



MLR

INSTITUTE OF TECHNOLOGY

(UGC AUTONOMOUS)

Laxman Reddy Avenue, Dundigal, Hyderabad - 500 043, Telangana, India



**DEPARTMENT OF COMPUTER SCIENCE &
ENGINEERING (DATA SCIENCE)**

A REPORT

ON

”EDUTECH ANALYSIS”

B.Tech (CSE - DATA SCIENCE)

SUBMITTED BY

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UNDER THE GUIDANCE OF

Mrs.Y.ANJALI (Asst Professor)

(Academic Year: 2023-2024)



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Certificate

This is to certify that project entitled

"PROJECT TITLE HERE"

has been completed by

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of B.Tech CSE(DS), II Year, II Semester of academic year 2023-2024 in partial fulfillment of the Second Year of Bachelor degree in "Computer Science & Engineering (Data Science)" as prescribed by the MLR Institute of Technology.

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External Examiner

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It gives me great pleasure and satisfaction in presenting this mini project on “Mini Project Title”.

I would like to express my deep sense of gratitude towards. . . (Write in your own wording)

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Abstract

- **Pardh Tech:** A company with expertise in business decision making for software companies. They offer various analysis services.
- **EduTech:** A company providing paid and free courses to equip students with skills for the competitive corporate world. They're looking to focus on courses related to 4.0 technologies (technologies like Artificial Intelligence, Blockchain, etc.).
- **The Initiative:** EduTech plans to launch these new 4.0 tech courses within the next 8 months, coinciding with their 25th-anniversary celebrations.

Potential areas where Pardh Tech can assist EduTech:

- **Market Analysis:** Pardh Tech's analysis services can help EduTech identify the most in-demand 4.0 tech skills within the software industry. This will ensure their courses target the right areas and provide students with the most relevant skillsets.
- **Course Development:** Pardh Tech can analyze existing learning materials and competitor courses to help EduTech develop high-quality and engaging course content.
- **Pricing Strategy:** Pardh Tech's expertise can be valuable in determining the optimal pricing strategy for EduTech's courses, considering factors like target audience, competition, and course value.

They approached us to analyze the trend among students about their domain interest and other details. so in this project we are going to study the the domain of student of age group around 18-25 years by conducting an survey and drawing meaningful insights

Chapter 1

INTRODUCTION

1.1 Background and Opportunity

The education sector is rapidly evolving, with companies like EduTech offering students a pathway to upgrade their skills and prepare for the competitive job market, particularly in the realm of 4.0 technologies. As EduTech approaches its 25th anniversary, they plan to launch new courses focused on these in-demand technologies. To ensure these offerings align with student interests, they require a deeper understanding of their target audience.

1.2 Project Objectives

This project, titled "EduTech Analysis," addresses this need by partnering with Pardh Tech, a software analysis company, to analyze student domain interest among those aged 18-25. Through a comprehensive survey, we aim to identify trends and gather valuable insights to guide EduTech's course development.

Specifically, this project will:

- Analyze student interest in various domains through a targeted survey.
- Draw meaningful insights from the data to identify the most sought-after domains.
- Provide actionable recommendations for EduTech's upcoming course launch focused on 4.0 technologies.

By leveraging data-driven analysis, this project empowers EduTech to make informed decisions about their curriculum, ultimately leading to the development of courses that cater to student needs and equip them for success in the evolving technological landscape.

Chapter 2

Mission and Vision

2.1 Mission

- To leverage data analysis to gain a deeper understanding of student interest in 4.0 technologies and preferred learning styles within the EduTech landscape.
- To translate these insights into actionable recommendations for developing engaging and effective educational courses that cater to the evolving needs of the student population.

2.2 vision

- To contribute to a future where EduTech platforms are personalized and optimized based on student data, fostering a more effective and engaging learning experience for all.
- To empower educators with data-driven insights that enable them to tailor their teaching methods to individual student strengths and preferences.
- To contribute to a more accessible and inclusive educational landscape by leveraging the power of 4.0 technologies.

Chapter 3

LITERATURE SURVEY

This literature survey explores existing research on student learning preferences and educational technology trends, with a specific focus on students aged 18-25 interested in 4.0 technologies. EduTech, approaching its 25th anniversary, plans to launch new courses in this area. This analysis aims to inform their course development by understanding student needs and preferences.

3.1 Student Learning Preferences and Domain Interest in 4.0 Technologies

- Focus on Skills vs. Theoretical Knowledge
- Importance of Real-World Application
- Personalized Learning Approaches
- Limited Research on 4.0 Technology Domain Interest (potential for your project to fill the gap)
- Insights from Broader Trends: Student Interest in Emerging Technologies

3.2 Trends in Educational Technology for Engaging 18-25 Year Olds

The first line of the first paragraph under each heading should start from left-hand margins without indentation. Text of abstract should be typed in Times New Roman, 12pt. Keywords should be written in Times New Roman, 12pt, *Italic*.

3.3 Gaps in the Literature

- Need for Research on Student Needs in 4.0 Technologies
- How Your Project Addresses This Gap

Chapter 4

SYSTEM ANALYSIS

4.1 Option 1: Methodology

4.1.1 Survey Design and Data Collection

- Explain the type of survey you conducted (online, paper-based) and the platform used.
- Briefly mention the sampling method (random, convenience).
- Describe the specific questions you asked in the survey related to student domain interest and other relevant details (age, education level, etc.).

4.1.2 Data Cleaning and Analysis

- Explain the process of cleaning your data, such as removing incomplete responses, identifying and correcting outliers, and standardizing formats.
- Briefly mention the data analysis techniques you used (descriptive statistics, cross-tabulation) to explore trends and relationships in your data.

