A COMPARATIVE STUDY OF TOP GLOBAL UNIVERSITIES IN DATA ANALYTICS

NAAN MUDHALVAN

PROJECT REPORT

Submitted By

ARUN KUMAR S	**611220104009**
ASHIKA SHARON P	**611220104012**
GAYATHRI PRIYANKA R	**611220104045**
GOBI J	**611220104046**

in partial fulfilment for the award of the degree

of

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING

KNOWLEDGE INSTITUTE OF TECHNOLOGY,

SALEM-637504

ANNA UNIVERSITY::CHENNAI 600 025

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BONAFIDE CERTIFICATE

Certified that this project report titled **"A COMPARATIVE STUDY OF TOP GLOBAL UNIVERSITIES IN DATA ANALYTICS"** is the bonafide work of **"ARUN KUMAR S (611220104009), ASHIKA SHARON P (611220104012), GAYATHRI PRIYANKA R (611220104045), GOBI J (611220104046)"** who carried out the project work under my supervision.

SIGNATURE

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FACULTY MENTOR

ASSISTANT PROFESSOR

Department of Computer Science

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Knowledge Institute of Technology,

Kakapalayam,

Salem - 637 504.

SPOC

HEAD OF THE DEPARTMENT

ACKNOWLEDGEMENT

At the outset, we express our heartfelt gratitude to **GOD,** who has been our strength to bring this project to light.

At this pleasing moment of having successfully completed our project, we wish to convey our sincere thanks and gratitude to our beloved president **Mr. C. Balakrishnan,** who has provided all the facilities to us.

We would like to convey our sincere thanks to our beloved Principal **Dr. PSS. Srinivasan,** for forwarding us to do our project and offering adequate duration in completing our project.

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With deep sense of gratitude, we extend our earnest and sincere thanks to our SPOC **Mr. T. Karthikeyan,** Assistant Professor, Department of Computer Science and Engineering for his guidance and encouragement during this project.

We would also like express our thanks to all the faculty members of our department, friends and students who helped us directly and indirectly in all aspects of the project work to get completed successfully.

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ABSTRACT

ABSTRACT

In the ever-evolving landscape of data analytics, the demand for skilled professionals continues to grow exponentially. To meet this demand, universities around the world have established programs and departments dedicated to data analytics and related fields. This comparative study aims to assess and rank the top global universities offering data analytics programs, considering various factors such as academic excellence, research output, industry collaborations, and the overall impact of their programs. The study employs a multi-faceted approach to evaluate these universities. It includes quantitative metrics, such as faculty-to-student ratios, research publication productivity, and industry partnerships, as well as qualitative assessments, such as the quality of curricula, alumni success, and global recognition. Through an extensive review of publicly available data, surveys, and expert opinions, this research project aims to provide a comprehensive analysis of the top global universities in data analytics. By identifying the strengths and weaknesses of each institution, prospective students, employers, and policymakers can make informed decisions about where to invest their resources and talent. Ultimately, this comparative study contributes to the ongoing discourse on the development and enhancement of data analytics programs worldwide, ensuring that universities are adequately preparing the next generation of data scientists and analysts for the challenges and opportunities of the data-driven world.

LIST OF FIGURES

LIST OF ABBREVIATIONS

ABBREVIATION	EXPANSION
THE	TIMES HIGHER EDUCATION
QS	QUACQUARELLI SYMONDS
ARWU	ACADEMIC RANKING OF WORLD UNIVERSITIES
USNWR	UNITED STATES NEWS & WORLD REPORT

INTRODUCTION

1. INTRODUCTION

1.1 PROJECT OVERVIEW

"A Comparative Study of Top Global Universities in Data Analytics," seeks to conduct an in-depth evaluation and ranking of the world's leading universities that offer data analytics programs. In today's data-driven world, data analytics is instrumental in shaping industries and decision-making processes, leading to a surge in demand for skilled professionals in this field. Recognizing this demand, universities worldwide have established dedicated programs and departments. This project's primary objective is to comprehensively assess these programs and universities by considering a wide range of both quantitative and qualitative factors. The project aims to identify the key players in the realm of data analytics education, acknowledging universities that have emerged as leaders in this field. It quantifies academic excellence by employing various metrics, such as faculty-to-student ratios, research productivity, and other academic indicators. Furthermore, it assesses the industry relevance of these programs by scrutinizing factors like industry collaborations, internship opportunities, and job placement rates. The project also delves into the quality of curricula, examining the structure, content, and relevance of data analytics courses. Finally, the success of alumni from these institutions will be evaluated to gauge the overall effectiveness of the programs.

1.2 PURPOSE

The primary purpose of this research project, titled "A Comparative Study of Top Global Universities in Data Analytics," is to provide a comprehensive and objective assessment of universities offering data analytics programs on a global scale. In the contemporary world, characterized by data-driven decision-making

and technological advancements, data analytics has become a critical discipline that significantly influences industries and businesses. The escalating demand for skilled professionals in this field has led to the proliferation of data analytics programs in universities worldwide. The project's purpose is to address the need for clarity and guidance in this rapidly evolving landscape by achieving the following objectives.

Firstly, the project aims to identify and acknowledge the universities that have established themselves as leaders in the field of data analytics education. Recognizing these key players is crucial for prospective students, educators, and employers to make informed decisions about where to invest their resources and talent.

Secondly, the project seeks to quantitatively measure academic excellence in data analytics programs. By examining factors such as faculty-to-student ratios, research productivity, and other academic indicators, the project aims to assess the quality and rigor of these programs. This serves as a critical benchmark for students and institutions seeking to engage with the best educational offerings in the field.

Thirdly, the project intends to evaluate the practical relevance of data analytics programs. By analyzing industry collaborations, internship opportunities, and job placement rates, it provides insights into how well these programs prepare students for real-world challenges and opportunities, which is invaluable information for prospective students and employers.

Additionally, the research project delves into the quality of data analytics curricula, examining the structure, content, and relevance of the courses and programs offered by these universities. This assessment aids students and educators in selecting or designing programs that best align with the evolving needs of the industry. Lastly, the project aims to consider the success of alumni from these institutions.

LITERATURE SURVEY

2. LITERATURE SURVEY

2.1 THE STUDY OF GLOBAL MOBILITY OF THE TECHNOLOGY UNIVERSITY STUDENTS (CHAO-HUNG YANG, HORNG-REN TSAI)

A nations prosperity depends on its international competitiveness. Global mobility is one of important capabilities of the Technology University students to enhance the international competitiveness of the nation. Students with international experience should be one of the valuable assets to their country. This study examines whether the Technology University students own the ability of global mobility or not. Using structural equation analysis, the proposed model was tested with 404 samples from Technology University students. The results indicate that the communication and professional have a positive effect on global mobility.

2.2 UNIVERSITY RANKING PREDICTION SYSTEM BY ANALYZING GLOBAL PERFORMANCE (Anika Tabassum; Mahmudul Hasan; Shabbir Ahmed; Rahnuma Tasmin; Deen Md. Abdullah; Tasnim Musharrat)

In this research, we present a technique of developing university ranking prediction system by analyzing global university performance indicators. Here, we consider standardized dataset of Times higher education world university rankings. Firstly, we perform country wise university ranking data analysis to observe the variation of performance indicators to find out the top influential features. To build the proposed prediction model, we split the ranking dataset into training and test data. Then, based on score of previous years we generate predicted score for each influential feature using our proposed outlier detection and rank score calculation algorithm. Later on, all the universities are ranked globally based on the predicted total score.

2.3 EQUIPPING ENGINEERING STUDENTS WITH GLOBAL SKILLS: DEVLOPING GLOBAL MINDS THROUGH UNIVERSITY LIFE(ANNA DANIELEWICZ-BETZ;TATSUKI KAWAGUCHI)

This paper that explores the strategies and initiatives aimed at preparing engineering students for global challenges and opportunities. The authors emphasize the importance of nurturing a global perspective and cross-cultural skills within engineering education. They discuss how university life can serve as a platform for developing the essential competencies required for success in a globalized world. The paper likely provides insights into specific programs, activities, and approaches that universities can adopt to enhance the internationalization of engineering education, fostering global minds among their students.

2.4 INCLUSION OF YOUNG UNIVERSITIES INTO THE GLOBAL ACADEMIC COMMUNITY (DMITRY KONDRATYEV; ELMIRA KHALITOVA)

The inclusion of young universities into the global academic community presents both challenges and opportunities. This paper explores the case of Innopolis University in Russia, a relatively new institution with a unique focus on technology and innovation. The study delves into the strategies employed by Innopolis University to establish itself on the global academic stage, emphasizing the significance of innovation, international collaboration, and adapting to the evolving landscape of higher education. By examining the experiences and lessons learned from Innopolis University, this paper offers insights into how young universities can navigate the complexities of global academia and contribute to the worldwide knowledge exchange.

IDEATION & PROPOSED SOLUTION

3. IDEATION & PROPOSED SOLUTION

3.1 PROBLEM STATEMENTS DEFINITION

S. no	I am	Trying to	But	Because	Which makes me feel
1.	Student	I am looking to pursue a career in data analytics and want to choose the best university for my education	However, the existing university rankings are generic and don't specifically address data analytics programs.	I am uncertain about which universities offer the best data analytics education	making it challenging for me to decide where to enroll
2.	Educator	I am responsible for designing and improving data analytics programs at my university.	I'm trying to enhance the program's quality and industry relevance.	because there is no specialized ranking system for data analytics programs	This absence of comparative data makes it difficult to identify areas for improvement.
3.	Employer	I am responsible for hiring data analytics professionals for my company.	I am looking for graduates with the most relevant and practical education.	However, existing university rankings don't consider the practical relevance of data analytics programs	This lack of information makes it challenging for me to identify which universities produce the best-prepared candidates.
4.	University Administrator	I am responsible for enhancing our university's	I'm trying to attract the best students and industry partnerships.	However, existing rankings don't provide data on	which makes it challenging to understand our program's strengths and weaknesses and

		data analytics program.		program quality	to attract the right partners.
5.	Government Policy Maker	I am working on policies to support the growth of data analytics education.	I want to ensure universities are meeting industry needs.	However, because there is no specialized ranking for data analytics programs, it's difficult to identify which universities are excelling in this field	This lack of information makes it challenging to create targeted policies.

3.2 EMPATHY MAP CANVAS

Empathy map is a collaborative tool teams can use to gain a deeper insight into their customers. Much like a user persona, an empathy map can represent a group of users, such as a customer segment. The empathy map was originally created by Dave Gray and has gained much popularity within the agile community. Have the team members speak about the sticky notes as they place them on the empathy map. Ask questions to reach deeper insights so that they can be elaborated for the rest of the team.

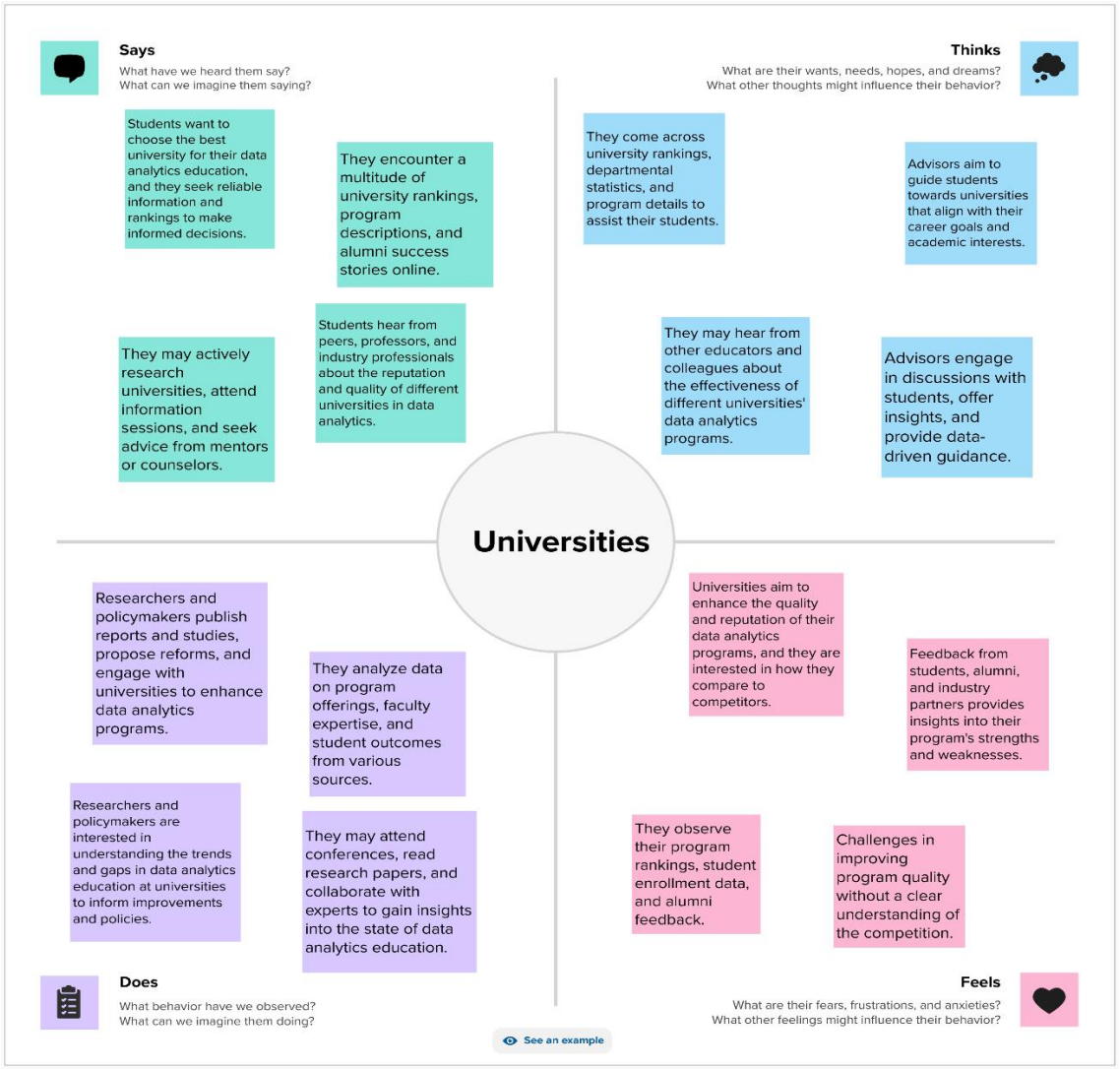

Fig 1: EMPATHY MAP

3.3 IDEATION & BRAINSTORMING

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich number of creative solutions.

