

STUDENT DATA ANALYSIS USING BUSINESS ANALYTICS AT SYSTEMS COMPUTER EDUCATION

Aditi Jadhav

Student,

NCRD's Sterling Institute of Management Studies,
Navi Mumbai

Dr. Sandeep J. Ponde,

Associate Professor,

NCRD's Sterling Institute of Management Studies,
Navi Mumbai

ABSTRACT

A study entitled *Students Admission and Retention Data Analysis System*. Business analytics is a combination of disciplines and technologies that use data analysis, statistical models, and other quantitative methods to solve business challenges. It entails an iterative, rigorous investigation of an organization's data, with a focus on statistical analysis, in order to inform decision-making. This research will give the importance of education where education is to increase one's knowledge. In order to gain knowledge, we must combine theoretical understanding with practical application in the real world. System Computer Education helps the understudies to get ready for the most pined for exams. We prepare our understudies to split exams that are dubious as well as hard to clear. We go for building a classroom where there is an exchange and not only a workshop room where a monolog is directed. The instructors are effortlessly agreeable and exceptionally supportive. Thinking about the essentialness of these exams the institute gives their understudies committed workforce, best course content and legitimate investigation management. The findings of this study will provide insights into the effectiveness of system computer education social media marketing strategies and will inform future education on digital platform. Ultimately, this study will contribute to the growing body of knowledge on social media marketing in the information and internet technology industry.

Keywords: - Student Data Analysis, Retention Data Analysis, Business Analytics, Data Analysis, Statistical Models, Theoretical Understanding, Practical Application, Digital platform, Information and Internet Technology Industry.

INTRODUCTION

Student Data analysis can provide a snapshot of what students know, what they should know, and what can be done to meet their academic needs. With appropriate analysis and interpretation of data, educators can make informed decisions that positively affect student outcomes.

- Data on student admission and retention in an academic institution were gathered through online surveys wherein they are asked to answer a survey. For data analysis on student retention, they are asked what are the factors and reasons of their continuous enrollment. Factors given are : employee's dependent, scholarship grant, location's accessibility, tuition fees and other fees, up-to-date facilities, board performance, quality instruction, autonomous status, community involvement activities, linkages and partners and employability rate.
- On the other hand, student admission data were analyzed on how they get to know the academic institution with given different marketing strategies as follows: referred by friend or relatives, career talk/orientation, house to house marketing campaign, marketing ads/ tarpaulin posting/flyers, website/social media platforms, newspaper and publications, television ads/commercials, hosting on various invitational academic and non-academic competitions, academic and sports competition. Likewise
- software prototyping applications and methods are best used in the situations like; systems that require a high level of interaction from users; online systems applications, systems that use a lot of screens, and systems and applications wherein users need to fill out forms like online surveys.

HOW BUSINESS ANALYTICS WORKS

BA begins with numerous foundational activities before beginning any data analysis:

- Determine the analysis's business purpose.
- Decide on an analytical method.
- Gather company data to aid in the analysis, which might come from a variety of systems and sources.
- Cleanse and combine data in a single repository, such as a data warehouse or data mart.

Predictive Analytics

Predictive analytics is the study of past data in order to forecast future events and trends. To increase the accuracy of forecasts, predictive analytics often employs methods such as big data, machine learning, and regression analysis (which investigates the correlations between past datasets).

Predictive analytics in marketing

Despite its many advancements over the decades, marketing technology does not always do the best job of assisting purchasers. Anyone who has ever gone online in search of new shoes only to have their computer bombard them with adverts for new sneakers for the next several months can attest to this.

However, predictive analytics is assisting marketers in improving their ability to predict customer behavior so that they may customize a marketing campaign for the right audience at the right time on the right channels.

Challenge: Predicting client behavior trends so that marketing campaigns can be properly focused.

Solution: Use marketing automation software with comprehensive analytics features to assist your marketing teams follow buyer behavior at every stage of the customer journey, giving them insight into the next steps customers are most likely to take.

Predictive Analytics Measurement Models

With predictive analytics, there are three main types of models to consider:

- **Cluster Models:** These algorithms are used to categorize audiences based on previous brand involvement, previous purchases, and demographic information.
- **Propensity Models:** These assess a customer's potential to convert, act on an offer, or disconnect from a brand.
- **Recommendations Filtering:** This approach analyses previous purchase data to see where additional sales possibilities may exist.

What role does predictive analytics play in marketers' marketing strategies?

To take use of predictive analytics, marketers need advanced marketing tools and measurement capabilities because there is so much data accessible.