4.2 Option 2: Research Analysis

- Summarize the key findings from your literature review regarding student learning preferences and educational technology trends for the target audience (18-25 year olds).
- Analyze how these findings relate to the specific focus of your project - student interest in 4.0 technologies.
- Identify any gaps in existing research that your project aims to address.

Chapter 5

REQUIREMENT ANALYSIS

5.1 Software Requirements

5.1.1 (Survey Tool)Google Forms

Google Forms is a survey administration tool that is part of the free web-based Google Docs Editors suite. This suite also offers Google Docs, Google Sheets, Google Slides, Google Drawings, Google Sites, and Google Keep. Google Forms is solely accessible as a web application.

5.1.2 (Survey Tool)Spreadsheets

Google Sheets is a spreadsheet application included in the free, web-based Google Docs Editors suite. It is available as a web application and a mobile app for Android, iOS, and as a desktop application on Google's ChromeOS. The app is compatible with Microsoft Excel file formats. It enables users to create and edit files online while collaborating with others in real-time.

5.1.3 (Data Analysis Software)ORACLE database(SQL)

Oracle Database, often known as Oracle DBMS or Oracle Autonomous Database, is a proprietary multi-model database management system developed and marketed by Oracle Corporation. It is commonly utilized for handling online transaction processing (OLTP), data warehousing (DWH), and mixed (OLTP DW) database workloads

5.1.4 Power BI(Statistical Software)

As part of the Microsoft Power Platform, Microsoft Power BI is a business intelligence software tool that specializes in interactive data visualization. It can create static and interactive data visualizations using data from sources such as databases, web pages, PDFs, and structured files. Power BI offers cloud-based business intelligence services called "Power BI Services," as well as a desktop interface called "Power BI Desktop." It also includes data warehouse features, data preparation, data mining, and interactive dashboards.

5.1.5 (Word Processing Software)Google docs

Google Docs is an online word processor that is part of the free, web-based Google Docs Editors suite provided by Google, along with Google Sheets, Google Slides, Google Drawings, Google Forms, Google Sites, and Google Keep. Google Docs allows users to create and edit documents online while collaborating with other users in real time.

5.2 Hardware Requirements

The hardware requirements for your project would be minimal. 4 computers with internet access would be sufficient for most tasks, including:

- Data Collection
- Data cleaning
- Primary Data Analysis
- Secondary Data Analysis
- Final Data Insights

5.3 Technical Requirements

SQL script Writing(assistance)