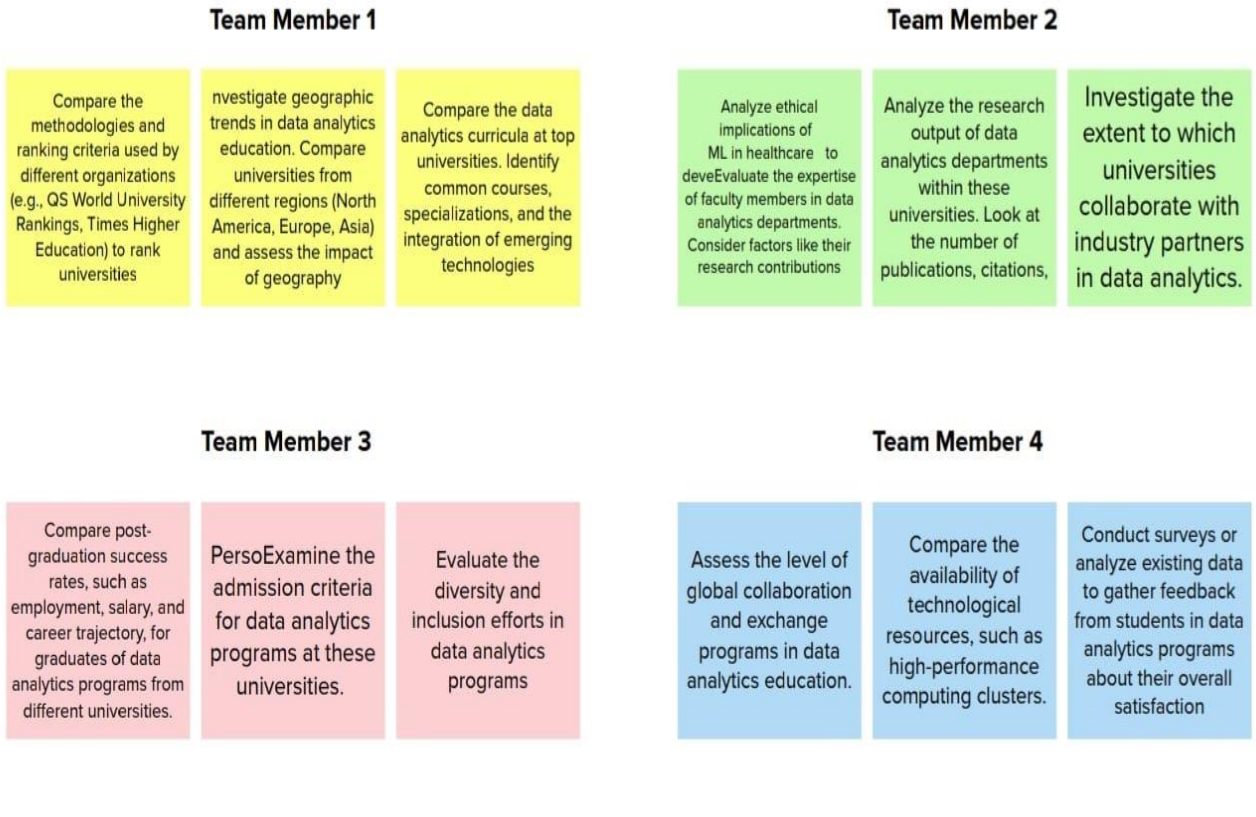

Fig 2: BRAINSTORMING

Fig 3: IDEA PRIORITIZATION

3.4 PROPOSED SOLUTION

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The field of data analytics is witnessing rapid growth and transformation, driven by the increasing importance of data-driven decision-making across industries. With this growth comes a rising demand for skilled data analytics professionals. To address this demand, universities globally have introduced data analytics programs.
2.	Idea/Solution description	The proposed solution involves a meticulous evaluation of global universities offering data analytics programs. It integrates quantitative metrics, qualitative assessments, and surveys to rank universities based on academic excellence, industry relevance, curriculum quality, and alumni success. The results will be presented in a comprehensive report with recommendations, serving as a valuable resource for students, educators, employers, and policymakers.
3.	Novelty/ Uniqueness	The project's novelty and uniqueness lie in its comprehensive assessment of global universities offering data analytics programs, combining both quantitative and qualitative methods, providing actionable recommendations, and emphasizing real-world relevance.
4.	Social Impact / Customer Satisfaction	The proposed solution empowers students by helping them make informed choices about their education and career paths, and it supports employers in finding well-prepared data analytics professionals. Ultimately, by fostering collaboration and knowledge sharing on a

		global scale, the project contributes to the overall advancement of the data analytics field.
5.	Business Model (Revenue Model)	The project's business model relies on a diversified revenue approach. It can generate income through research grants and sponsorships from educational and industry partners. Additionally, it can offer premium access to in-depth rankings and reports to universities, students, and employers.
6.	Scalability of the Solution	The solution exhibits scalability through its adaptable framework. As data analytics programs and universities continue to evolve, the project can easily extend its assessment to include new institutions and emerging trends in the field. The multi-faceted approach allows for flexibility in incorporating additional quantitative and qualitative measures, making it scalable to meet changing demands.

REQUIREMENT ANALYSIS

4. REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENTS

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 Dashboard	Evaluate Services and Features Pricing and Deals Analysis View User History and Ratings
FR-4	User profile and Preferences	Create and manage their profile. Allow users to change their privacy preferences and profile information as necessary.
FR -5	Output Generation	Report Generation Content Generation Itinerary Generation Visual Representation

4.2 NON-FUNCTIONAL REQUIREMENTS

NFR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	For users with varying levels of technical skill, the system should be simple to use and navigate, and it should offer the appropriate training and help.
NFR-2	**Security**	The system must guarantee the security, confidentiality, and privacy of user information and adhere to all applicable data protection laws.
NFR-3	**Reliability**	Reduce the possibility of errors or system breakdowns by having the system regularly produce accurate and dependable forecasts.
NFR-4	**Performance**	The system's performance should to be able to accommodate an expanding number of users and data sources over time.
NFR-5	**Availability**	An architecture that is reliable and scalable is essential for the system to be able to process requests for a lot of users' data without failing.
NFR-6	**Scalability**	Large amounts of data should be processed by the system quickly, and consumers should receive feedback right away.

PROJECT DESIGN

5. PROJECT DESIGN

5.1 DATA FLOW DIAGRAM

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It can be manual, automated, or a combination of both. It shows how data enters and leaves the system, what changes the information, and where data is stored. The objective of a DFD is to show the scope and boundaries of a system as a whole. It may be used as a communication tool between a system analyst and any person who plays a part in the order that acts as a starting point for redesigning a system.

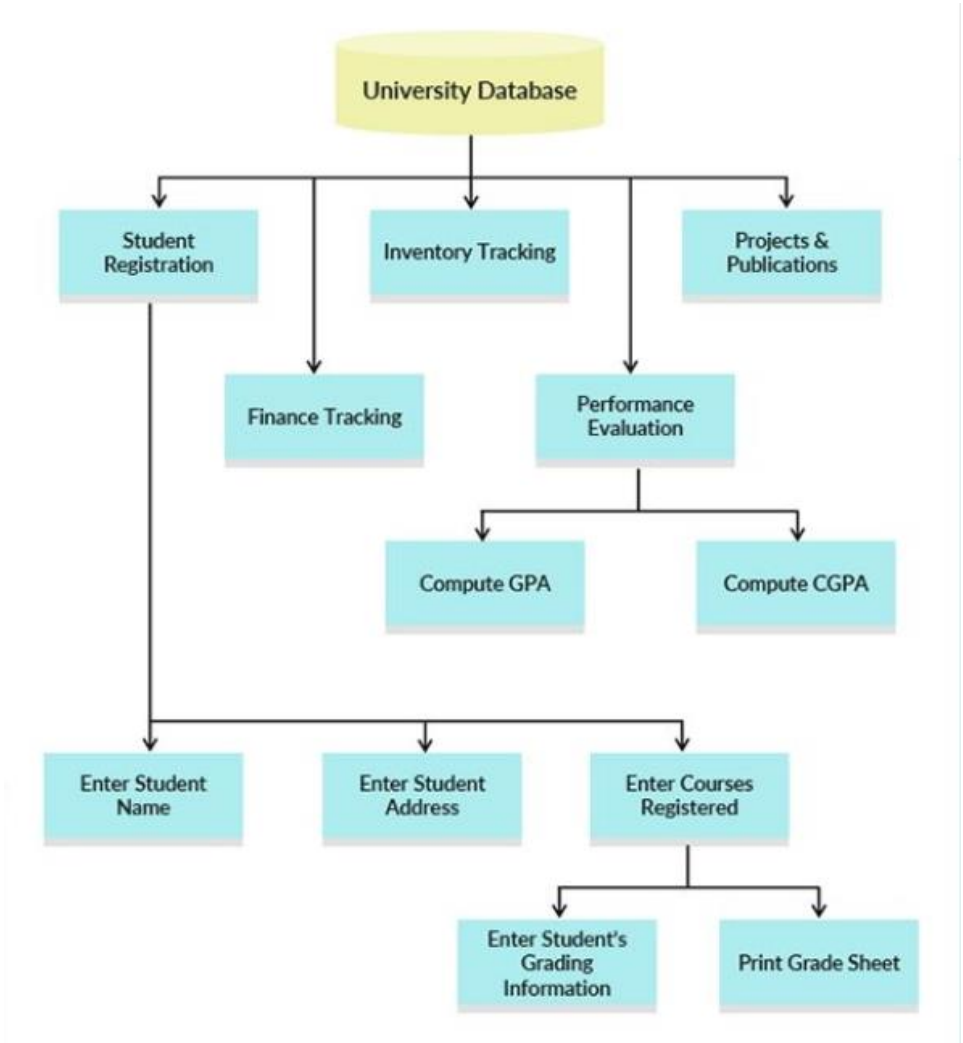

Fig 4: DATA FLOW DIAGRAM

5.2 SOLUTION & TECHNOLOGY ARCHITECTURE

The solution architecture for the "A Comparative Study of Top Global Universities in Data Analytics" project is designed to ensure a comprehensive and rigorous evaluation of universities offering data analytics programs. The primary components of the solution architecture include data collection, processing, analysis, and presentation.

1. Data Collection: To gather information about universities and their data analytics programs, data will be collected from various sources, such as university websites, academic databases, and industry reports. Web scraping tools and APIs can be employed to automate data collection. The collected data may include program details, faculty information, research publications, industry partnerships, internship opportunities, job placement rates, and alumni success stories.
2. Data Processing: The collected data will be cleaned, standardized, and stored in a structured database for analysis. Data preprocessing techniques will be applied to handle missing values and outliers. This database will serve as the foundation for further analysis and reporting.
3. Data Analysis: The heart of the project, data analysis, will involve quantitative and qualitative assessments. Metrics like faculty-to-student ratios, research productivity, and academic indicators will be quantitatively analyzed. Industry relevance will be assessed by examining industry collaborations, internship opportunities, and job placement rates. Qualitative assessment will focus on the curricula, course content, and its relevance. Alumni success stories will also be a crucial part of this analysis.
4. Presentation: The project's findings and rankings will be presented through interactive dashboards and reports. Data visualization tools such as Tableau or Power BI can be used to create dynamic visual representations of the results. This ensures that the project's insights are accessible and comprehensible to a broad audience.

The technology architecture for this data analysis project will leverage a combination of technologies and tools to ensure data accuracy, processing efficiency, and user-friendly reporting.

1. Data Collection Tools: Python with libraries like BeautifulSoup and Scrapy for web scraping, as well as APIs for accessing data from external sources. Data will be stored in a relational database using technologies like MySQL or PostgreSQL.

2. Data Processing: Data preprocessing and transformation will be handled using Python libraries like Pandas and NumPy. These libraries are efficient for cleaning and structuring the data.

3. Data Analysis and Machine Learning: For quantitative analysis and machine learning, Python's scientific libraries, such as scikit-learn and StatsModels, will be employed. This allows for the application of various statistical and machine learning techniques to assess the universities and their programs.