Marketing Metrics in One Place

Marketers require a large amount of past data to forecast future trends. Marketers must track each engagement as customers connect with campaigns, progress through the sales funnel, and eventually convert. To properly construct customer identities, all of this data must be connected and synced. By centralising data on market trends, consumer behaviour, and online and offline engagements, unified marketing measurement provides predictive analytics.

Software for Marketing Analysis

Multiple measurement models and a large amount of data are required for predictive analytics.

Marketers need powerful marketing analytics software that can condense all of this data into digestible information from which actionable insights may be derived in order to fully benefit from predictive analytics.

Artificial Intelligence and Machine Learning

AI and machine learning are expected to play a big part in marketing optimization, and they're already being talked about as must-have elements when it comes to omnichannel marketing solutions.

These solutions are necessary because they allow marketers to respond on data in real time, automatically presenting dynamic content. Dynamic pricing, automated sales predictions, automated content generation, and real-time personalization are all possible with predictive analytics, machine learning, and AI marketing capabilities.

Today's customers have more options than ever before. They are no longer limited to what is in stock at their local store; they may order whatever they want, whenever they want. As a result, vendors, merchants, and service providers are all competing fiercely. The only way to stay competitive is to stay ahead of consumer trends and desires. This is possible because of predictive analytics, which helps marketers evaluate customer behavior and patterns, forecast future shifts, and design campaigns appropriately.

Objectives of the Study

Overarching Goals

The primary goal of education is to increase one's knowledge. In order to gain knowledge, we must combine theoretical understanding with practical application in the real world.

The following is a list of the study's objectives.

Specific Objectives

- To understand about the current state of difficult learning solutions.
- To investigate how Wicully learning solutions are perceived by customers.
- To make recommendations based on research and observation.
- to research its competitors' brands
- To understand how employees contribute to the brand's positions.
- Leads collected through various marketing means are converted.
- Creating a short- and long-term sales strategy to achieve the target
- Consistently meet revenue targets in accordance with team/organizational goals.
- Identifying cross-selling/up-selling prospects with customers on a proactive basis
Identifying references from the existing client base to boost sales funnel
- Customer Relationship Management (CRM) is a term that refers to the management of customer relationships.
- Understand the customer's needs and communicate them to the product team through Key Account Management, New Account Development, Operations, and Reporting.
- Managing the assigned pre-sales and post-sales support activities.

Scope of the Study

This report was created after lengthy discussions with system employees and their supervisor. I met with an analytics manager to compile this report. He gave me an update on his activities. I had a great opportunity to learn about data cleansing, sorting, finding new clients through data visualization, and other related topics while producing this report. Conference publications have a substantial market. This book made it simple for me to compile information from a small number of conference publications.

Limitations of the Study

- 1.2.1 A fundamental limitation in the organization is the lack of relevant documents and information.
- 1.2.2 For me, an important constraint of the study was the unintended failure of the target audience/respondent to give the essential information due to their busy schedules.
- 1.2.3 There is a lot of information that can't be shared because of security concerns or other corporate commitments.
- 1.2.4 There may be deliberate inaccuracies due to a lack of experience in writing such extensive reports.