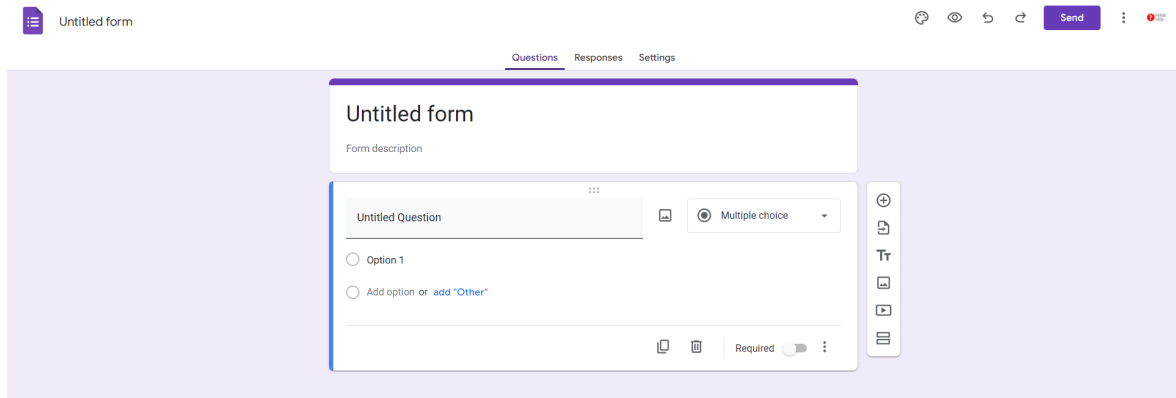


Figure 5.1: Google Forms Interface

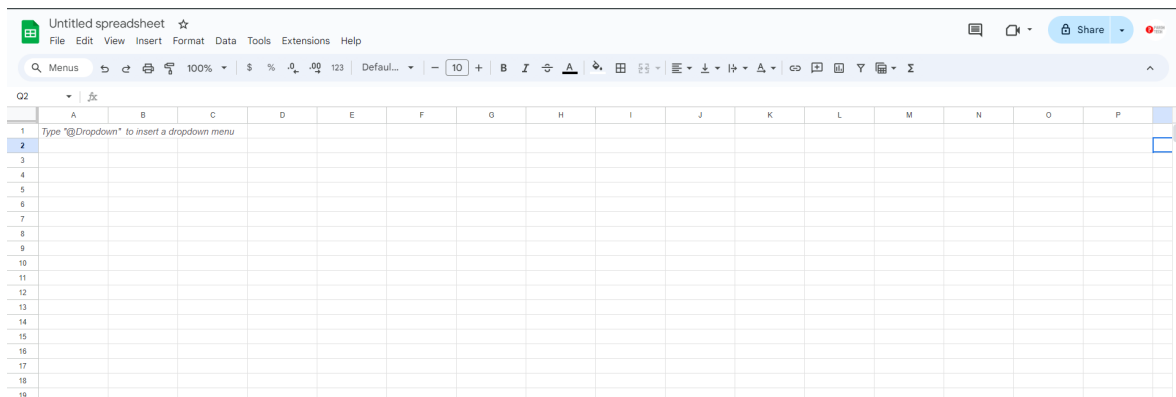


Figure 5.2: Google sheets Interface



Figure 5.3: Oracle Database Interface

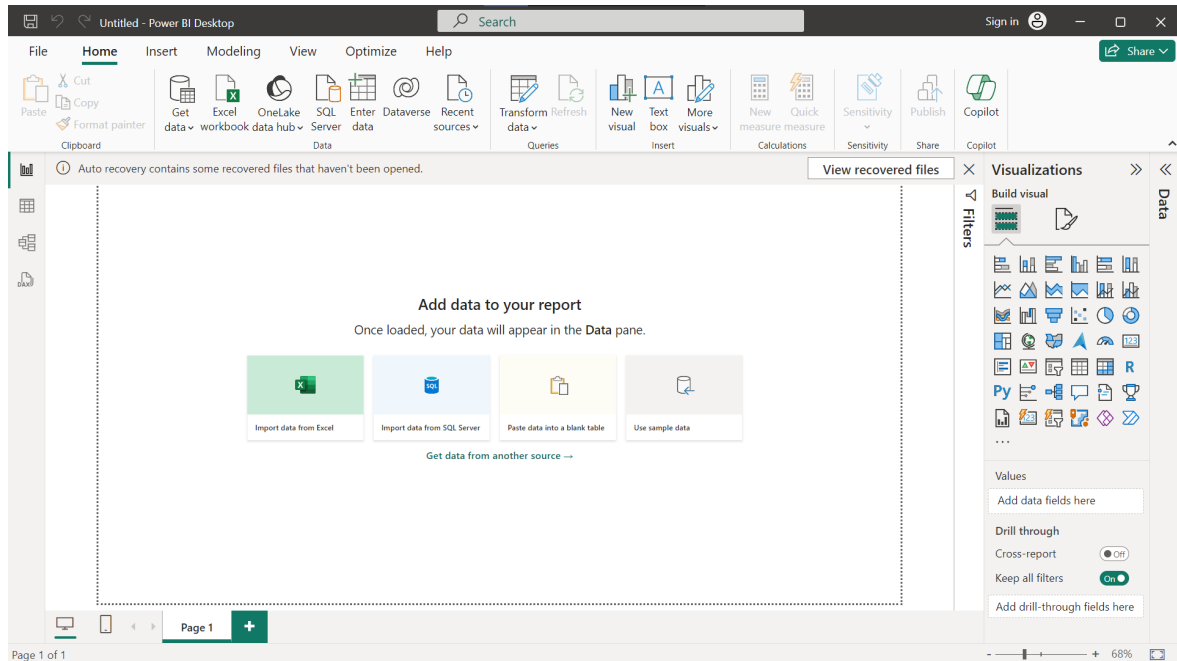


Figure 5.4: Power BI Interface

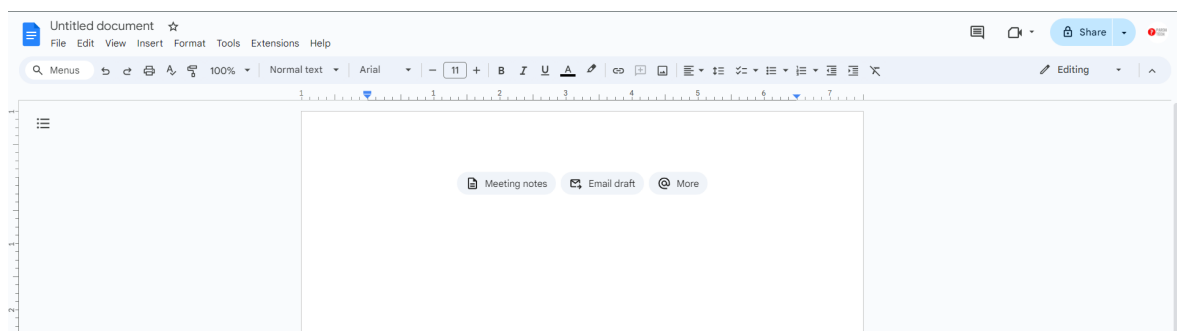


Figure 5.5: Google Docs Interface

Chapter 6

SYSTEM DESIGN

6.1 Work Flow

Workflows describe how we performed tasks to complete a project. It provides a simple way to remind all team members of the work that needs to be done to complete project in time.

6.2 Explanation

1. **Start:** The project begins by defining the overall objectives, focusing on analyzing student domain interest for EduTech.
2. **Literature Review:** Research existing studies on student learning preferences and trends in educational technology, particularly for the target audience (18-25 years old). This helps tailor the survey instrument.
3. **Design Survey Instrument:** Develop a survey questionnaire that gathers data on student demographics, educational background, preferred learning styles, and specific areas of interest in 4.0 technologies.
4. **Identify Target Audience:** Define the target population for the survey - students aged 18-25.
5. **Select Sampling Method:** Choose a method to select survey participants (random sampling for a representative sample, convenience sampling if reaching a specific group is easier).
6. **Distribute Final Survey:** Launch the final survey using the chosen method (online platform, paper-based distribution).
7. **Collect Survey Responses:** Gather completed surveys from the target audience.
8. **Clean and Prepare Data:** Clean the collected data by removing incomplete responses, correcting errors, and formatting data consistently.