4. Data Visualization: Tools like Tableau, Power BI, or Matplotlib and Seaborn in Python will be used for creating interactive and informative visualizations, making the results easily understandable.

5. Reporting and Collaboration: The project team can use collaboration tools like Microsoft Teams or Slack for communication, and cloud-based storage solutions such as Google Drive or Dropbox for data sharing and project management.

5.2.1 SOLUTION ARCHITECTURE DIAGRAM

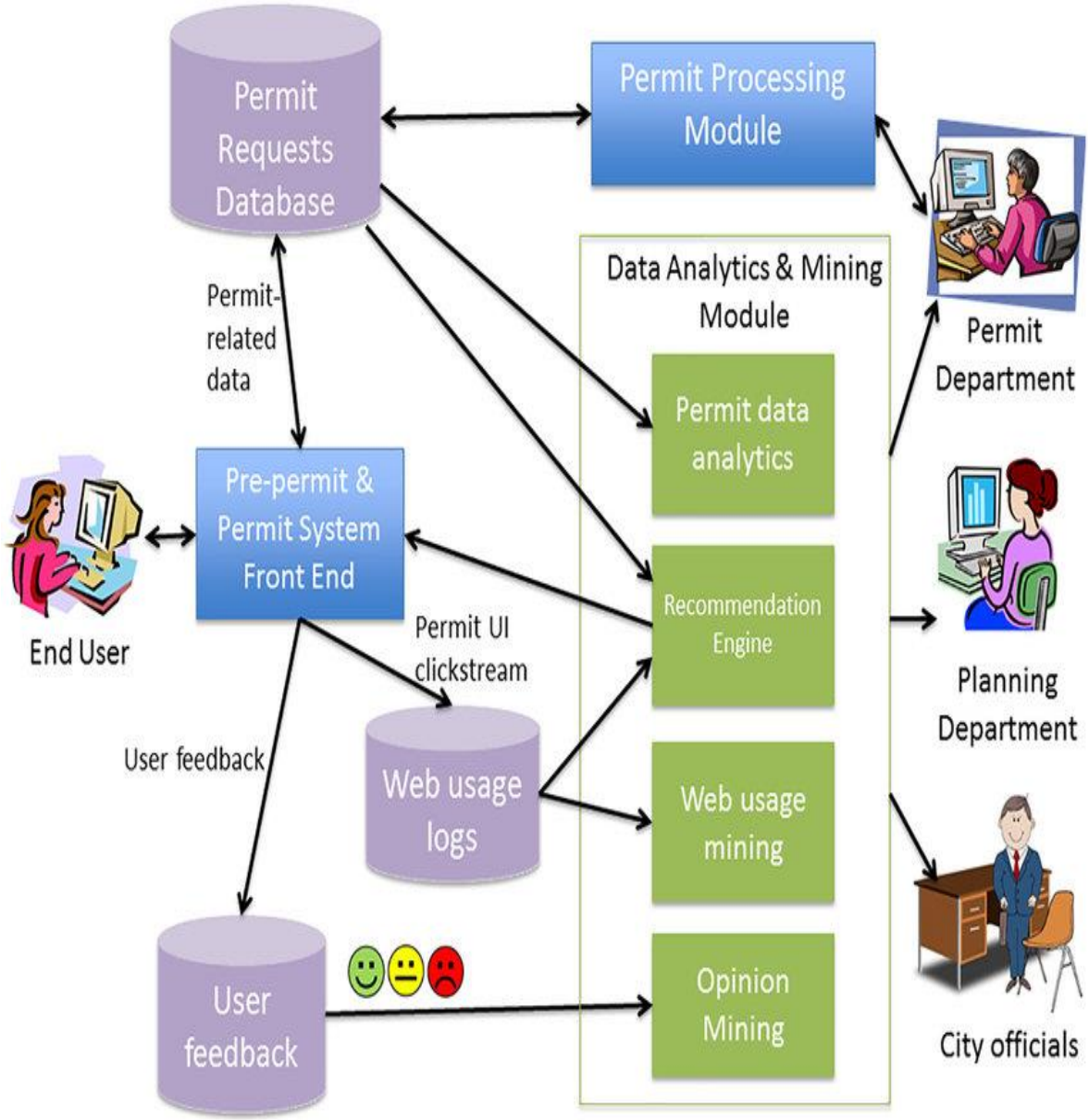

Fig 5: SOLUTION ARCHITECTURE

5.2.2 TECHNOLOGY ARCHITECTURE

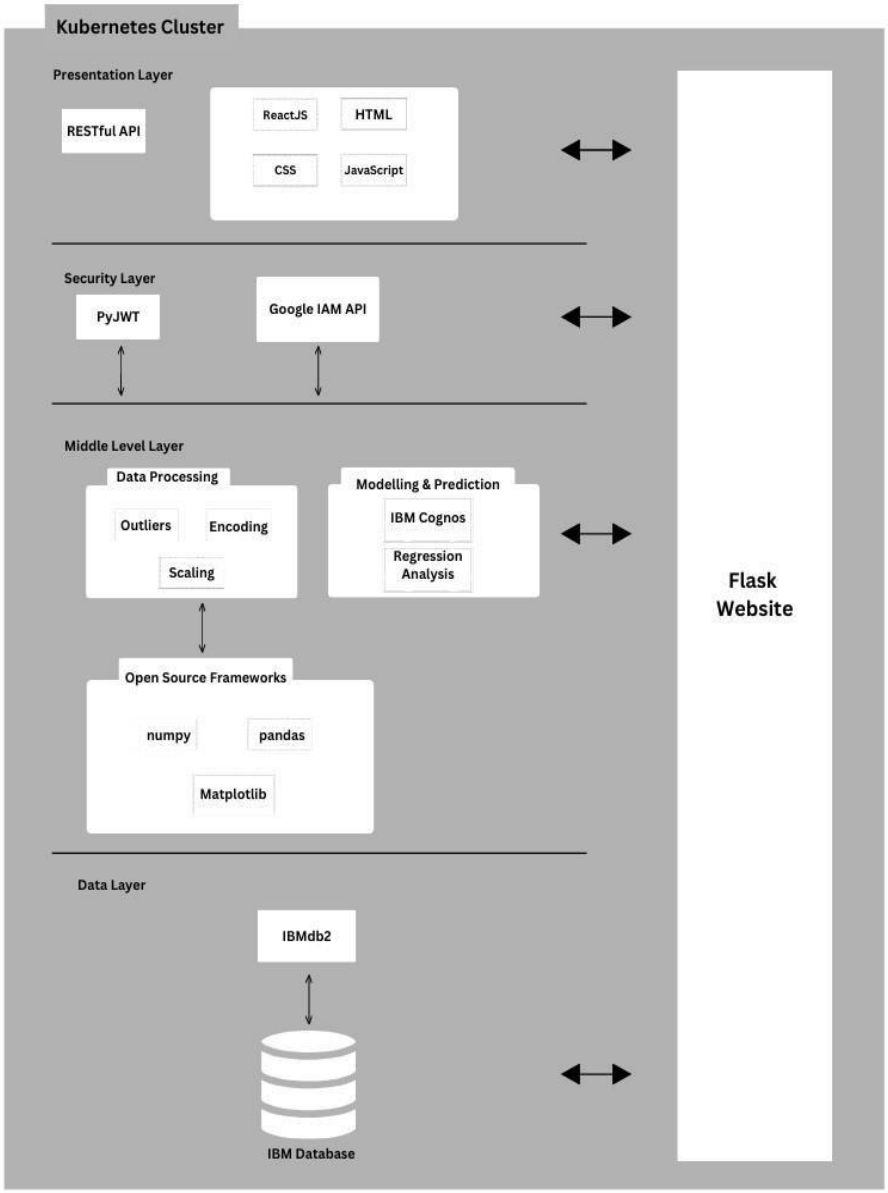

Fig 6: TECHNOLOGY ARCHITECTURE

5.3 USER STORIES

User Type	Functional Requirement (Epic)	User Story. no	Task	Criteria	Priority	Team
Student	Access to a user-friendly website with a search feature.	USN-1	As a prospective student, I want to search for top universities offering data analytics programs globally.	I need to filter universities based on criteria such as program quality, faculty qualifications, industry partnerships, and alumni success to make an informed decision about where to enroll.	High	Arun
Educator	Access to a personalized dashboard for program assessment.	USN-2	As a data analytics educator, I need to assess my university's program against global standards.	I should be able to compare our program with others based on curriculum quality, student-to-faculty ratios	Medium	Ashika
Employer	Access to detailed program profiles.	USN-3	As an employer, I want to find universities that produce graduates with the most relevant data analytics education.	I need access to program profiles that highlight curriculum details, internship opportunities	High	Gayathri
Administrator	Data analytics program	USN-4	As a university	I should be able to	Medium	Gobi

User Type	Functional Requirement (Epic)	User Story. no	Task	Criteria	Priority	Team
	benchmarking tools.		administrator, I need tools to benchmark our data analytics program against global peers.	compare our program's research impact, curriculum relevance, faculty qualifications, and industry engagement with other universities to attract students and industry partnerships effectively.		

CODING & SOLUTION

6. CODING & SOLUTIONING

The project is intended to develop a website application for Comparative Study of Top Global Universities using Data Analytics. The application provides users with accurate analysis that users can make use of with great ease.

6.1 USER INTERFACE

The user interface (UI) for the "A Comparative Study of Top Global Universities in Data Analytics" project will be designed with a user-centric approach, ensuring ease of navigation and accessibility. The UI will feature a clean and intuitive design. It will include interactive dashboards, visually appealing data visualizations, and user-friendly filters to explore rankings, program details, and performance metrics. A responsive and web-based UI will provide accessibility across various devices, ensuring that stakeholders, including students, educators, and industry professionals, can easily access and gain insights from the project's comprehensive evaluation of data analytics programs and universities.

```
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  <h1 class="head">Dashboard</h1>
  <div class="frame">
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      perspective=dashboard&amp;pathRef=.
      public_folders%2FGlobal%2BUniversity%2FDashboard&amp;
      closeWindowOnLastView=true&amp;ui_appbar=false&amp;
      ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;
      mode=dashboard&amp;subView=model0000018b3cdbebaf_00000002"
      frameborder="0"
      gesture="media"
      allow="encrypted-media"
      allowfullscreen=""
    ></iframe>
  </div>
</section>
```

