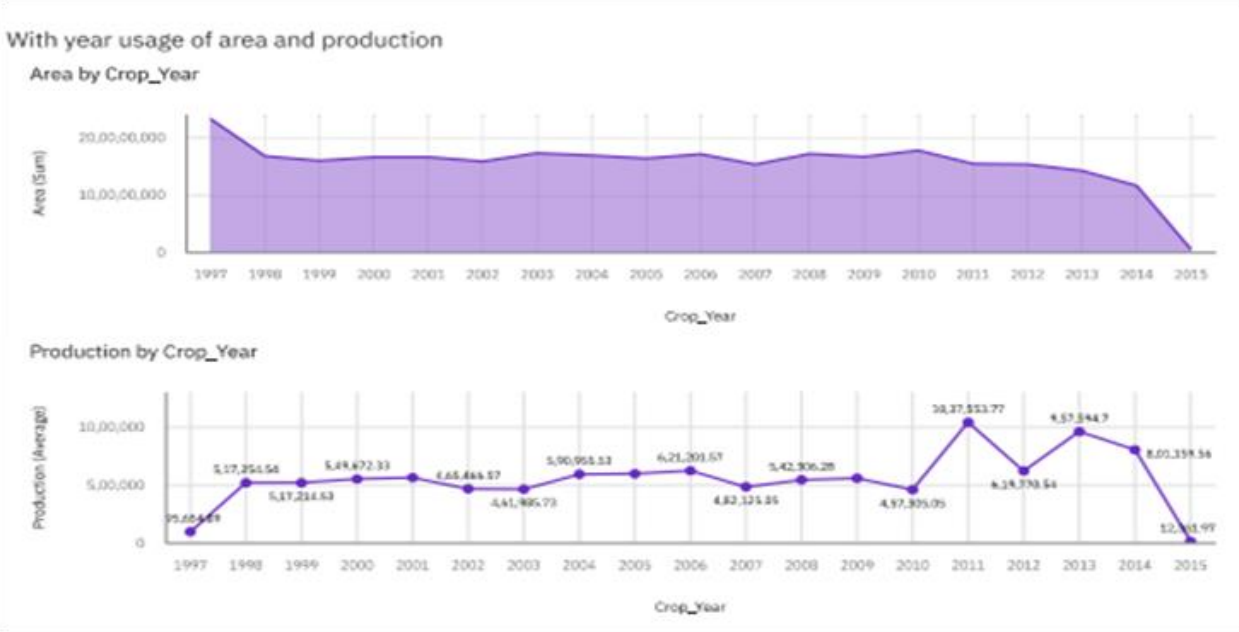
9.1.1 SEASON WITH AVERAGE PRODUCTION

As production of crops depends on different seasons, so let's plot the graphs to visualize the average production based on different seasons.



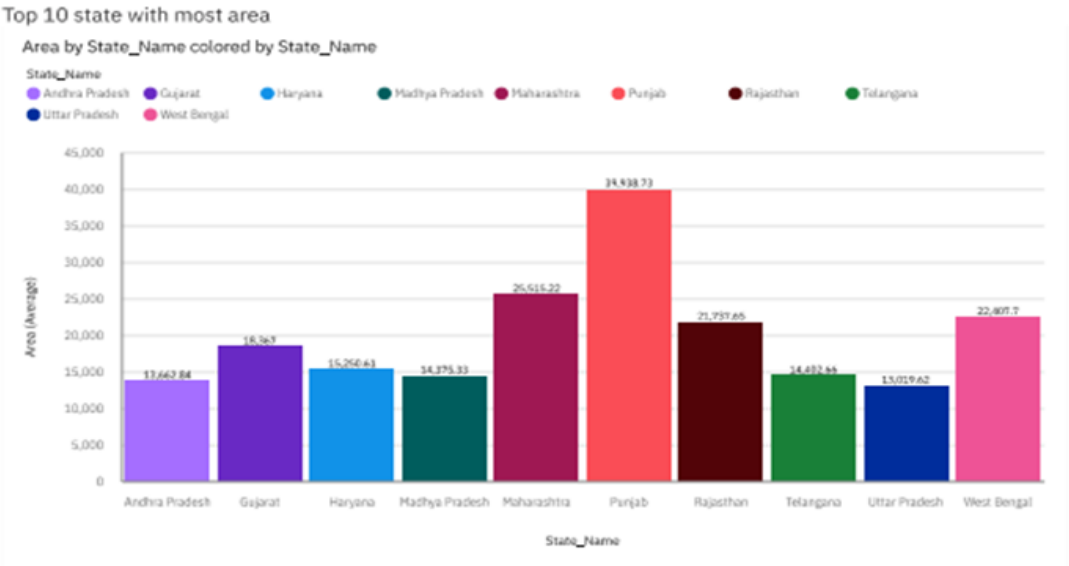
9.1.2 WITH YEARS USAGE OF AREA AND PRODUCTION

In our dataset we also have a year's columns by which we will plot a line and area graphs to see the change in these both data with respect to increase in years.