9. **Data Analysis:** Analyze the cleaned data using descriptive statistics (frequencies, percentages, central tendency measures) to understand overall trends in student domain interest. Additionally, use cross-tabulation (optional) to explore relationships between variables (e.g., how domain interest varies by age or education level).
10. **Generate Insights:** Based on the data analysis, identify key insights about the most in-demand domains among students aged 18-25.
11. **Develop Recommendations:** Formulate actionable recommendations for EduTech based on the student domain interest insights. This could suggest specific course offerings or focus areas for their upcoming launch related to 4.0 technologies.
12. **End:** The project concludes with a report summarizing

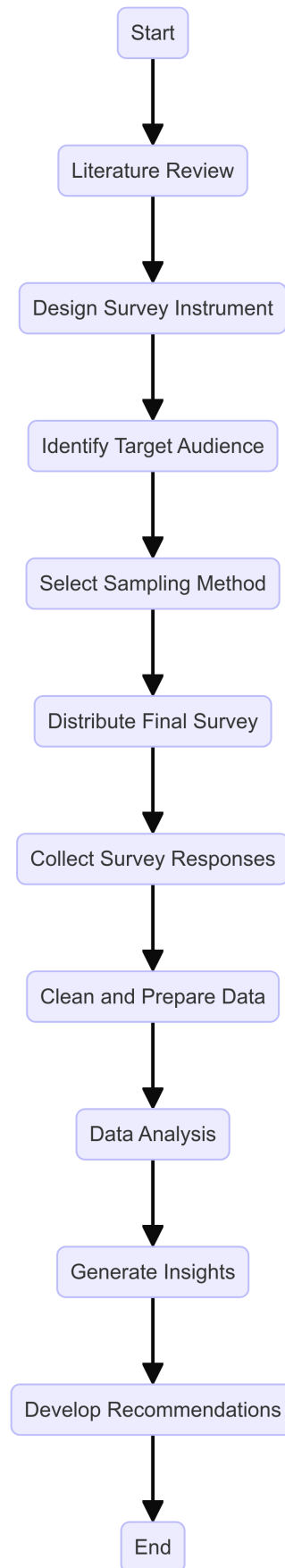


Figure 6.1: Work Flow of Project

Chapter 7

IMPLEMENTATION

This chapter represents how the project is executed step by step.

7.1 Data Collection

This section would explain how we gathered data to for survey step by step:

7.1.1 Survey Development

1. Basic Info ?
2. Which Domain are you interested in ?
3. Would you like one-on-one mentorship from industry professionals?
4. Would you like to enroll in the program?
5. You are interested to learn by solving real time simulation processes?
6. How much money you want to spend to complete the course?
7. What you know about 4.0 technologies?

Embed HTML Code

```
iframe src="https://docs.google.com/forms/d/e/1FAIpQLSeGxz9ypRRNwhFEgvapuBJQ0rG35xTqBrb1V-Q/viewform?embedded=true" width="700" height="520" frameborder="0" marginheight="0" marginwidth="0">Loading.../iframe
```

Edutech survey

Edutech, an education-based platform primarily focusing on 4.0 technologies, offers a variety of free mini-courses and courses at affordable prices for students.

* Indicates required question

1. Name *

2. Email *

3. Mobile Number *

4. College Name *

5. Gender *

Mark only one oval.

☐ male

☐ Female

6. Qualification *

Mark only one oval.

☐ B.Tech

☐ Degree

☐ Other:

sample

Figure 7.1: Survey Form

7. YEAR OF STUDY *

Dropdown

Mark only one oval.

- ☐ 1st Year
- ☐ 2st Year
- ☐ 3rd Year
- ☐ 4th Year

8. You are here for *

Mark only one oval.

- ☐ To upgrade your skills
- ☐ Internship
- ☐ both above options

9. what you know about 4.O technologies ?

mention: what you know about it.

10. Which Domain are you interested in *

Mark only one oval.

- ☐ Artificial Intelligence
- ☐ Data Science
- ☐ Embedded systems and IoT
- ☐ Big Data Analytics
- ☐ Cloud Computing
- ☐ Cyber Security
- ☐ Other: _____

11. How you Want to study *

Mark only one oval.

- ☐ Online
- ☐ Offline

Figure 7.2: Survey Form

12. Would you like one-on-one mentorship from industry professionals? *

Mark only one oval.

☐ yes

☐ No

13. Would you like to enroll in the _____ program? *

Mark only one oval.

☐ live sessions

☐ self paced

14. You are interested to learn by solving real time simulation process? *

Mark only one oval.

☐ Yes, I am waiting for it

☐ No, I Want only theory

15. How much money you want to spend to complete the course? *

Skip to question 16

Declaration

16. I hereby declare that I participated in this survey voluntarily without any external pressure in this Edutech Survey. *

Check all that apply.

☐ I confirm

17. how is your experience in this Survey conducted by PARDH TECH *

Mark only one oval.

☐ Excellent

☐ Good

☐ Average

☐ Need to improve

Figure 7.3: Survey Form

18. Suggestions ^{*}

For your improvement surveying process

Skip to section 3 (Thanks for submission)

Thanks for submission

your response is precious for us.

This content is neither created nor endorsed by Google.

Google Forms

sample

Figure 7.4: Survey Form

7.1.2 Survey Distribution

- **WhatsApp:** While primarily a messaging app, WhatsApp can be used to distribute surveys to specific contacts or groups. You can create surveys using other tools and share the survey links through WhatsApp
- **Facebook:** Facebook offers a built-in survey tool called Facebook Polls, which allows you to create simple polls that can be distributed to your followers and friends on Facebook.
- **Twitter:** Twitter can be a quick and easy way to gather opinions and feedback from your Twitter followers.
- **LinkedIn:** LinkedIn has a feature called LinkedIn Polls, which allows you to create and distribute polls to your professional network. It's a good option if your survey audience consists of professionals or businesses.

7.1.3 Data Collection Methods

Spreadsheets: we used spreadsheets for data collection as we know Spreadsheets is a powerful tool created by humans to organize, manipulate and analyze data efficiently.

7.2 Data Analysis and Insights

This section would combine the data collection aspects with a focus on how you analyzed the information and arrived at key insights.