Fig 6: DASHBOARD

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      closeWindowOnLastView=true&amp;ui_appbar=false&amp;
      ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;
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      gesture="media"
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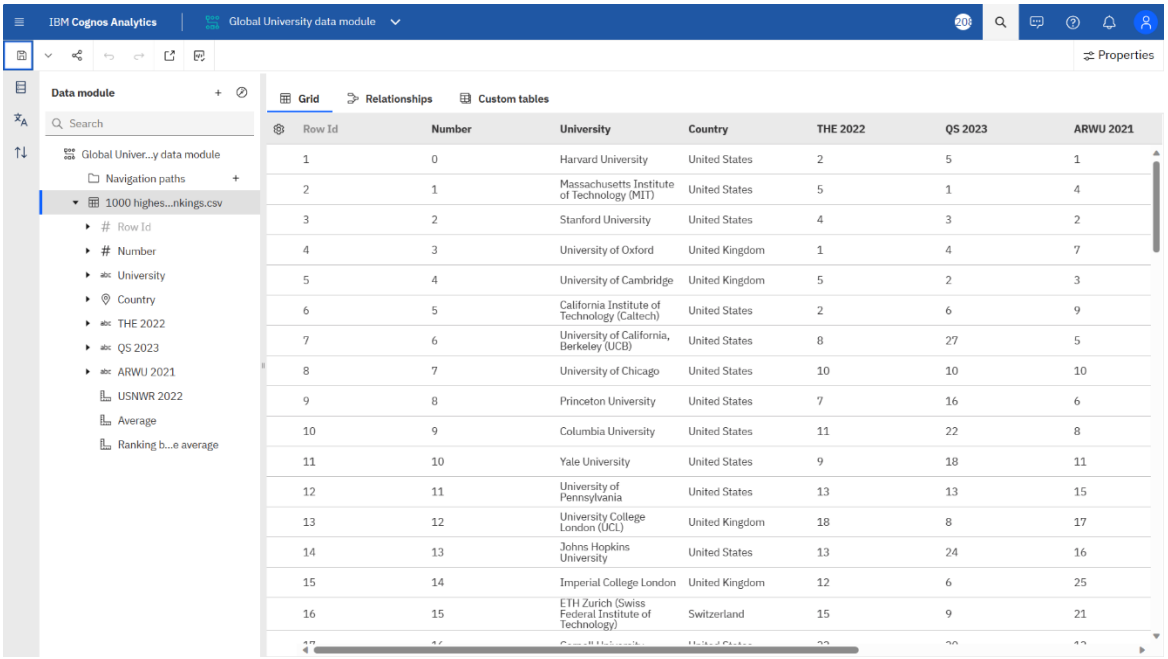
      allowfullscreen=""
    ></iframe>
  </div>
</section>
```

Fig 7: STORY BOARD

RESULTS

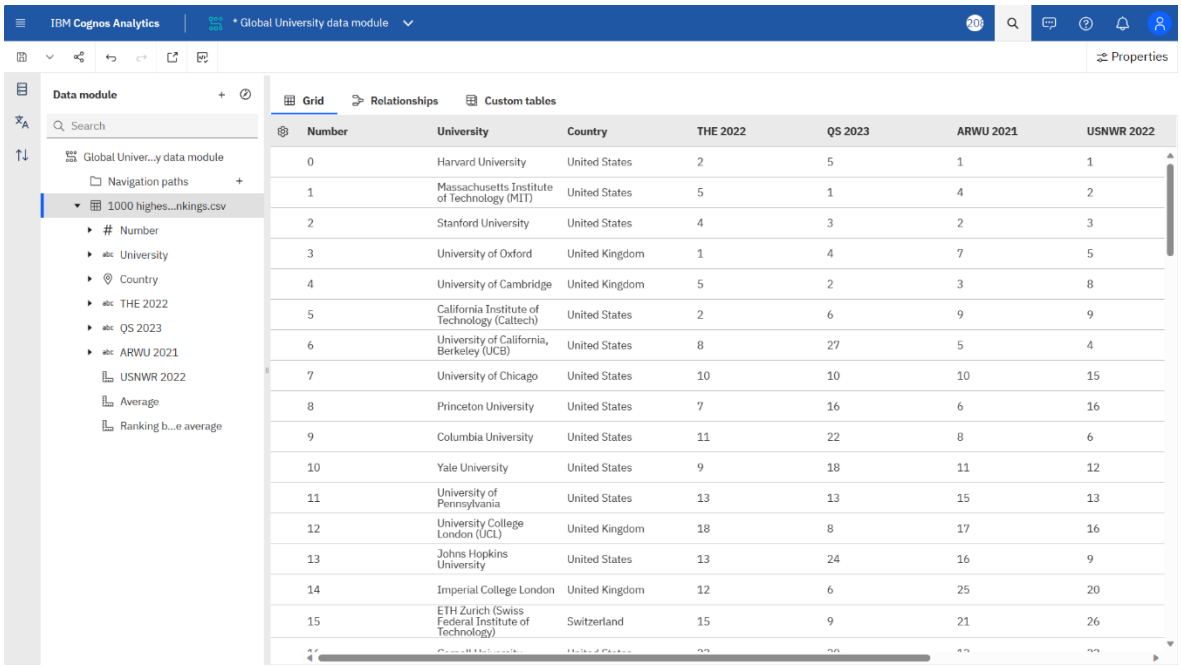
7. RESULTS

7.1 OUTPUT



Row Id	Number	University	Country	THE 2022	QS 2023	ARWU 2021
1	0	Harvard University	United States	2	5	1
2	1	Massachusetts Institute of Technology (MIT)	United States	5	1	4
3	2	Stanford University	United States	4	3	2
4	3	University of Oxford	United Kingdom	1	4	7
5	4	University of Cambridge	United Kingdom	5	2	3
6	5	California Institute of Technology (Caltech)	United States	2	6	9
7	6	University of California, Berkeley (UCB)	United States	8	27	5
8	7	University of Chicago	United States	10	10	10
9	8	Princeton University	United States	7	16	6
10	9	Columbia University	United States	11	22	8
11	10	Yale University	United States	9	18	11
12	11	University of Pennsylvania	United States	13	13	15
13	12	University College London (UCL)	United Kingdom	18	8	17
14	13	Johns Hopkins University	United States	13	24	16
15	14	Imperial College London	United Kingdom	12	6	25
16	15	ETH Zurich (Swiss Federal Institute of Technology)	Switzerland	15	9	21

Fig 8: UNCLEANED DATA



Number	University	Country	THE 2022	QS 2023	ARWU 2021	USNWR 2022
0	Harvard University	United States	2	5	1	1
1	Massachusetts Institute of Technology (MIT)	United States	5	1	4	2
2	Stanford University	United States	4	3	2	3
3	University of Oxford	United Kingdom	1	4	7	5
4	University of Cambridge	United Kingdom	5	2	3	8
5	California Institute of Technology (Caltech)	United States	2	6	9	9
6	University of California, Berkeley (UCB)	United States	8	27	5	4
7	University of Chicago	United States	10	10	10	15
8	Princeton University	United States	7	16	6	16
9	Columbia University	United States	11	22	8	6
10	Yale University	United States	9	18	11	12
11	University of Pennsylvania	United States	13	13	15	13
12	University College London (UCL)	United Kingdom	18	8	17	16
13	Johns Hopkins University	United States	13	24	16	9
14	Imperial College London	United Kingdom	12	6	25	20
15	ETH Zurich (Swiss Federal Institute of Technology)	Switzerland	15	9	21	26

Fig 9: CLEANED DATA

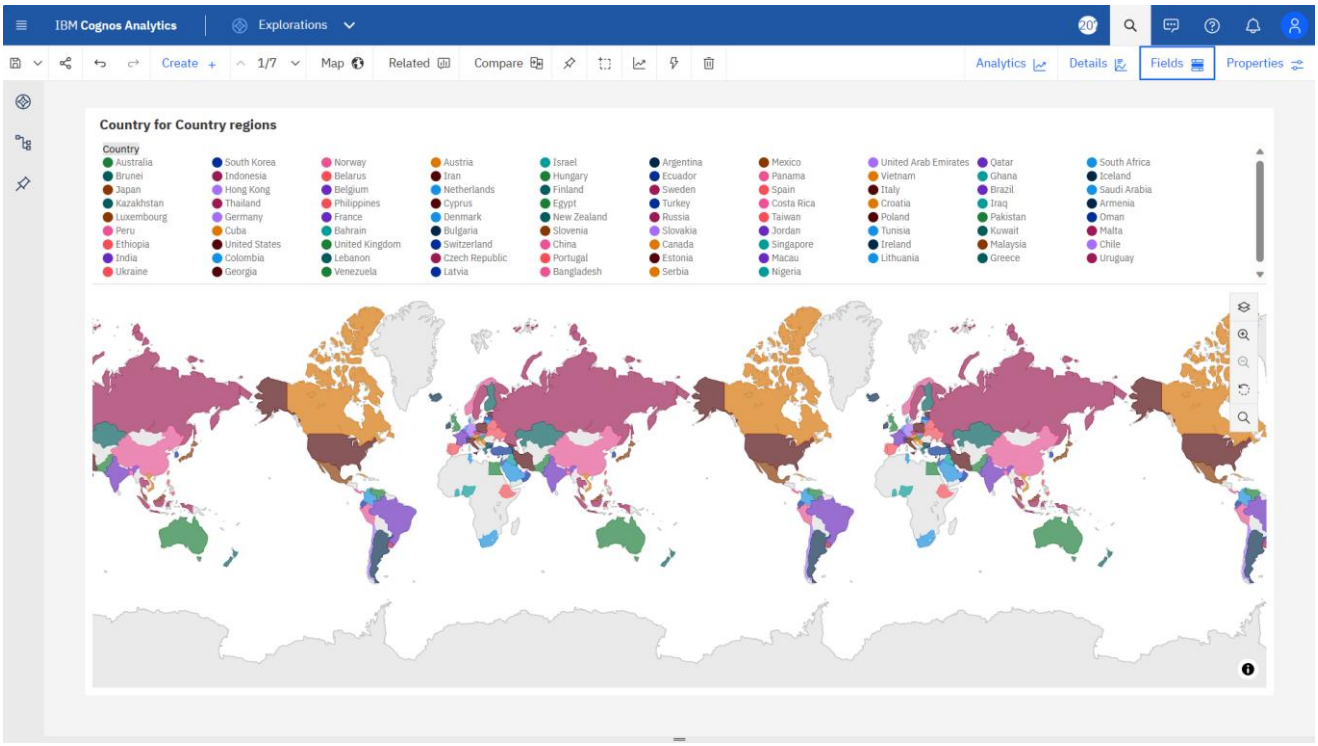


Fig 10: EXPLORATION – COUNTRY FOR COUNTRY REGIONS