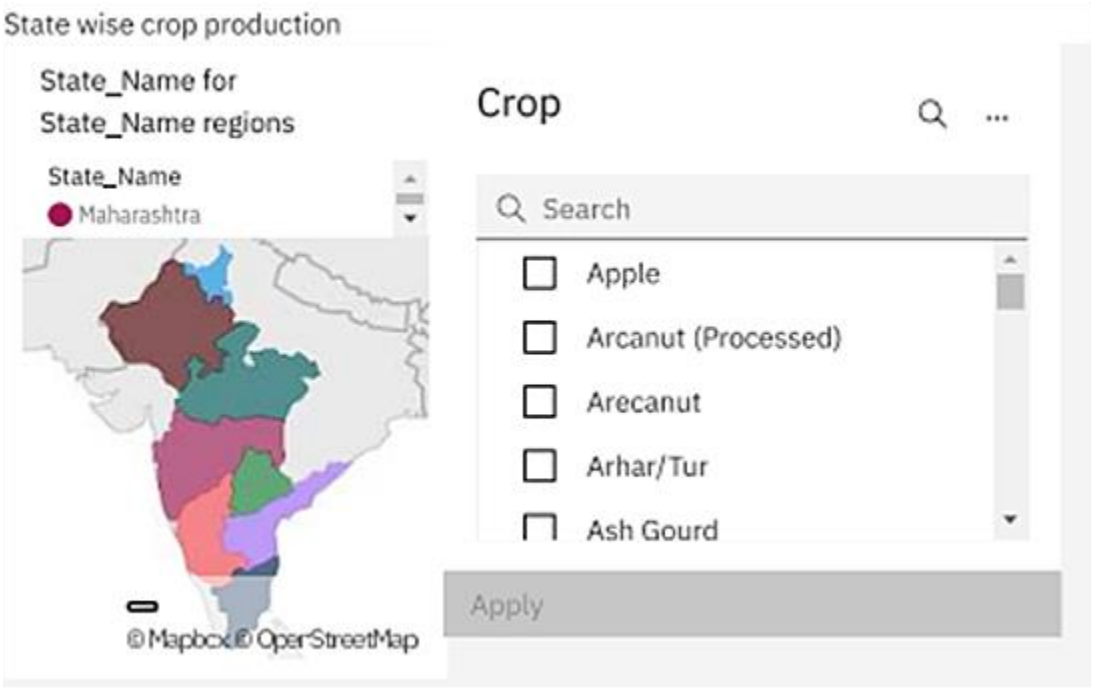
9.1.3 TOP 10 STATE WITH MOST AREA

As we have an area data in our dataset, we will be plotting some graphs to visualize the top 10 Indian states with the most area.