7.2.1 Data Cleaning and Preparation

Data Preparation Steps(using spreadsheets)

1. Identifying and Removing Duplicates
2. removing of unwanted columns
3. Checking for Missing and Null Values
4. Handling Missing and Null Values
5. Data Type Consistency

7.3 primary Data Analysis(using SQL)

1. Distribution of College
2. Gender Breakdown
3. Year of Study
4. Interest in Specific Domains
5. minimum,maximum,standard deviation

Source Codes:

7.3.1 Distribution of College

```
select *from EDUTECH;  
SELECT COLLEGE, COUNT(*) AS Enrollments  
FROM EDUTECH  
GROUP BY COLLEGE;
```

Figure 7.5: distribution of college

Results	Explain	Describe	Saved SQL	History
COLLEGE		ENROLLMENTS		
GITAM		2		
Fergusson College		2		
Delhi University		1		
Amity University		2		
MRCET		7		
HITAM		4		
IIT Bombay		1		
NSITM		2		
IIIT-H		1		
VIT ap		1		
IIT Delhi		2		
Mumbai University		1		
KIT&B		2		
JNTUH		1		
ST MARTIN'S		1		
IARE		3		
Government College		2		
KIIT Bhubaneswar		2		
St. Joseph's College		1		
TIE&TS		1		
GIET		1		
MLRIT		9		
Janvi college		1		
NIT Trichy		2		
Jadavpur University		2		
BITS Pilani		2		
IIT-H		1		
VCE		1		
MLRITM		1		
MVSR		1		
DPS R K Puram		1		
OUCE		1		
VCE		2		
GIRET		1		
AU		3		
GFGC HAROHALLI		2		
MRECW		2		
Presidency College		1		
SRM Institute		1		
Delhi Technological Univ.		2		
GRIET		1		
GOVT DEGREE COLLEGE FOR WOMENS		1		
MU		2		
Anna University		1		
PBR Vishwabharathi College of Pharmacy		1		
JNTUH		1		
IARE		1		

47 rows returned in 0.02 seconds [CSV Export](#)

Figure 7.6: distribution of college

7.3.2 Gender Breakdown

```
SELECT Gender, COUNT(*) AS Count  
FROM EDUTECH  
GROUP BY Gender;
```

Figure 7.7: Gender Breakdown code

Results	Explain	Describe	Saved SQL	History
GENDER		COUNT		
FEMALE		37		
MALE		47		

2 rows returned in 0.01 seconds [CSV Export](#)

Figure 7.8: Gender Breakdown

7.3.4 Interest in Specific Domains

```
SELECT DOMAIN, COUNT(*) AS Count  
FROM EDUTECH  
GROUP BY DOMAIN  
ORDER BY Count DESC;
```

Figure 7.11: Domain Interest Code

Chapter 8

Secondary Data Analysis

8.1 Data Visualization using Power BI

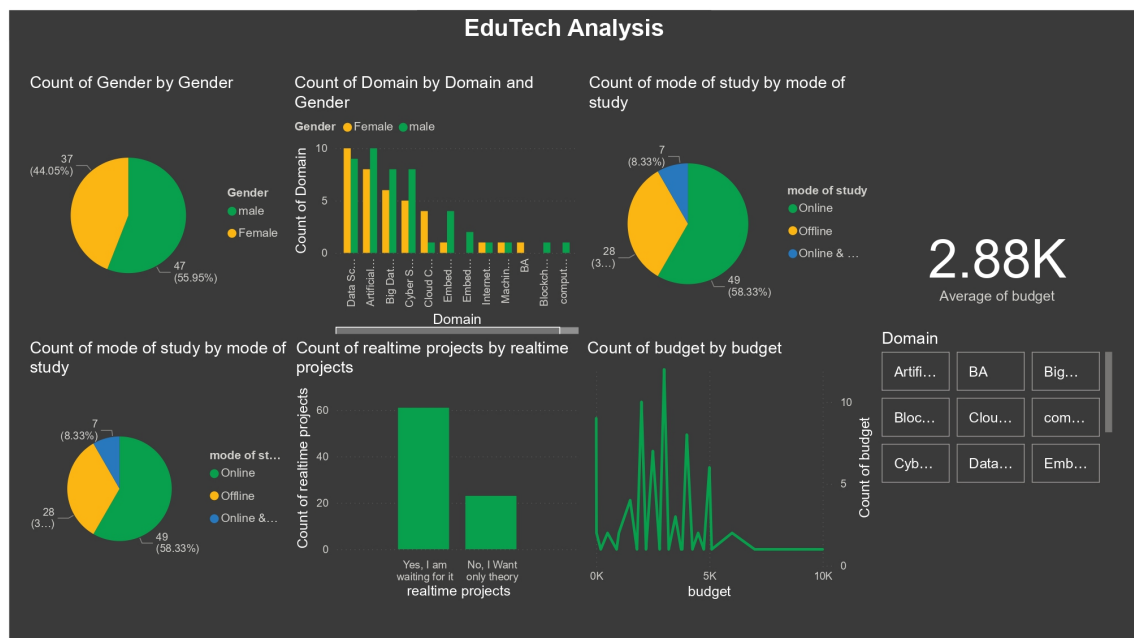


Figure 8.1: BI Dashboard

8.2 Focus Area plots

This Section contains of:

1. Focuses on questions in survey
2. Findings from plots
3. Suggestions for EduTech company

8.2.1 Which Domain are you interested in ?

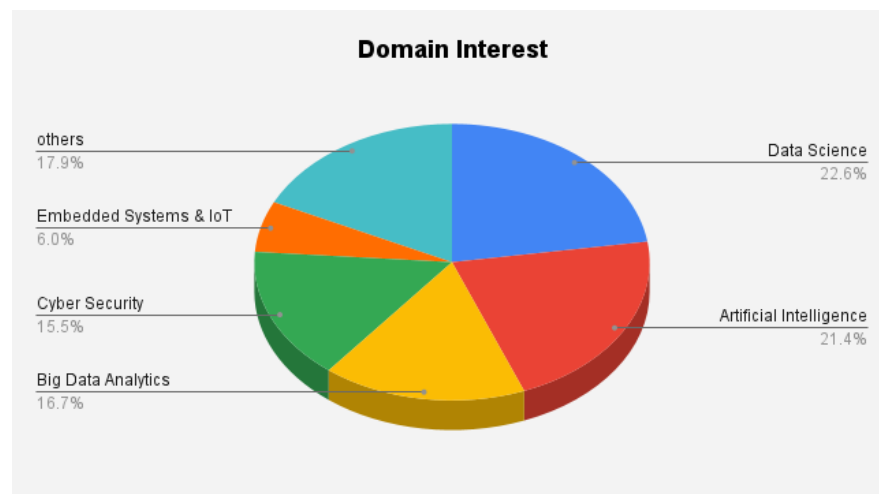


Figure 8.2: domain Interest

Findings:

The provided pie chart illustrates the distribution of student interest across various 4.0 technology domains:

- **Data Science and Artificial Intelligence** are the clear frontrunners in terms of student interest, together constituting nearly 45% of the total interest.
- **Cybersecurity and Big Data Analytics** follow closely behind, indicating a significant interest in these domains as well.
- **Embedded Systems and IoT** and **Others** have relatively lower interest levels, suggesting a potential need for further exploration or targeted marketing efforts.

Suggestions:

Based on the findings, the following suggestions can be considered:

- **Prioritize Course Development:** Given the high interest in Data Science and Artificial Intelligence, it is recommended to prioritize the development of courses in these domains.

- **Expand Offerings:** While Cybersecurity and Big Data Analytics show substantial interest, offering courses in these areas could further attract students.
- **Explore Niche Areas:** To capture a wider audience, consider offering introductory courses in Embedded Systems and IoT, potentially as electives or specializations within other programs.
- **Targeted Marketing:** Develop focused marketing strategies to promote the less popular domains, potentially highlighting their career prospects and unique learning opportunities.
- **Continuous Assessment:** Regularly assess student interest and preferences to adapt course offerings accordingly. Consider conducting surveys or feedback mechanisms to stay updated on evolving trends.

8.2.2 Would you like one-on-one mentorship from industry professionals?

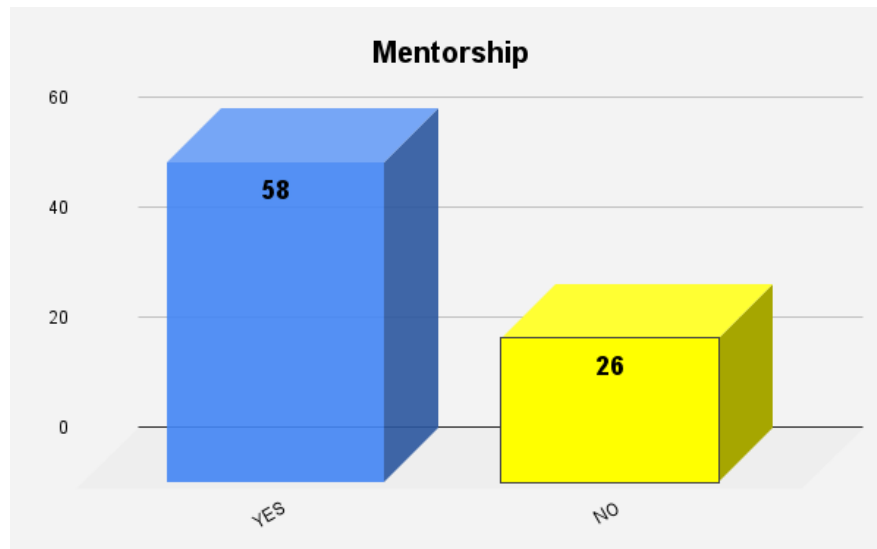


Figure 8.3: mentorship

Findings:

The provided bar chart illustrates a clear preference for mentorship among respondents.

- **High Demand for Mentorship:** A significant majority (58 out of 84 respondents) indicated a desire for mentorship, underscoring the importance of mentorship programs.
- **Minority Preference for Independent Learning:** While a considerable portion of respondents expressed a need for mentorship, a notable minority (26 out of 84) indicated a preference for independent learning.

Suggestions:

Based on these findings, the following recommendations can be considered:

- **Prioritize Mentorship Programs:** Given the high demand, a robust mentorship program should be a cornerstone of the educational or professional development initiative.

8.2.3 Would you like to enroll in the program?Live Session/ Self-paced

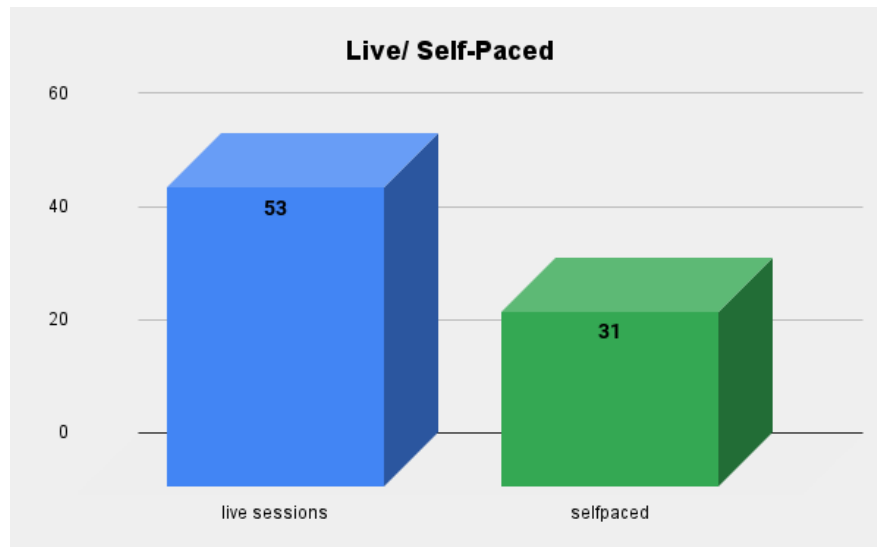


Figure 8.4: live sessions / Self-Paced

Findings:

The provided image is a bar chart comparing the preference for "live sessions" versus "self-paced" learning formats. The key findings are:

- **Stronger Preference for Live Sessions:**
- The bar representing live sessions is significantly taller than the one for self-paced learning, indicating a stronger preference for live sessions among the respondents.