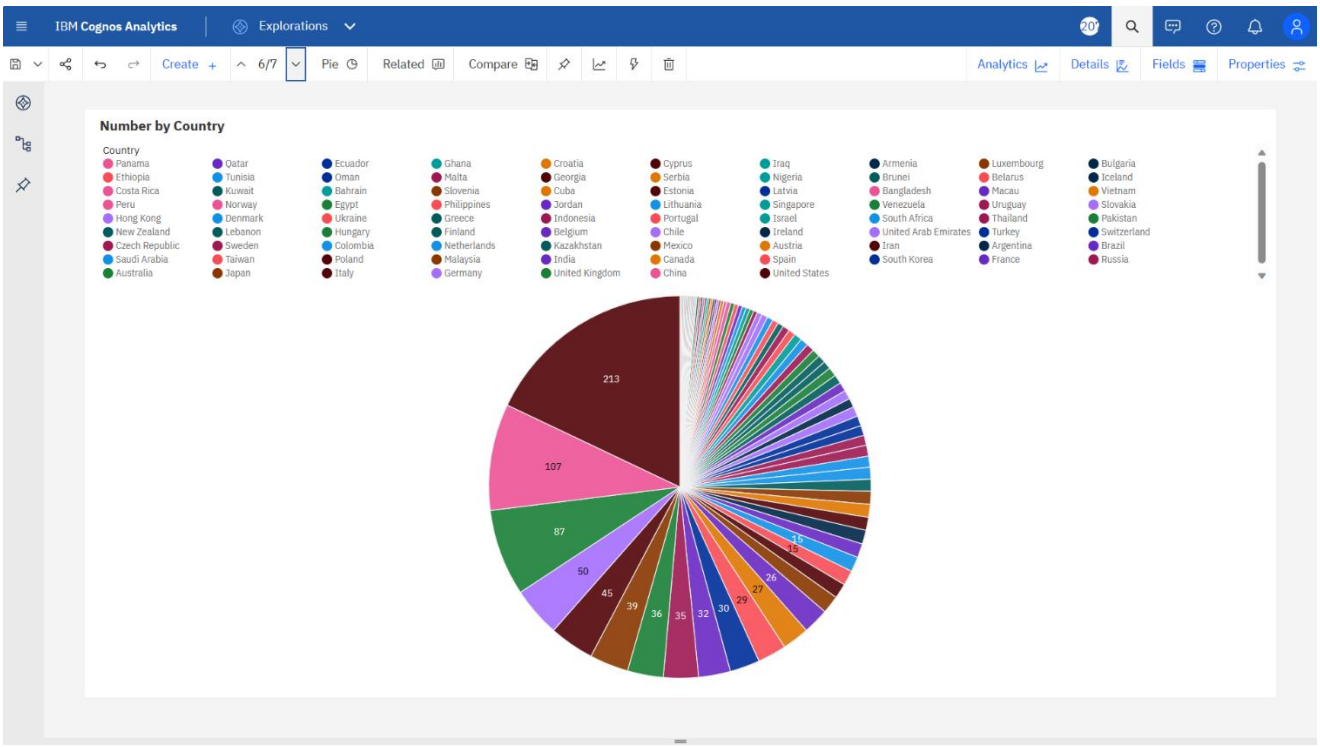


Fig 10: EXPLORATION – NUMBER BY COUNTRY

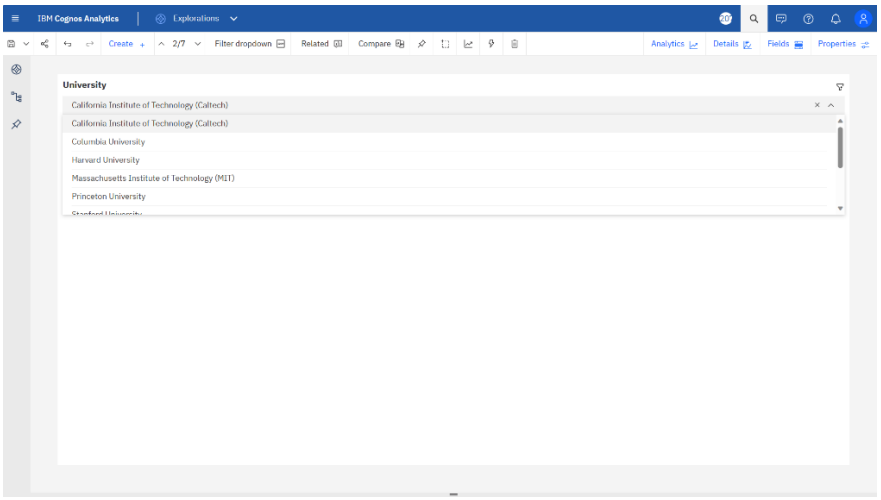


Fig 10: EXPLORATION – TOP 10 UNIVERSITIES

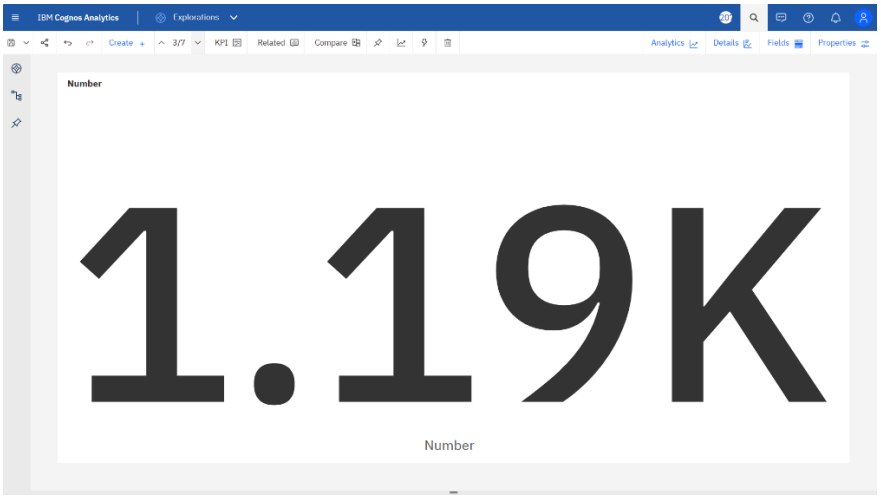


Fig 12: EXPLORATION – UNIVERSITY COMPARED TO THE 2022

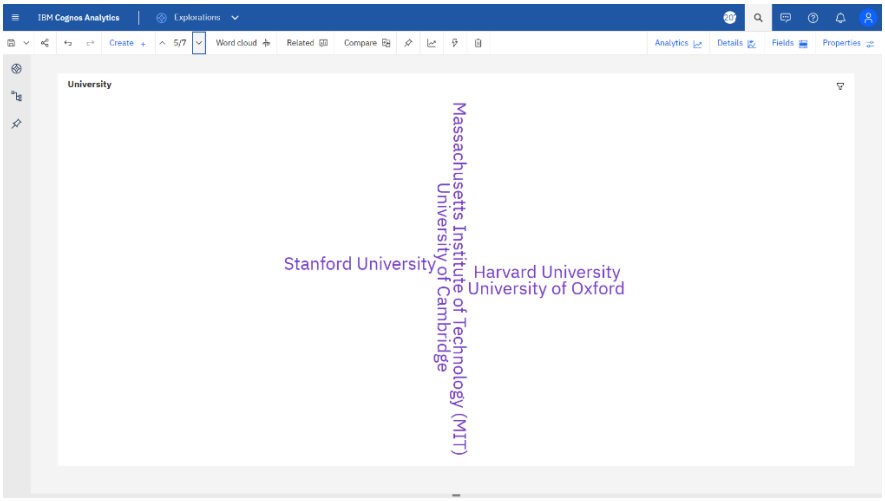


Fig 13: EXPLORATION – TOP 5 UNIVERSITIES BASED ON RANKING

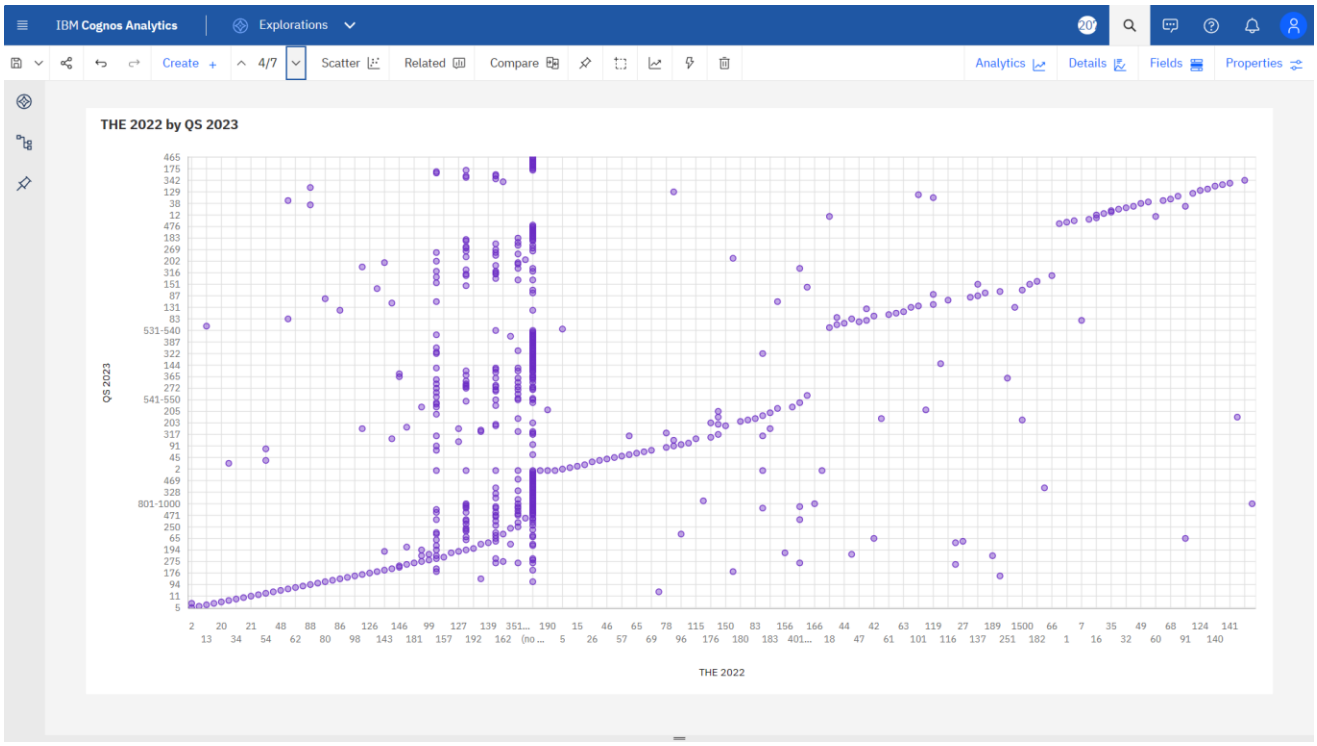


Fig 14: EXPLORATION – THE 2022 BY QS 2023

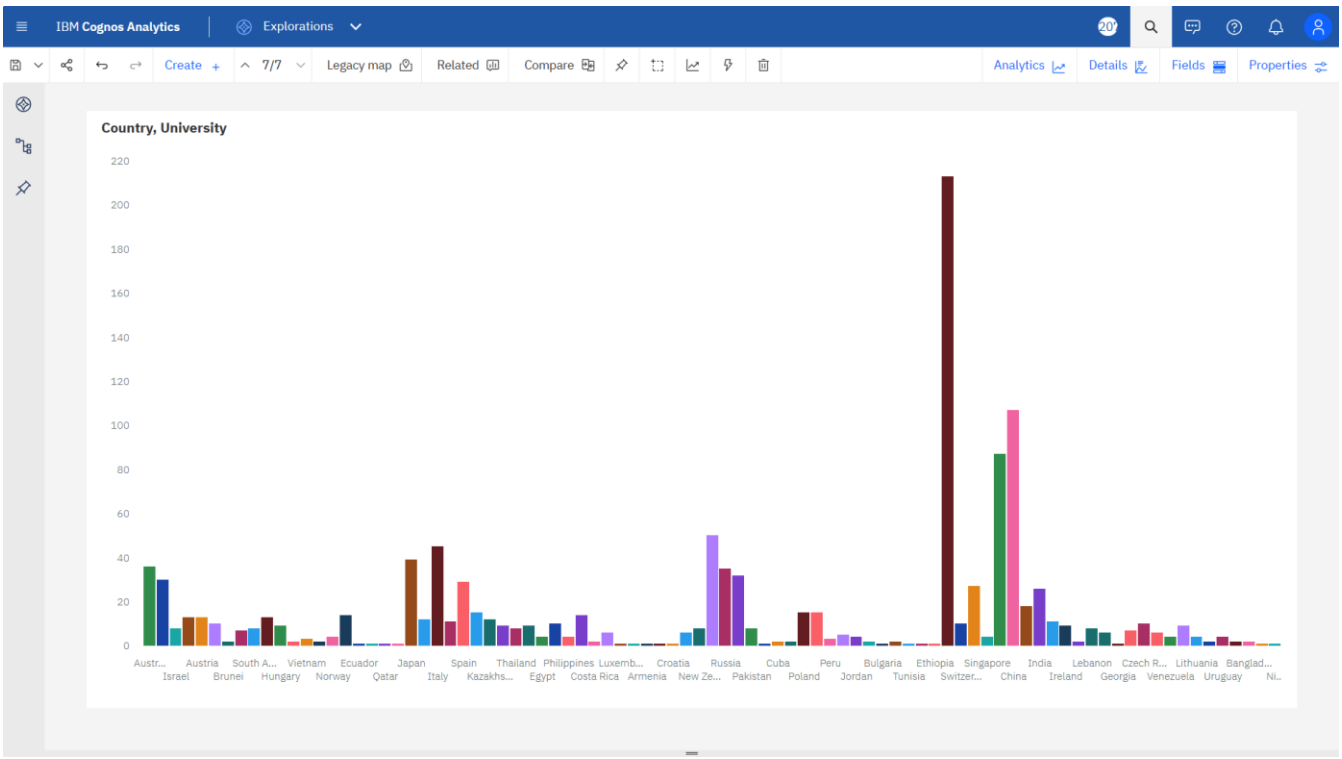


Fig 15: EXPLORATION – COUNTRY & UNIVERSITY

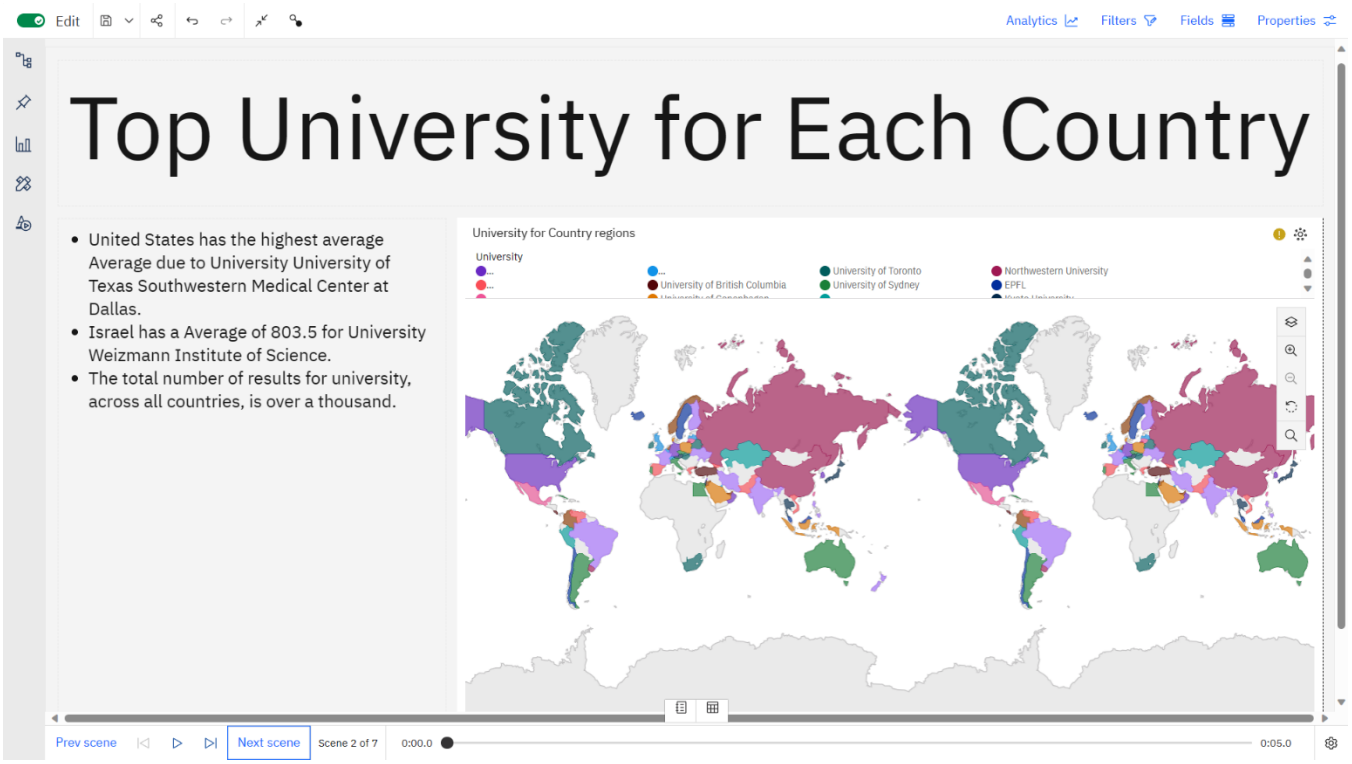


Fig 16: STORY – TOP UNIVERSITY FOR EACH COUNTRY

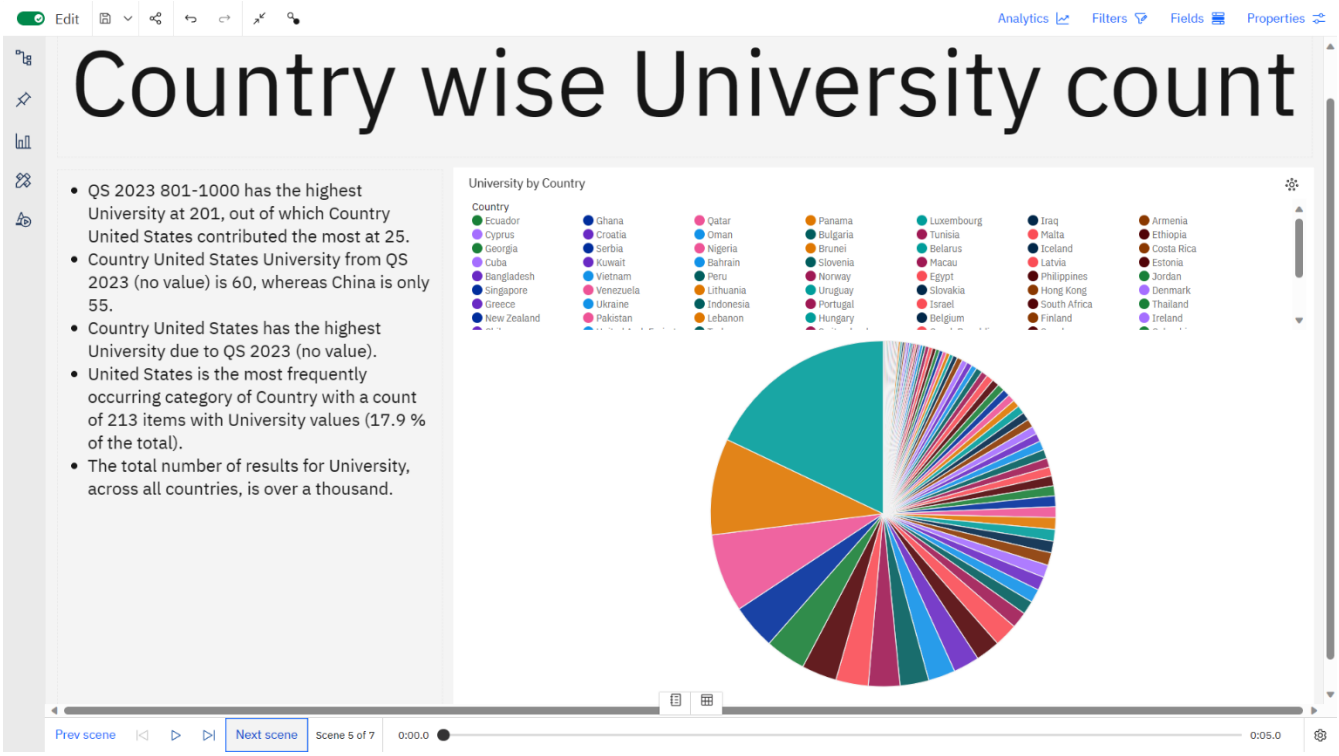


Fig 17: STORY –COUNTRY VISE UNIVERSITY COUNT

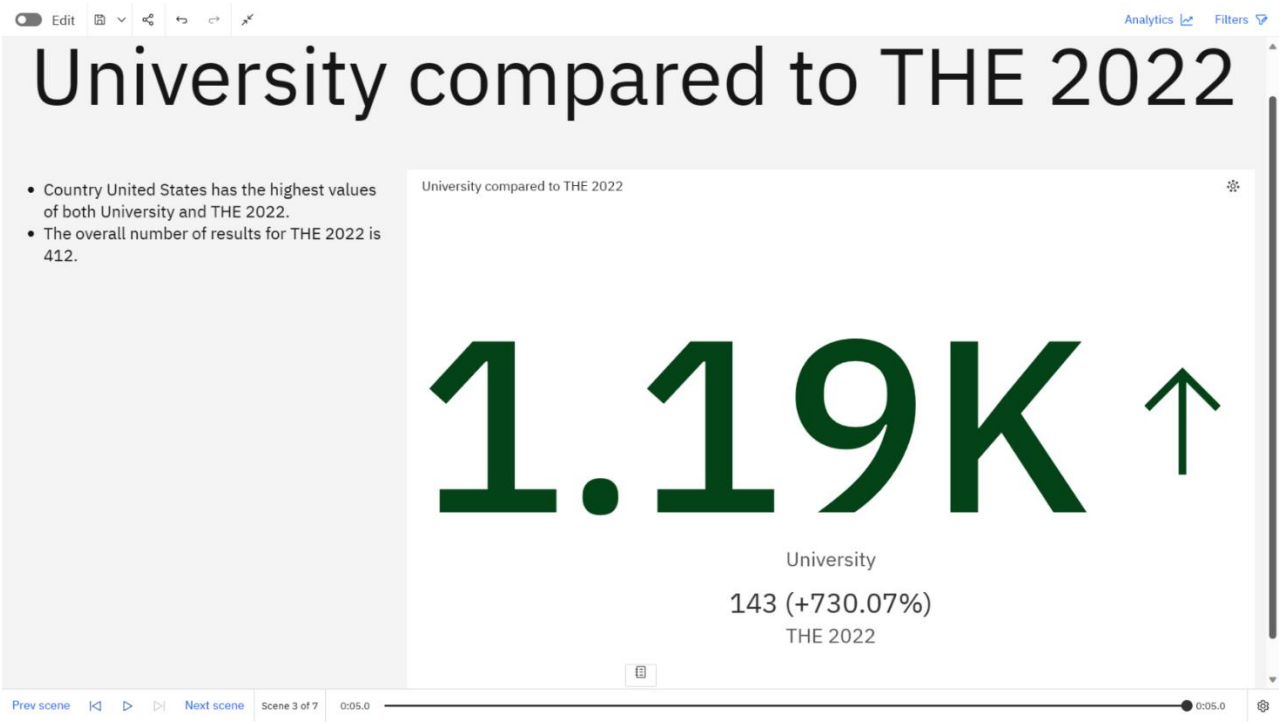


Fig 18: STORY – UNIVERSITY COMPARED TO THE 2022

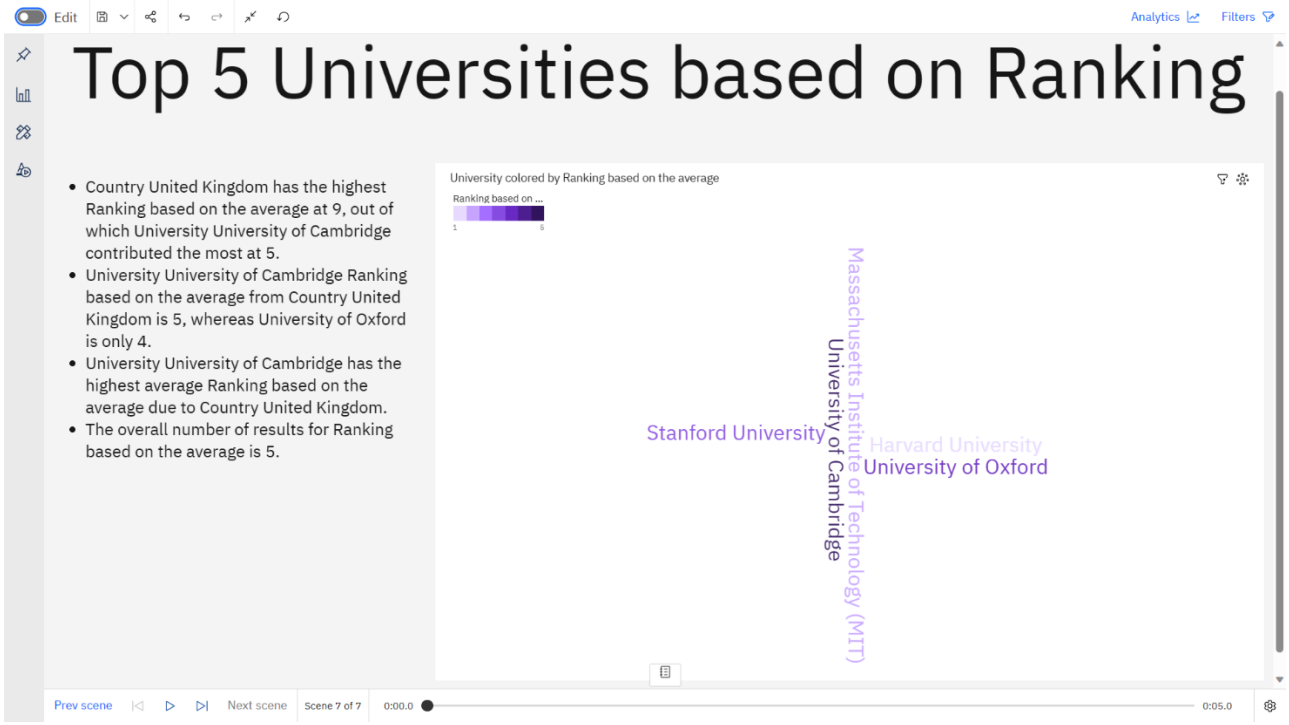


Fig 19: STORY – TOP 5 UNIVERSITIES BASED ON RANKING

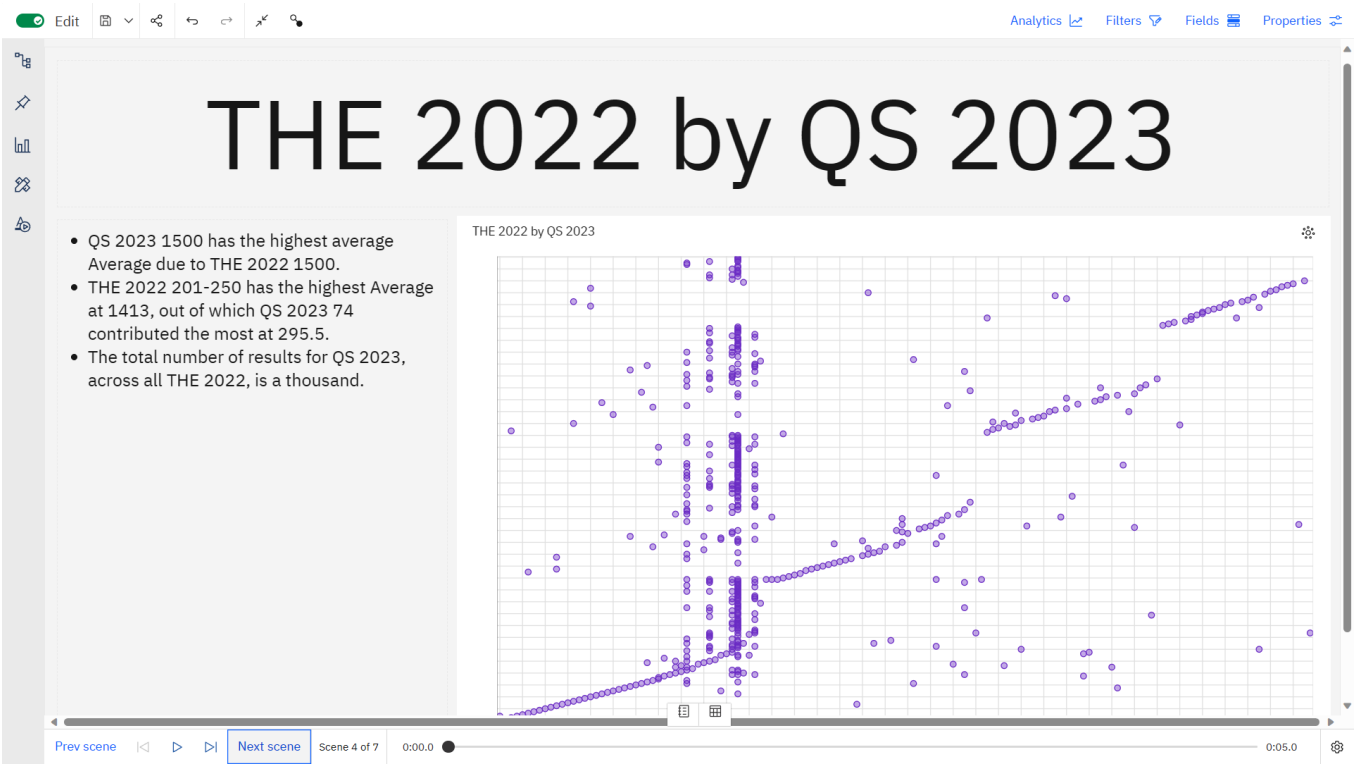


Fig 20: STORY – THE 2022 BY QS 2023

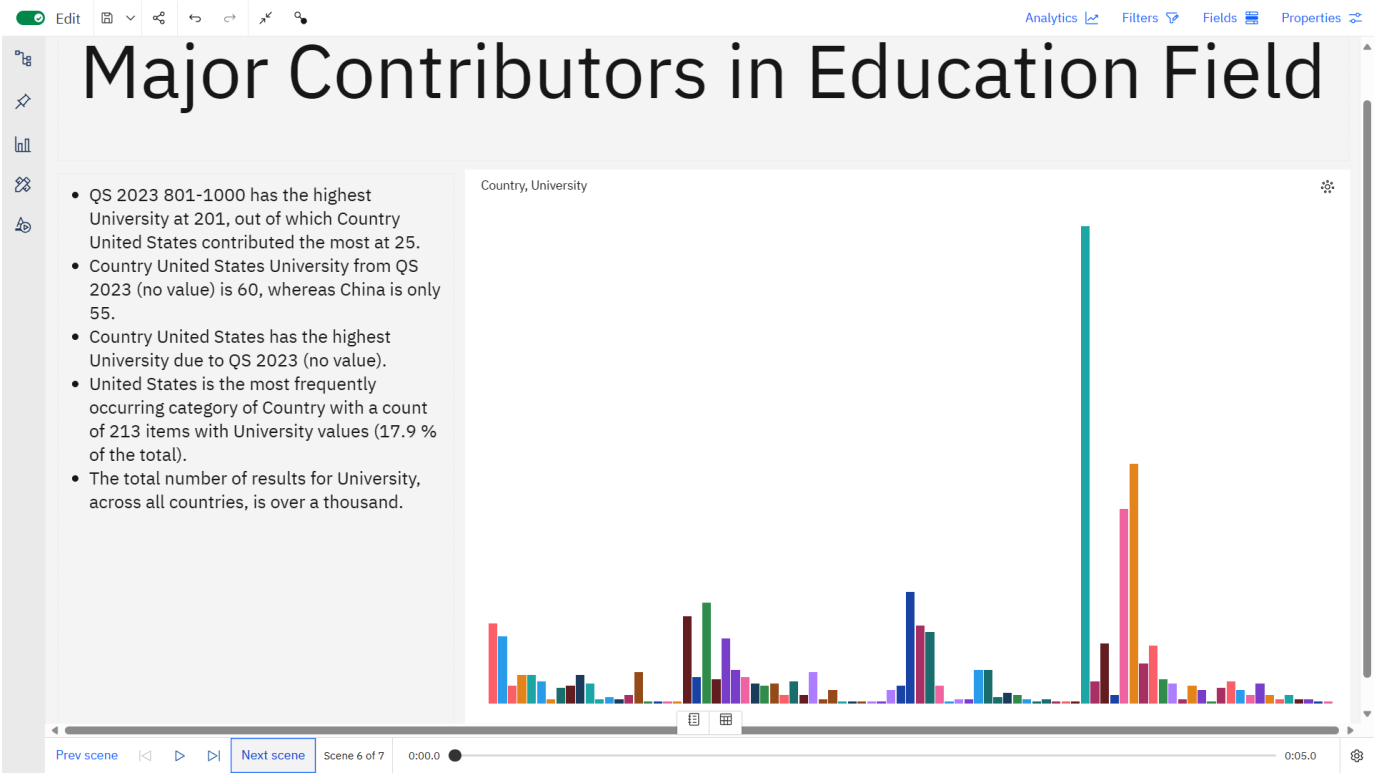


Fig 21: STORY – MAJOR CONTRIBUTURS IN EDUCATION FIELD

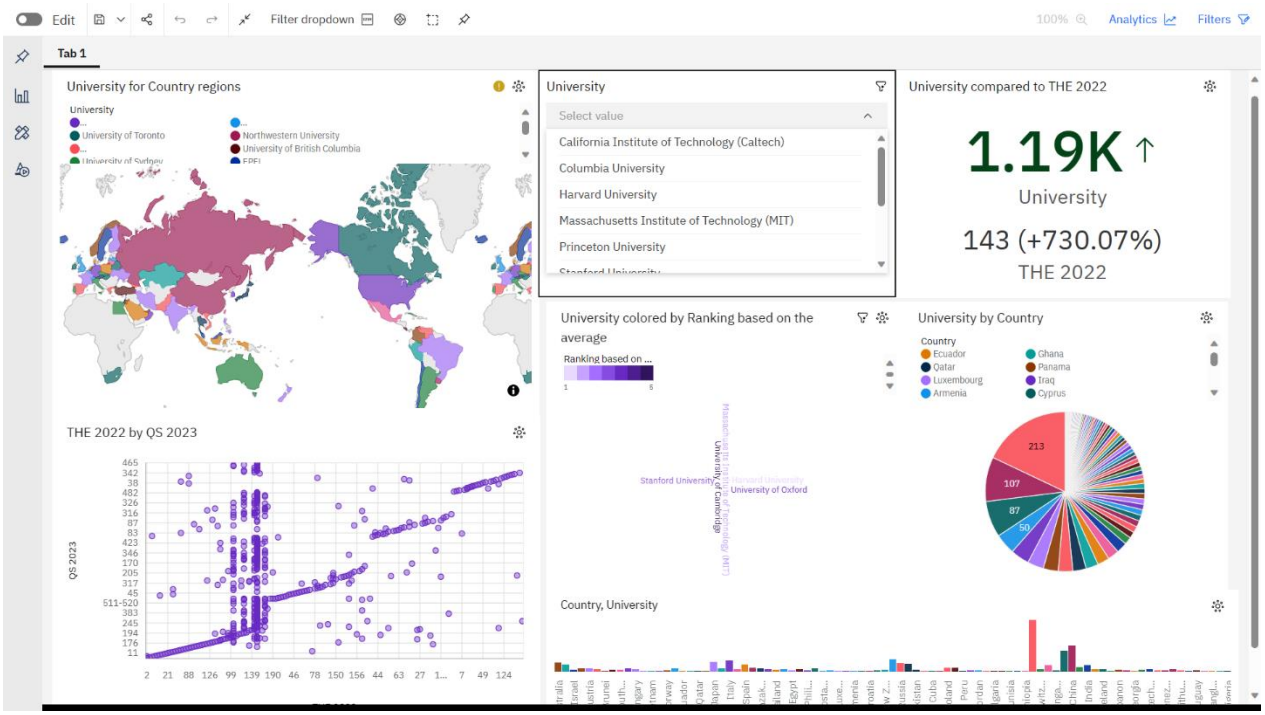


Fig 22: DASHBOARD

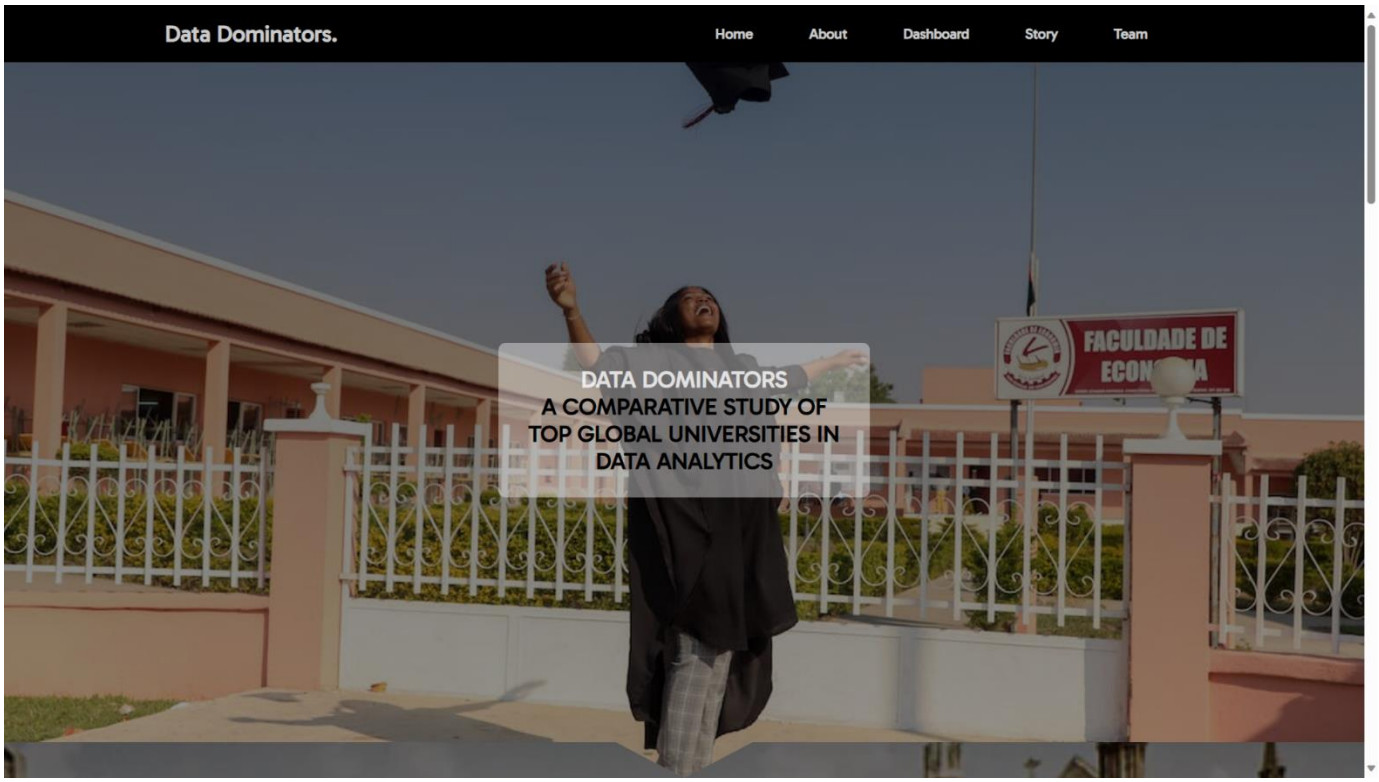


Fig 23: WEBPAGE – HOME SECTION

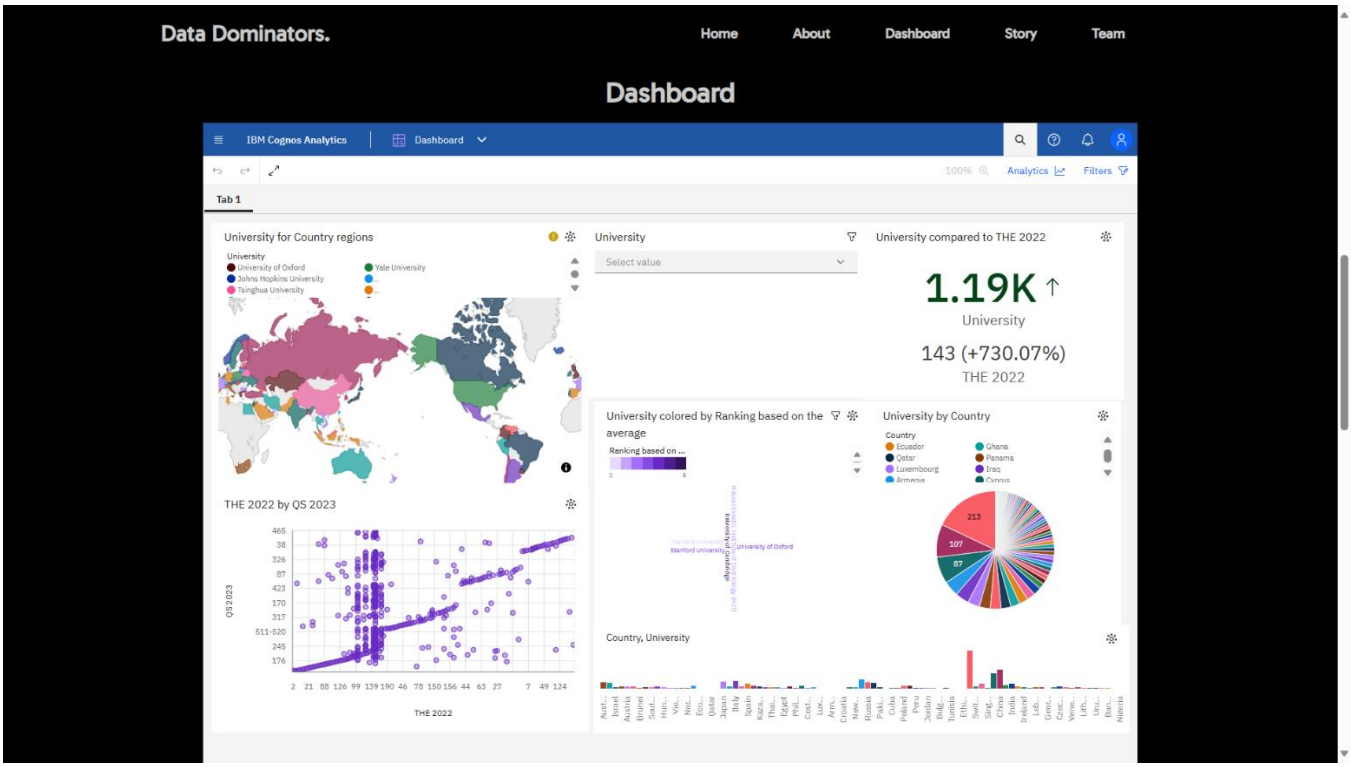


Fig 24: WEBPAGE – DASHBOARD SECTION

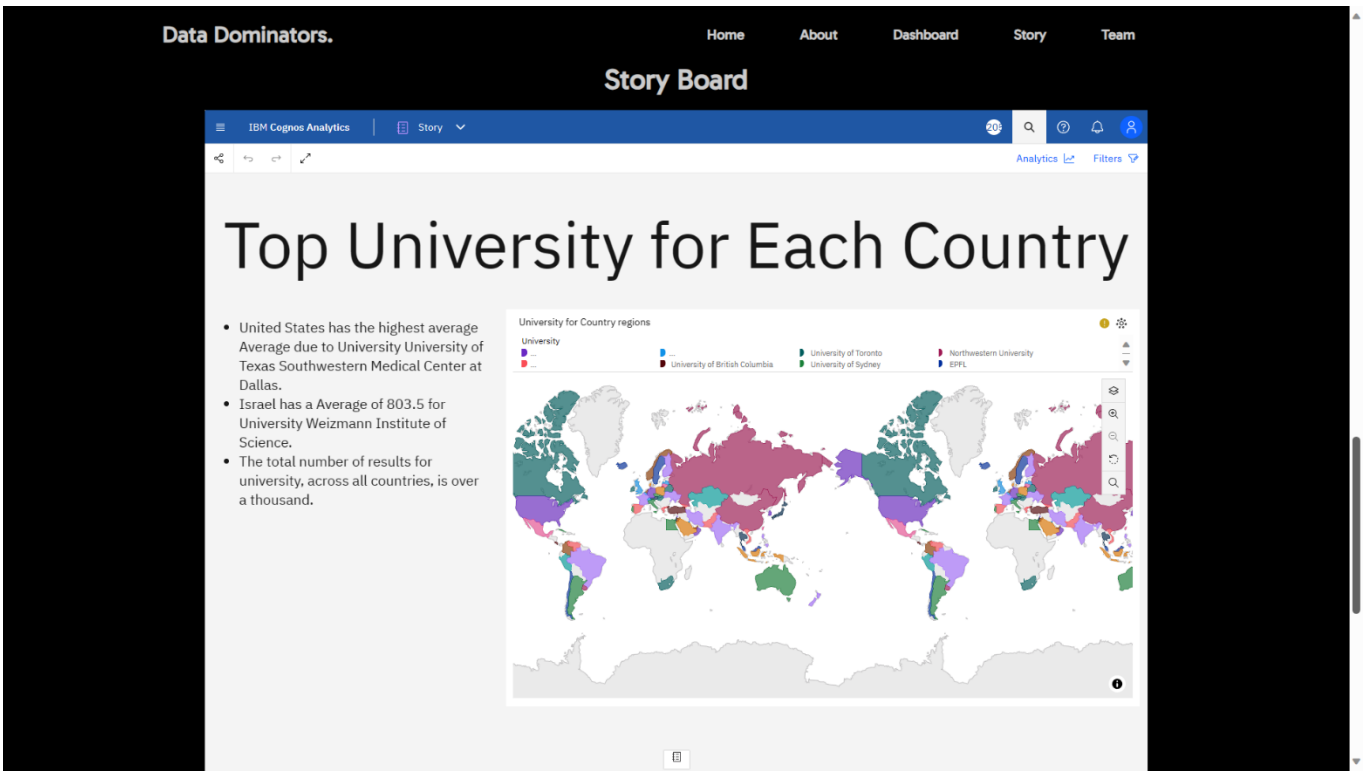


Fig 25: WEBPAGE – STORY BOARD SECTION

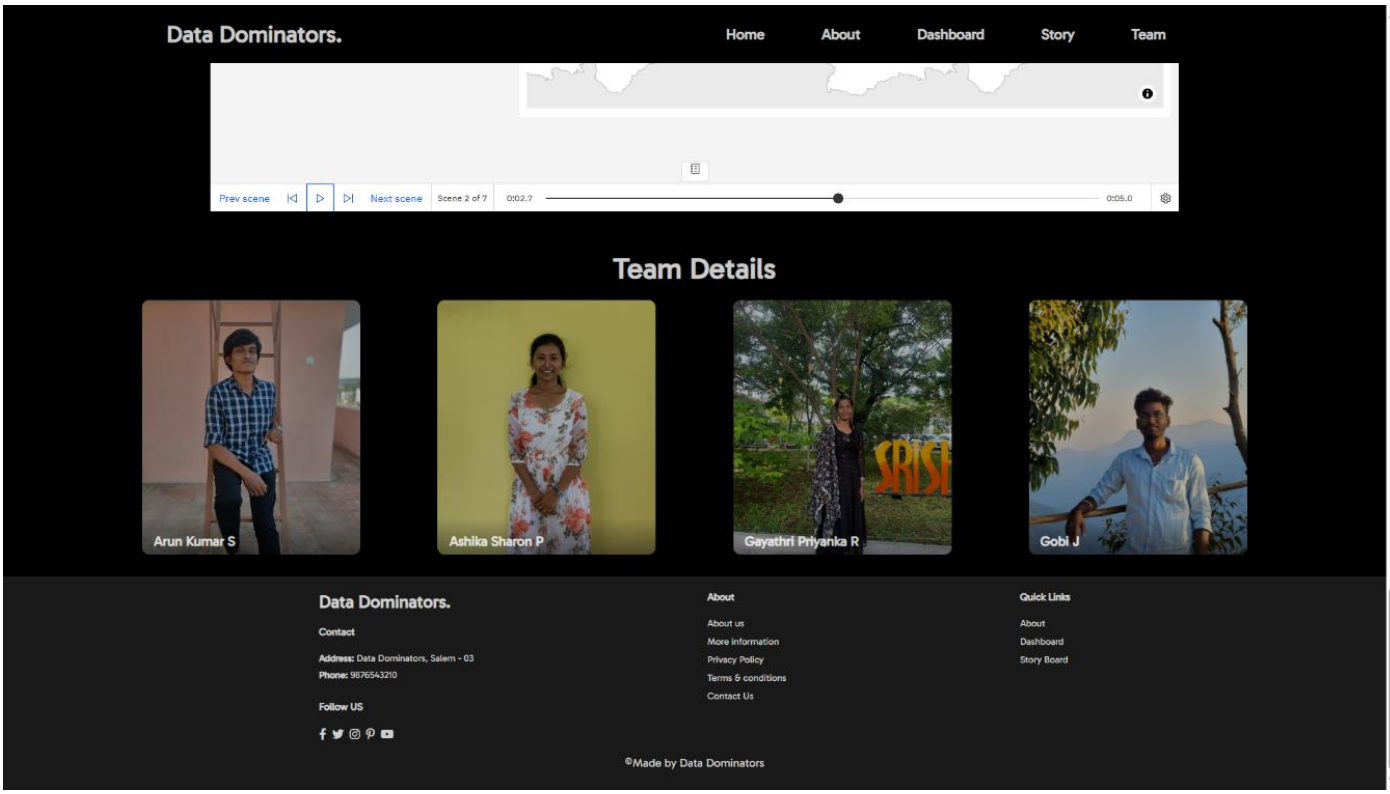


Fig 26: WEBPAGE – TEAM SECTION

ADVANTAGES & DISADVANTAGES

8. ADVANTAGES & DISADVANTAGES

8.1 ADVANTAGES

1. Easy to use the User Interface
2. Mobile responsive UI
3. Access to reliable and adaptable data
4. Has wide range of choices
5. Tracking changes in cancer rates over time provides effectiveness of prevention.

8.2 DISADVANTAGES

1. Risk of misinterpretation
2. Lack of Personalization
3. Predicted values are not exact
4. Complexity of factors
5. Gathering and analyzing extensive data from universities globally may require significant time, effort, and financial resources

CONCLUSION

9. CONCLUSION

In conclusion, the project, "A Comparative Study of Top Global Universities in Data Analytics," addresses a critical need in the ever-evolving landscape of data analytics education. By comprehensively assessing and ranking global universities offering data analytics programs, this project provides a valuable resource for prospective students, educators, employers, and policymakers. The multi-faceted approach, blending quantitative and qualitative data collection and analysis, offers a well-rounded evaluation of