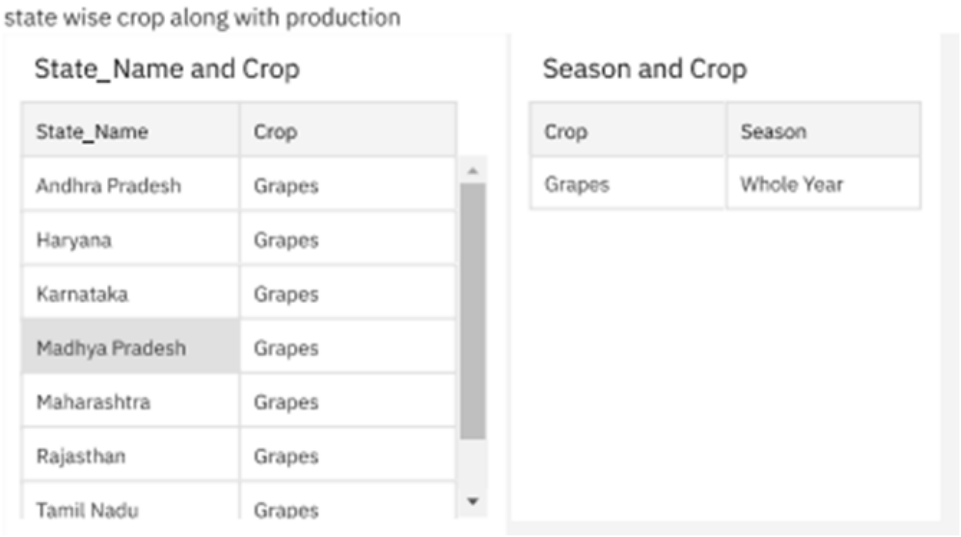
9.1.4 STATE WISE CROP PRODUCTION

There are so many different crops produced in Indian and most of us don't know which crop is belongs to which state so we will be plotting and highlight the states in map according to different crops.



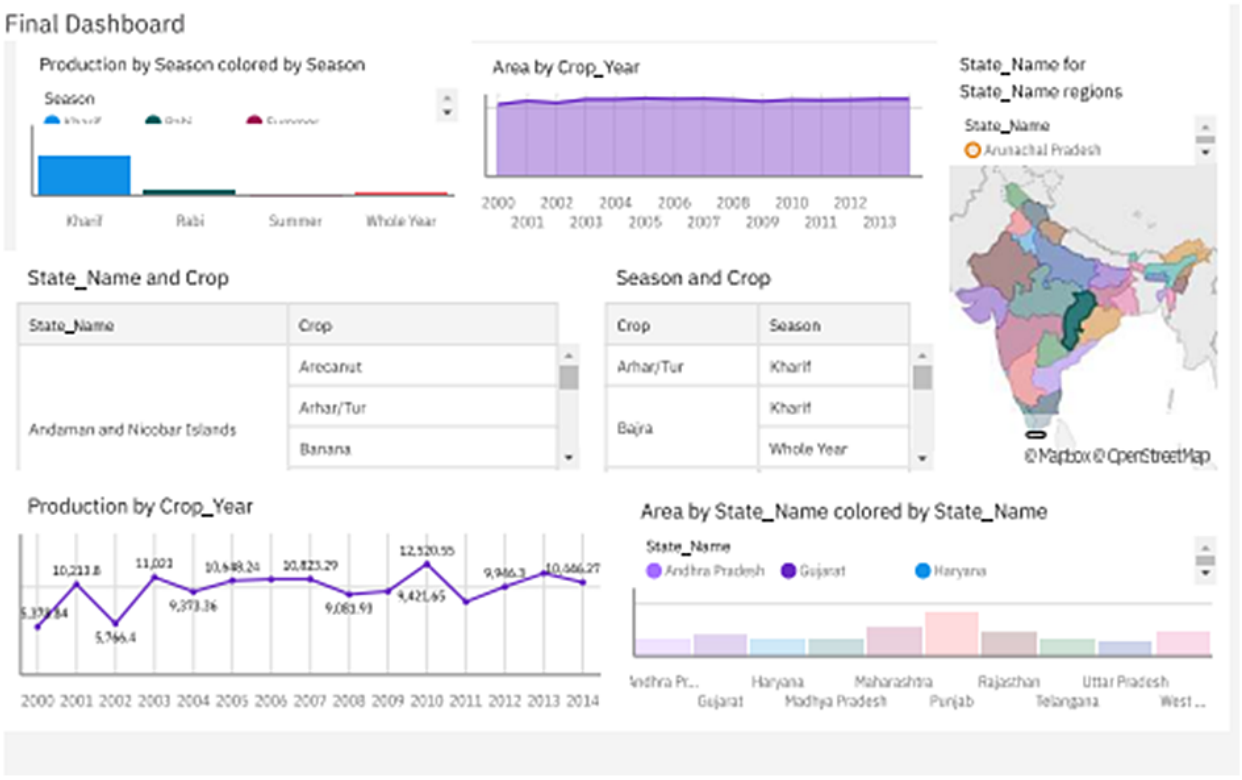
9.1.5 STATE WISE CROP PRODUCTION ALONG WITH SEASON

Taking forward the previous plot we will be fetching the state name and showing it in a text table whenever different crops are chosen.



9.1.6 FINAL DASHBOARD

Once you've created views on different tabs in Cognos analytics, you can pull them into a dashboard.



CHAPTER 10

10.1 ADVANTAGES

1. Collect the dataset from crop yields in production.
2. Farmer can easy to learn.
3. And we can estimated the crop profit or loss.