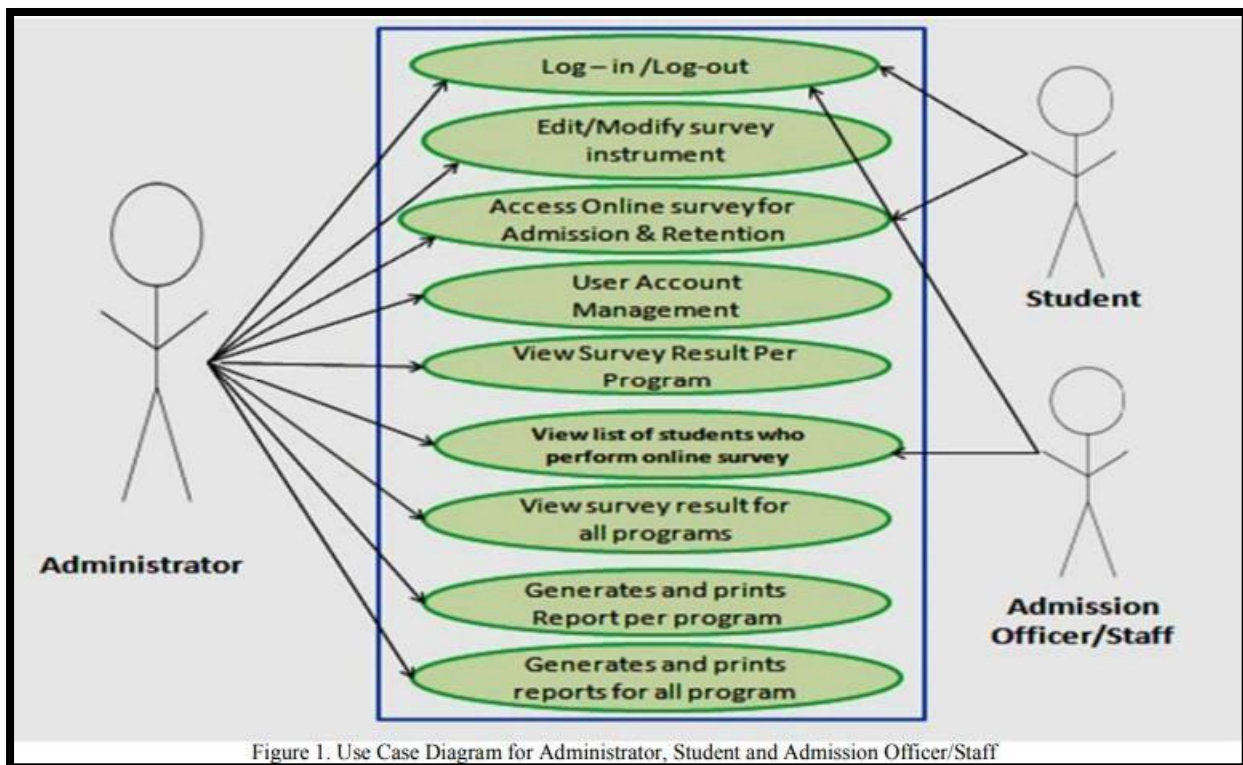


Figure 1. Use Case Diagram for Administrator, Student and Admission Officer/Staff

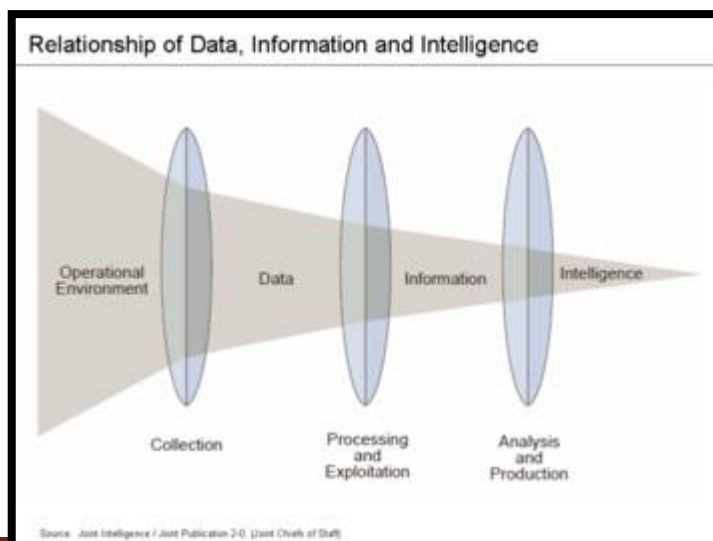
Figure 1 shows the use-cases for Administrator, Students and Admission Officer/Staff. It was presented that the administrator, student and admission officer/staff logs-in and logs-out of the system. Both the administrator and the student can access the online survey for admission and retention. Also, both Administrator and Admission Officer/Staff can view the list of students who finished the online survey in order to issue clearance with the students. Moreover, the administrators will be the one to manage the account of the users, edit/modify survey instrument, can view survey results for individual programs and all programs. Lastly, the Administrator could generate and print survey results per program and all programs.

STUDENT DATA ANALYSIS

Student Data analysis is a process of inspecting, cleansing, transforming, and modeling Student data with the goal of discovering useful information, informing conclusions, and supporting decision-making. Data analysis has multiple facts and approaches, encompassing diverse techniques under a variety of names, and is used in different business, science, and social science domains. In today's business world, data analysis plays a role in making decisions more scientific and helping businesses operate more effectively.

THE PROCESS OF DATA ANALYSIS

Analysis, refer to dividing a whole into its separate components for individual examination.