program quality, academic excellence, industry relevance, curriculum design, and alumni success. The project's unique emphasis on the real-world applicability of data analytics education sets it apart, making it an invaluable asset to the data analytics community. By promoting international collaboration and knowledge sharing, this project contributes to the ongoing enhancement of data analytics programs worldwide, ensuring that students are equipped to tackle the challenges and opportunities of the data-driven world.

Ultimately, this research project is not just a study; it is a catalyst for informed decisions, positive change, and advancement within the field of data analytics education.

FUTURE SCOPE

10. FUTURE SCOPE

The future scope of the project, "A Comparative Study of Top Global Universities in Data Analytics," holds significant potential for ongoing growth and influence within the field of data analytics education. As the data analytics landscape continues to evolve, the project can adapt to meet the emerging needs of the industry and educational institutions. It may extend its reach to include a broader range of universities globally, ensuring its rankings and recommendations remain globally relevant. By incorporating the assessment of emerging trends and technologies in data analytics, such as artificial intelligence, machine learning, and big data analytics, the project can remain at the forefront of industry developments.

Furthermore, as data analytics programs become more specialized, the project can focus on assessing and ranking specialized tracks within data analytics, catering to the growing demand for domain-specific expertise. Customized reports tailored to individual universities' strengths and weaknesses can also be explored as a future revenue stream. This approach could provide institutions with valuable insights to improve their data analytics programs. Moreover, enhancing student and alumni engagement within the project can foster a dynamic feedback loop, with graduates contributing their experiences and insights.

In summary, the project's future scope is expansive and adaptable, providing opportunities to refine its methods, extend its reach, and continue serving as an invaluable resource for stakeholders in the dynamic and increasingly essential field of data analytics education.

APPENDIX

11. APPENDIX

A.1 SOURCE CODE

Index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Data Dominators</title>
    <script
      src="https://kit.fontawesome.com/f72d61014c.js"
