Define Problem

Specify the Business Problem

Pandemic has influenced all spheres of the humanity. COVID-19 impacted the education vertical in larger manner. Traditional classroom environment plays a very vital role in moulding the life of an individual. Bond nurtured in the early ages of the life acts as the great moral support in the latter stages of the journey. As the pandemic has forced us into online education, this data collection aims to analyse the impact of online education. To check out the satisfactory level of the learners, review conducted.

Business Requirements

The following are the requirements to analyse the impact of virtual classroom in online education system:

1. Gender – Male, Female
2. Home Location – Rural, Urban
3. Level of Education – Post Graduate, School, Under Graduate
4. Age – Years
5. Number of Subjects – 1- 20
6. Device type used to attend classes – Desktop, Laptop, Mobile
7. Economic status – Middle Class, Poor, Rich
8. Family size – 1 -10
9. Internet facility in your locality – Number scale (Very Bad to Very Good)
10. Are you involved in any sports? – Yes, No
11. Do elderly people monitor you? – Yes, No
12. Study time – Hours
13. Sleep time – Hours
14. Time spent on social media – Hours
15. Interested in Gaming? – Yes, No
16. Have separate room for studying? – Yes, No
17. Engaged in group studies? – Yes, No
18. Average marks scored before pandemic in traditional classroom – range
19. Your interaction in online mode - Number scale (Very Bad to Very Good)
20. Clearing doubts with faculties in online mode - Number scale (Very Bad to Very Good)
21. Interested in? – Practical, Theory, Both
22. Performance in online - Number scale (Very Bad to Very Good)
23. Your level of satisfaction in Online Education – Average, Bad, Good

Literature Survey

The Online Education System-Review by Radhakrishnan and Sujatha [1] survey the online education system impact during COVID'19. The data collection aims to analyze the impact of online education. To check out the satisfactory level of the learners, review was conducted. Gender – Male, Female Home Location – Rural, Urban Level of Education – Post Graduate, School, Under Graduate Age – Years Number of Subjects – 1- 20 Device type used to attend classes – Desktop, Laptop, Mobile Economic status – Middle Class, Poor, Rich Family size – 1 -10 Internet facility in your locality – Number scale (Very Bad to Very Good) Are you involved in any sports? – Yes, No Do elderly people monitor you? – Yes, No Study time – Hours Sleep time.

Using business analytics, the case study [2] by Kara Bunting was prepared to address a hypothetical request from the University of Notre Dame Australia to report the impact that online education has had on students overall marks versus the traditional classroom With online learning becoming increasingly popular, this topic has gained a lot of attention from researchers. While many studies have been completed in this area, no study has been able to definitively address the variables that directly affect student's marks. The study herein, aims to analyse the average marks obtained by students from traditional, face-to-face (F2F) classroom environments and compare them against the average marks obtained by the same students in the online mode. Tests between the relationship of changes in average marks and variables such as amount of interaction in online mode, study time, outside interests, family size, etc. were carried out for statistical significance. The data was collected via Kaggle.com. The study used both descriptive and predictive analysis methods, to return the most statistically significant model in which 35% of the variations in student marks were supported by the explanatory variables. Furthermore, recommendations have been offered to Notre Dame

References
[1]. Radhakrishnan, Sujatha (2021), "Online Education System - Review", Mendeley Data, V1, 2021, doi: 10.17632/bzk9zbyvv7.1.

[2]. Kara Bunting, "ISYS3375–ASSESSMENT 2: BUSINESS ANALYTICS CASE STUDY Comparison of Student Marks from Traditional Classroom and Online Learning", Royal Melbourne Institute of Technology, University of Notre Dame Australia,2022.

Social or Business Impact

The virtual classroom has revolutionized education, offering unprecedented access to knowledge and learning opportunities. This study concludes by summarizing the key findings and emphasing the importance of addressing the challenges while harnessing the potential of online education for the betterment of society.