

Power BI Source File

- Project Documentation

Submitted as part of Internship at SoulVibe Tech

Submitted By:
Ajay Kumar Sahu

Date: 1 July, 2025

◆ Overview of the Source File (.pbix)

This document outlines the content and logic behind my Power BI source file, named:

File Name: Ajay_Kumar_Sahu_PowerBI_Task

Tool Used: Power BI Desktop (June 2025 version)

The file contains all the data transformations, visuals, and reports built as part of my internship task. Since the submission portal does not allow .pbix uploads, this PDF serves as documentation for the same.

◆ Dataset Used

- **Source:** DA Batch 10 Dataset.csv
 - **Records:** 60,000+ entries
 - **Key Columns:** District, Taluka, College Name, College Type, University, Course Name, Course Type, Duration, Category
 - **Data Structure:** Single flat table (no relationships)
-

◆ Data Preparation & Transformation

All data transformation was performed in **Power Query Editor**. The following steps were applied:

1. **Removed missing values** in the 'College Type' column.
 2. **Renamed columns** to remove spaces and improve readability
(e.g., "Course Name" → "Course_Name")
 3. **Created new column – Specialization**
 - Extracted from 'Course Name' by splitting text after the hyphen
(e.g., "ITI – Electrician" → "Electrician")
 4. **Created Duration Category column**
 - Based on months:
 - Short (< 12 months)
 - Medium (12–36 months)
 - Long (> 36 months)
-

◆ Visualizations Built

The report includes one main dashboard and a Q&A page:



Dashboard Page

- District-wise college count (bar chart)
- Course categories (stacked chart)
- Type of colleges (pie chart)
- Duration breakdown (bar chart with filters)

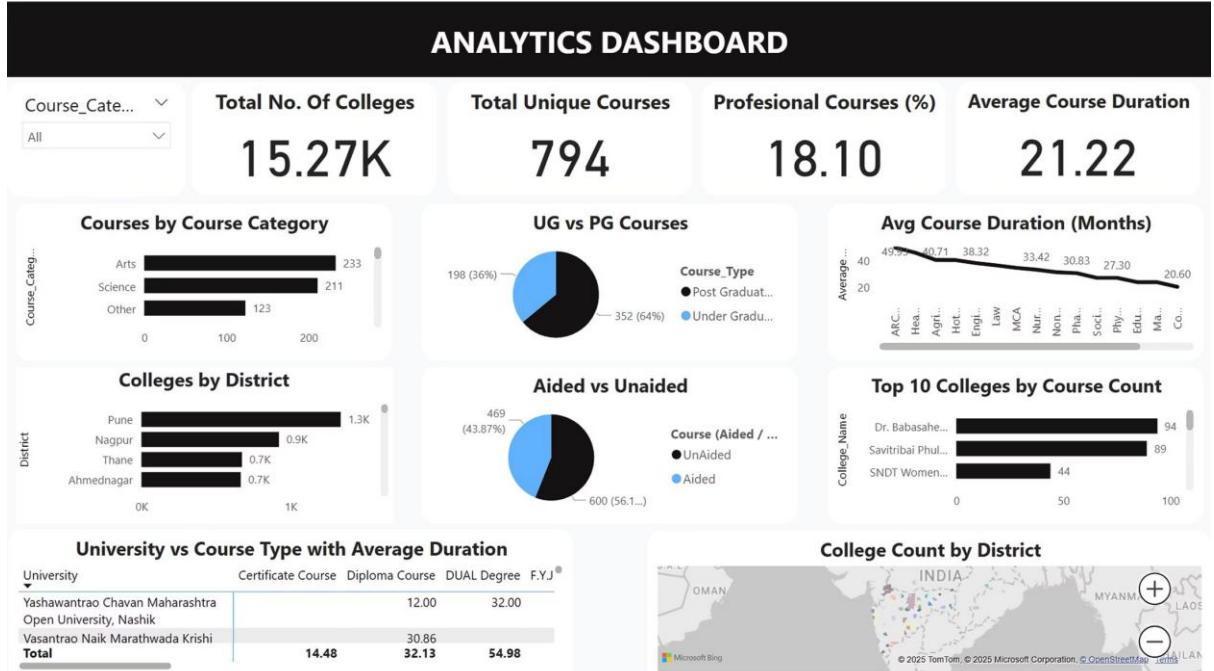
Q&A Page

- Interactive visual generation using natural language (e.g., “Top 5 specializations”)

All visuals are **cross-filtered** and dynamic using slicers.

◆ Screenshots from the PBIX File

1. Dashboard Overview



2. Data Transformation Steps in Power Query Editor

The screenshot shows the Power Query Editor interface with a table named "DA Batch 10 SQL & Pow...". The table has columns: Sr.No, District, Taluka, College_Name, and University. The University column contains many entries like "SANT GADGE BABA" and "DEEMED UNIVERSITY". The "APPLIED STEPS" pane on the right shows various transformations applied, including "Replaced Value1" and "Replaced Value2".

3. Q&A Visual Page (if used)

The screenshot shows a Q&A Visual Page titled "REPORT PAGE" containing six visualizations:

- 1. Which district has the most colleges?** Bar chart showing districts and their counts: Pune (1.3K), Nagpur (0.9K), Thane (0.7K), Ahmednagar (0.7K), Aurangabad (0.6K), Nashik (0.6K), Mumbai Subu... (0.6K), Amravati (0.5K), Solapur (0.5K).
- 2. What are the most common course categories?** Donut chart showing course categories and their percentages: Arts (29.09%), Management (26.34%), Commerce (15.36%), Law (6.00%), Agriculture (5.70%), Other (2.00%), Science (1.62%), and Health Science (0.00%).
- 3. Which universities offer the widest range of course types?** Table listing universities: Shantaram Potlukhe College of Law, Chandrapur; Savitribai Phule Pune University; Ness Wadia College of Commerce; Narayanrao Chavan Law College, Nanded; M. P. Law College, Aurangabad; K.R.T. Arts, B.H. Commerce & AM Science College, Nashik; Gokhale Education Society's BYK College of Commerce, Nashik; DR. AMBEDKAR JR. COLLEGE DIKSHABHUMI NAGPUR; DHANANJAYRAO GADGIL COLLEGE OF COMMFRCE, SATARA.
- 4. Are aided courses more common in professional or non-professional programs?** Stacked bar chart showing aided and unaided courses: Non-Professional Course (363), Professional Course (439), Is_Professional (163).
- 5. Which college has the longest average course duration?** Table listing colleges: Zuleikhabai Valy Md. Unani Medical College & Hospital; Yunus Fazlani Unani Medical College & Al-Fazlani Unani Hospital; Yashoda College of Architecture, Satara; Walwa Taluka Education Society's Shri. S. D. Patil College of Architecture, Islampur; Vivekanand Education Society's College of Architecture, Chembur, Mumbai; Vishwaniketan College of Architecture, Art & Design, Khalapur; Vishveshwar Shikshan Prasarak Mandal, Shivlingeshwar.
- 6. What is the top specialization in the state?** Bar chart showing specializations and counts: ITI (82), Information Technology (7), Automobile Engineering (6), Civil Engineering (6), Computer Engineering (6), Computer Science (6), Electrical Engineering (6), Electronics and Communication Engineering (6), Electronics Engineering (6), and Mechanical Engineering (6).

◆ Notes

The .pbix file contains:

- All visuals
- Transformations
- Custom columns

- Q&A visual logic

I have attached this in my GitHub portfolio.

 **Thank You**

This documentation reflects the structure and logic behind my Power BI project as part of my internship submission.