      crossorigin="anonymous"
    ></script>
    <link rel="stylesheet" href="style.css" />
  </head>
  <body>
    <header>
      <h1>Data Dominators.</h1>
      <nav>
        <ul>
          <li><a href="#hero">Home</a></li>
          <li><a href="#about">About</a></li>
          <li><a href="#dashboard">Dashboard</a></li>
          <li><a href="#story">Story</a></li>
          <li><a href="#team">Team</a></li>
        </ul>
      </nav>
    </header>
    <main id="hero">
      <h1>
        <span>DATA DOMINATORS </span><br />
        A COMPARATIVE STUDY OF TOP GLOBAL UNIVERSITIES IN DATA ANALYTICS
      </h1>
    </main>
    <section id="about">
      <p>
        The Times Higher Education World University Rankings, often referred to
        as the THE Rankings or just THE, is the annual publication of university
        rankings by the Times Higher Education magazine. The publisher had
        collaborated with Quacquarelli Symonds (QS) to publish the joint THE-QS
        World University Rankings from 2004 to 2009 before it turned to Thomson
        Reuters for a new ranking system from 2010 to 2013. In 2014, the
        magazine signed an agreement with Elsevier to provide it with the data
        used in compiling its annual rankings..
      </p>
      <div class="about-buttons">
```

```
        <a href="#dashboard">View Dashboard</a>
        <a href="#story">View Story Board</a>
      </div>
    </section>
    <section id="dashboard">
      <h1 class="head">Dashboard</h1>
      <div class="frame">
        <iframe
          src="https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&amp;pathRe
f=.public_folders%2FGlobal%2BUniversity%2FDashboard&amp;closeWindowOnLastView=true&a
mp;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;mo
de=dashboard&amp;subView=model0000018b3cdbebaf_00000002"
          frameborder="0"
          gesture="media"
          allow="encrypted-media"
          allowfullscreen=""
        ></iframe>
      </div>
    </section>
    <section id="story">
      <h1 class="head">Story Board</h1>
      <div class="frame">
        <iframe
          src="https://us3.ca.analytics.ibm.com/bi/?perspective=story&amp;pathRef=.p
ublic_folders%2FGlobal%2BUniversity%2FStory&amp;closeWindowOnLastView=true&amp;ui_ap
pbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;sceneId=mo
del0000018b3e56f69a_00000002&amp;sceneTime=5000"
          frameborder="0"
          gesture="media"
          allow="encrypted-media"
          allowfullscreen=""
        ></iframe>
      </div>
    </section>