10.2 DISAVANTAGES

i. Sometimes Not Accuracy. ii. Design Issues. iii. Core Messages can be Skipped.

CHAPTER 11

CONCLUSION

There has been a little increase in productivity due to technology's encroachment into the agricultural sector. The improvements have given rise to fresh concepts including precision agriculture, good farming, and digital agriculture. It has been found in the literature that analysis has been done on data related to crop yields, hidden patterns uncovered victimization, and agricultural output. In multiple states and districts, we have identified and analyzed the various crops that are grown, the space they are grown in, and the output they produce. IBM One of them is 1) Seasons with average productions, according to Cognos. In this analysis, we seek to understand which seasons see a high level of common production and which seasons see a low level of assembly.2) Production split up per crop year. In this analysis, we seek to understand the years in which the population is at its highest and lowest levels. 3) District-based production. With the use of these analytics, we can focus on the states and districts that are cultivating the specified crops. 4) Space production. From this, we can determine how much land needs to be planted and predict how much production to expect. After creating the

dashboard, study was done to determine which state, which year, and how much crop area will be produced.

CHAPTER 12

FUTURE SCOPE

As part of this project, we will analyst several key visualizations, create a dashboard, and then browse it to gain the most information possible about crop output in the Republic of India. Analytics is the process of interpreting data patterns to help in decision-making and performance enhancement. Crop yield analytics in agriculture aids in the analysis of certain important visuals and the creation of a dashboard, and by looking at these, we may learn most about crop output in the Republic of India. By integrating reportage, modelling, analysis, exploration, dashboards, stories, and event management, IBM Cognos Analytics enables us to perceive the knowledge within our business and make wise decisions .A dashboard provides vital insights and analysis on our expertise on one or several pages or screens, enabling the United States to observe events or activities at a glance. In this project, we frequently create dashboards to visualize, analyze, and get the majority of the insights.

ADVANTAGES:

The data's can be visualized using IBM Cognos analytics in various methods.

a. Season with average production.

b. With year usage of area and production.

c. State with crop production.

d. State with crop production along with season.

CHAPTER 13

APPENDIX

13.1 SOURCE CODE

Story.html

```
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>  body
{
  margin: 0;
  font-family: Arial, Helvetica, sans-serif;
}
.topnav {
  overflow: hidden;
  background-color: #333;
}
.topnav a {
```

```
  float: left;
  color: #f2f2f2;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
  font-size: 17px;ac
}
.topnav a:hover {
  background-color: #ddd;
  color: black;
}
</style>
</head>
<body>
<div class="topnav">
  <a href="index.html">Home</a>
  <a href="Visualization_Page.html">Visualization</a>
  <a href="dash.html">Dashboard</a>
  <a href="story.html">Story</a>
  <a href="report.html">Report</a>
  <a href="crop_production.csv">Dataset</a>
  <a href="about.html">About us</a>
```

```
</div>

</br>

<center><h2 style="font-family:Arial, Helvetica, sans-serif; font-weight: bolder;">Story-Visualization</h2>

<iframe src="https://us1.ca.analytics.ibm.com/bi/?perspective=story&amp;pathRef=.my_f o lders%2FFINAL%2FSTORY-DASHBOARD&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp ;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;sceneId= model000001847bdb24a5_00000000&amp;sceneTime=850" width="850" height="550" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

</center>

</body>

</html>
```

Dashboard.html

```
<html>

<head>

<meta name="viewport" content="width=device-width, initial-scale=1">

<style> body

{

 margin: 0;

 font-family: Arial, Helvetica, sans-serif;

}

.topnav {

 overflow: hidden;
```

```
  background-color: #333;
}
.topnav a {
  float: left;
  color: #f2f2f2;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
  font-size: 17px;
}
.topnav a:hover {
  background-color: #ddd;
  color: black;
}
</style>
</head>
<body>
<div class="topnav">
  <a href="index.html">Home</a>
  <a href="Visualization_Page.html">Visualization</a>
  <a href="dash.html">Dashboard</a>
  <a href="story.html">Story</a>
```

```
 <a href="report.html">Report</a>

 <a href="crop_production.csv">Dataset</a>

 <a href="about.html">About us</a>

</div>

</br>

<center><h2 style="font-family:sans-serif; font-weight: bolder;">DashboardVisualization</h2>


  <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&amp;pathRef=.
my_folders%2FFINAL%2FFINALDASHBOARD&amp;closeWindowOnLastView=true&amp;ui
_appbar=false&amp
;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;mode=das
hboard&amp;subView=model000001847bce849d_00000001" width="850" height="550"
frameborder="0" gesture="media" allow="encrypted-media"
allowfullscreen=""></iframe>

  </center>


</body>

</html>
```