Suggestions:

Based on these findings, it appears that there's a substantial inclination towards live sessions among the respondents. Therefore, educational institutions and platforms should:

- **Prioritize Live Sessions:** Invest more resources and efforts in providing high-quality live sessions, ensuring they are engaging and interactive.
- **Supplement with Self-Paced Options:** While live sessions are preferred, offering self-paced learning materials as supplementary resources can cater to a wider audience and provide flexibility.

8.2.4 You are interested to learn by solving real time simulations?

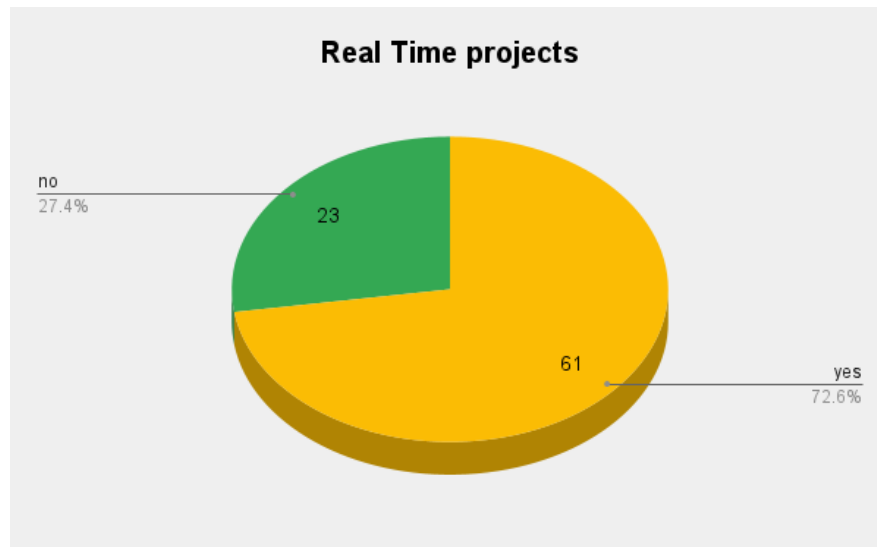


Figure 8.5: Real time projects

Findings:

The provided pie chart illustrates the distribution of responses regarding involvement in real-time projects.

- **High Prevalence of Real-Time Project Experience:** A significant majority of respondents (72.6%) have been involved in real-time projects, indicating a strong emphasis on real-time systems development within the surveyed group.
- **Smaller Segment with No Experience:** A smaller portion (27.4%) of respondents have no experience with real-time projects, suggesting potential areas for skill development and training.

Suggestions:

Based on these findings, the following recommendations can be considered:

- **Leverage Real-Time Expertise:** Organizations should capitalize on the existing expertise in real-time systems by assigning experienced individuals to mentor and guide those with less experience.
- **Skill Development Focus:** Provide opportunities for individuals with no real-time project experience to gain exposure and develop necessary skills through training, workshops, or small-scale projects.
- **Project Prioritization:** When allocating resources and personnel, prioritize projects that require real-time capabilities to optimize the utilization of existing expertise.

8.2.5 How you Want to study?

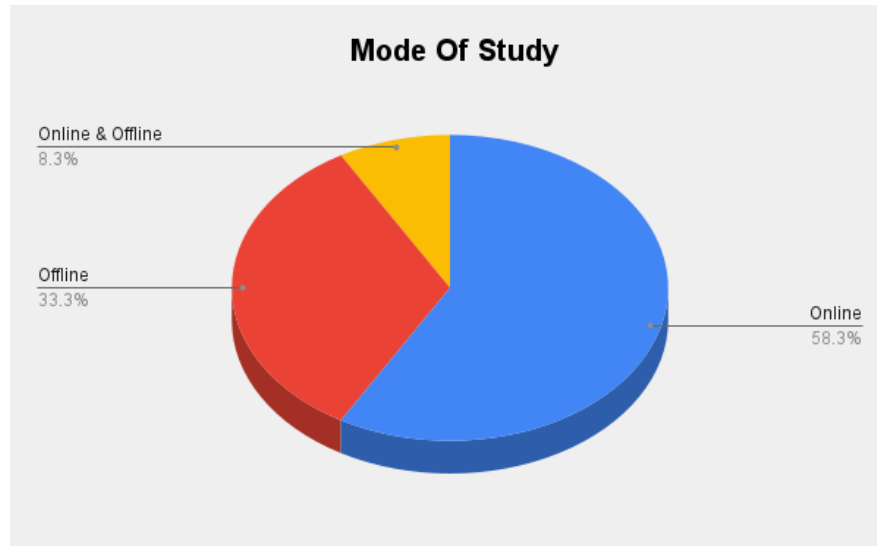


Figure 8.6: Mode Of Study

Findings:

The provided pie chart illustrates the distribution of preferred learning modes among respondents.