    <section id="team">
      <h1 class="head">Team Details</h1>
      <div class="team-container">
        <div class="member">
          <img src="team/team-1.jpg" alt="" />
          <div class="member-details">
            <h3>Arun Kumar S</h3>
            <h4>BE CSE</h4>
            <h5>KIOT</h5>
          </div>
        </div>
        <div class="member">
          <img src="team/team-2.jpg" alt="" />
          <div class="member-details">
```

```
            <h3>Ashika Sharon P</h3>
            <h4>BE CSE</h4>
            <h5>KIOT</h5>
          </div>
        </div>
        <div class="member">
          <img src="team/team-3.jpg" alt="" />
          <div class="member-details">
            <h3>Gayathri Priyanka R</h3>
            <h4>BE CSE</h4>
            <h5>KIOT</h5>
          </div>
        </div>
        <div class="member">
          <img src="team/team-4.jpg" alt="" />
          <div class="member-details">
            <h3>Gobi J</h3>
            <h4>BE CSE</h4>
            <h5>KIOT</h5>
          </div>
        </div>
      </div>
    </section>
    <footer>
      <div class="foot">
        <div class="col">
          <h2>Data Dominators.</h2>
          <br />
          <h4>Contact</h4>
          <p><strong>Address: </strong>Data Dominators, Salem - 03</p>
          <p><strong>Phone: </strong>9876543210</p>
          <div class="follow">
            <h4>Follow US</h4>
            <div class="icon">
              <i class="fab fa-facebook-f"></i>
              <i class="fab fa-twitter"></i>
              <i class="fab fa-instagram"></i>
              <i class="fab fa-pinterest-p"></i>
              <i class="fab fa-youtube"></i>
            </div>
          </div>
        </div>
        <div class="col">
          <h4>About</h4>
          <a href="#about">About us</a>
          <a href="#">More information</a>
          <a href="#">Privacy Policy</a>
          <a href="#">Terms & conditions</a>
```

```
          <a href="#contact">Contact Us</a>
        </div>
        <div class="col">
          <h4>Quick Links</h4>
          <a href="#about">About</a>
          <a href="#dashboard">Dashboard</a>
          <a href="#story">Story Board</a>
        </div>
        <div class="copy">
          <p>&copy;Made by Data Dominators</p>
        </div>
      </div>
    </footer>
  </body>
</html>
```

A.2 GITHUB & PROJECT DEMO VIDEO LINK

GitHub: https://github.com/Arundev2002/NM2023TMID02601

Project Demo Video: https://drive.google.com/drive/folders/1pqiAKqGqwYMhbJgA_GWUg1LlCXvVYYp2?usp=sharing