About.html

```
<html>
```

```
<head>
<style> body
{
  font-family: Arial, Helvetica, sans-serif;
  margin: 0;
}  html
{
  box-sizing: border-box;
}
*, *:before, *:after {
  box-sizing: inherit;
}
.about-section {
  padding: 50px;
  text-align: center;
  background-color: #474e5d;
  color: white;
}
.container {
  padding: 0 16px;
}
.container::after, .row::after {
  content: "";
```

```
  clear:              both;
display: table;
}
.topnav {
  overflow: hidden;
  background-color: #333;
}
.topnav a:hover {
  background-color: #ddd;
  color: black;
}
</style>
</head>
<body>
  <div class="topnav">
  <a href="index.html">Home</a>
  <a href="Visualization_Page.html">Visualization</a>
  <a href="dash.html">Dashboard</a>
  <a href="story.html">Story</a>
  <a href="report.html">Report</a>
  <a href="crop_production.csv">Dataset</a>
  <a href="about.html">About us</a>
```

```
</div>
<h2 style="text-align:center">About us</h2>
</br><div class="row">
  <div class="column">
    <div class="card">
      <div class="container">
      </br>
        <p>TEAM GUIDE: MR.R.PALANI KUMAR</p>
    </br>
      </div>
    </div>
</div>
</div>
<div class="row">
  <div class="column">
   <div class="card">
      <div class="container">
      </br>
        <p>TEAM LEAD:RAGUL S</p>
        <p>TEAM MEMBER  1:MOHANRAJ S</p>
        <p>TEAM MEMBER 2:NITHESH A</p>
        <p>TEAM MEMBER 3:SUGUMARAN S</p>
```

```
      <p>TEAM MEMBER 4:TAMIZH SELVAN N</p>
   </br>
    </div>
   </div>
</div>
</body>
</html>
```

Visualization.html:

```
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>  body
{
  font-family: Arial, Helvetica, sans-serif;
  margin: 0;
}
.navbar {
 overflow: hidden;
  background-color: #333;
}
.navbar a {
  float: left;
  font-size: 17px;
```

```
  color: white;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
}
.subnav {
  float: left;
  overflow: hidden;
}
.subnav .subnavbtn {
  font-size: 17px;
  border: none;
  outline: none;
  color: white;
  padding: 14px 16px;
  background-color: inherit;
  font-family: inherit;
  margin: 0;
}
.navbar a:hover, .subnav:hover .subnavbtn {
  background-color: gray;
}
```

```
.subnav-content {
  display: none;
  position: absolute;
  background-color: gray;
  min-width: 160px;
  box-shadow: 0px 8px 16px 0px rgba(0,0,0,0.2);
  z-index: 1;
}
.subnav-content a {
  float: none;
  color: white;
  padding: 12px 16px;
  text-decoration: none;
  display: block;
  text-align: left;
}

.subnav-content a:hover {
  background-color: #eee;
  color: black;
}
.subnav:hover .subnav-content {
  display: block;
```

```
}
</style>
</head>
<body>
<div class="navbar">
 <a href="index.html">Home</a>
 <div class="subnav">
                                <button       class="subnavbtn">Visualization<i
class="fa      fa-caretdown"></i></button>
   <div class="subnav-content">
    <a href="vis1.html">1. Season with average production</a>
    <a href="vis2.html">2. With year usage of area and production</a>
    <a href="vis3.html">3. Top 10 State with most area</a>
    <a href="vis4.html">4. State with crop production</a>
    <a href="vis5.html">5. State with the crop production with season</a>
   </div>
 </div>
 <a href="dash.html">Dashboard</a>
 <a href="story.html">Story</a>
 <a href="report.html">Report</a>
 <a href="crop_production.csv">Dataset</a>
<a href="about.html">About us</a>
   </div>
```

```
</br></br></br></br></br></br></br>

<div class="div1">

        <center><h2>Estimate the crop yield production using Data Analytics</h2></center>

</br></br>

<center><img src="visuali.png" width="320px" height="155px"></center>

</br>

</div>

</body>

</html>
```