- **Online Learning Dominance:** Online learning is the most preferred mode of study, accounting for 58.3% of respondents.
- **Offline Learning Still Relevant:** Despite the dominance of online learning, offline learning still holds significance, with 33.3% of respondents opting for this mode.
- **Blended Learning Niche:** A smaller segment of respondents (8.3%) prefers a combination of online and offline learning, indicating a potential demand for flexible learning options.

Suggestions

- **Prioritize Online Learning Infrastructure:** Given the strong preference for online learning, institutions should invest in robust online platforms and resources to ensure a seamless learning experience.
- **Complement with Offline Support:** While online learning is preferred, offering offline support systems like physical libraries, study centers, or mentorship programs can enhance the overall learning experience.

8.2.6 Expectations From Course

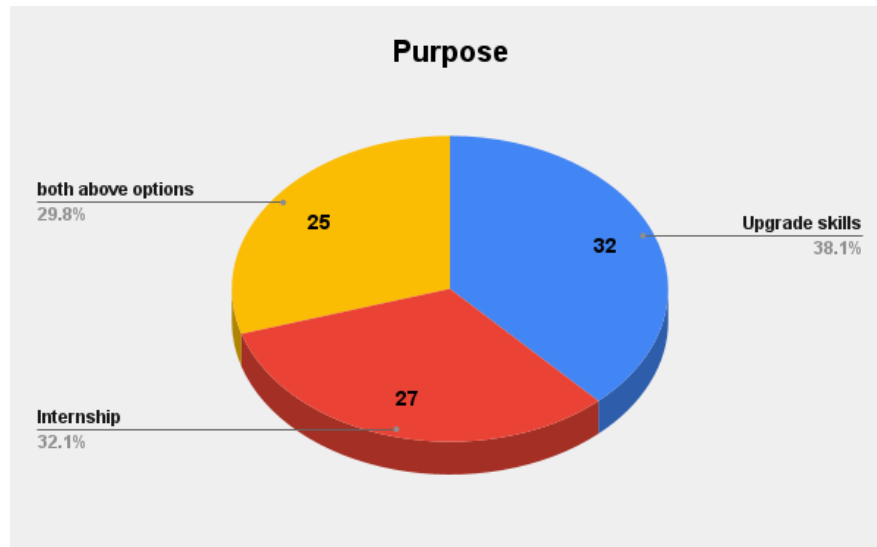


Figure 8.7: purpose

Findings

The provided pie chart illustrates the distribution of participant motivations for attending a workshop.

- **Skill Enhancement is Primary:** The largest segment of participants (38.1%) aims to upgrade their skills, indicating a strong desire for professional development.
- **Balanced Interest:** Both 'Internship' and 'Both Above Options' hold substantial weight, with 32.1% and 29.8% respectively, suggesting a balanced interest in practical experience and skill enhancement.

Suggestions

Based on these findings, the following suggestions can be considered:

- **Skill Enhancement Focus:** Given the significant emphasis on skill upgrade, the workshop content should heavily prioritize practical skill development and application.
- **Internship Opportunities:** To cater to the interest in internships, exploring partnerships with companies for potential placements or projects can be beneficial.

Chapter 9

ADVANTAGES

9.1 Technical Expertise

9.1.1 Data Analysis (SQL, etc.)

Gain hands-on experience in data cleaning, analysis techniques, and writing SQL queries - highly sought-after skills in the industry.

9.1.2 Tool Proficiency

Develop proficiency in using industry-standard tools like SQL, Power BI, and Excel for data manipulation, analysis, and visualization.

9.2 Data Science Simulation

Project Mimics Real-World Work Clean, analyze, and interpret real-time survey data, mimicking the core tasks undertaken by data scientists in various industries.

9.3 Soft Skills Development

9.3.1 Teamwork and Communication

Develop effective collaboration skills, foster improved communication, and practice project planning and task delegation.

9.3.2 Project Management

Gain practical experience in the fundamentals of project management, including planning, execution, and monitoring.

9.3.3 Social Skills and Etiquette

Enhance professional communication skills and potentially gain exposure to appropriate business etiquette.

9.4 Overall Benefits

9.4.1 Career Advantage

Build a strong portfolio that showcases technical abilities and initiative, thereby enhancing future job prospects.

9.4.2 Personal Growth

Gain insights into student learning preferences and the EduTech industry, while honing critical thinking and problem-solving skills.

9.4.3 Benefits for society

- Address the domain interest of students seeking careers in the rapidly growing field of 4.0 technologies.
- Prepare students for successful careers by equipping them with the most relevant and in-demand skillsets.
- Contribute to the overall growth and advancement of the EduTech domain itself.

Chapter 10

CONCLUSION

10.1 Key Findings

- **Strong preference for live sessions:** Respondents overwhelmingly favored live learning formats over self-paced options.
- **High demand for mentorship:** A significant portion of participants expressed a need for mentorship to support their learning journey.
- **Focus on skill enhancement:** Upgrading existing skills was the primary motivation for workshop attendance.

10.2 Recommendations

- **Prioritize live learning experiences:** Invest in technologies and infrastructure to deliver high-quality live sessions.
- **Offer flexible options:** While live sessions are preferred, provide self-paced resources for supplementary learning.
- **Implement mentorship programs:** Establish a robust mentorship program to support learners and address the expressed need.
- **Skill-focused curriculum:** Design workshops and programs with a strong emphasis on practical skill development and application.

10.3 summary

Student interest in 4.0 technologies leans heavily towards **Data Science and Artificial Intelligence**, followed by **Cybersecurity and Big Data Analytics**. There's a clear preference for live learning formats over self-paced options. A significant portion of respondents expressed a need for mentorship, indicating the potential for a robust mentorship program. To maximize the impact of educational initiatives, a focus on these high-demand domains, coupled with a balance of live and self-paced learning options and mentorship opportunities, is recommended.