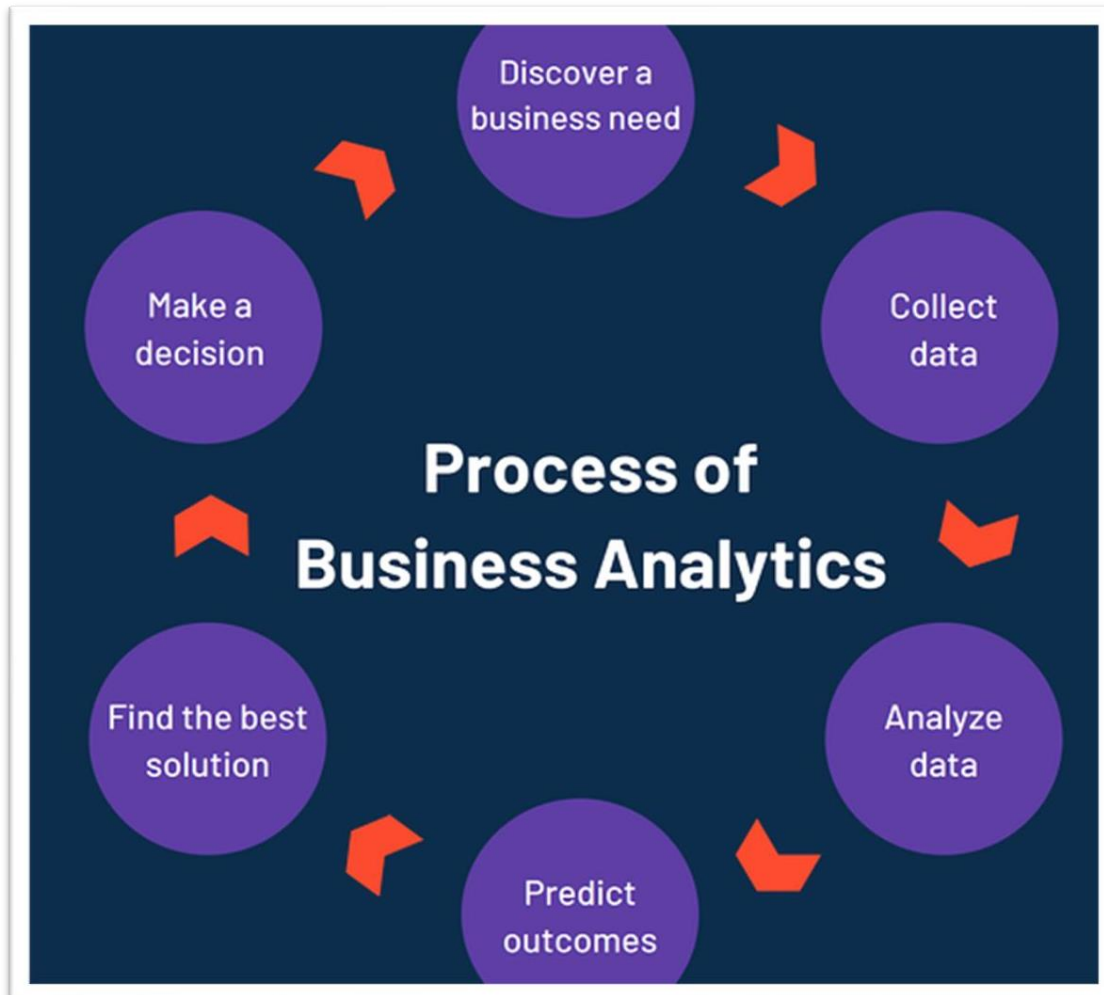


The phases of the intelligence cycle used to convert raw information into actionable intelligence or knowledge are conceptually similar to the phases in data analysis

BUSINESS ANALYTICS

Business analytics (BA) is a set of disciplines and technologies for solving business problems using data analysis, statistical models and other quantitative methods. It involves an iterative, methodical exploration of an organization's data, with an emphasis on statistical analysis, to drive decision-making.

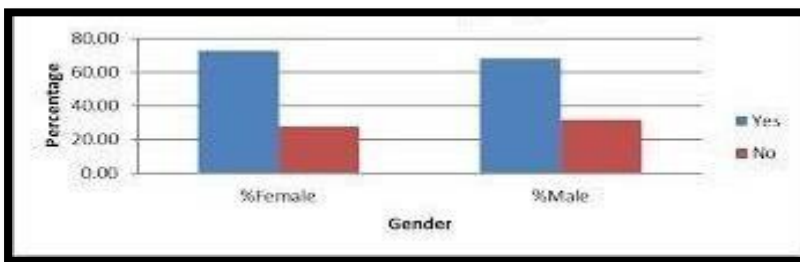
HOW BUSINESS ANALYTICS WORKS:



ANALYSIS&INTERPRETATIONOFFINANCIALSTATEMENTS

Systech tracks each Student 'journey' by analyzing every click and touch they make duringeach session. Users' journeys help us learn how they use the app and anticipate their nextpurchase. Company should expect 2.5 to 6 times business growth during the SummerHolidays.

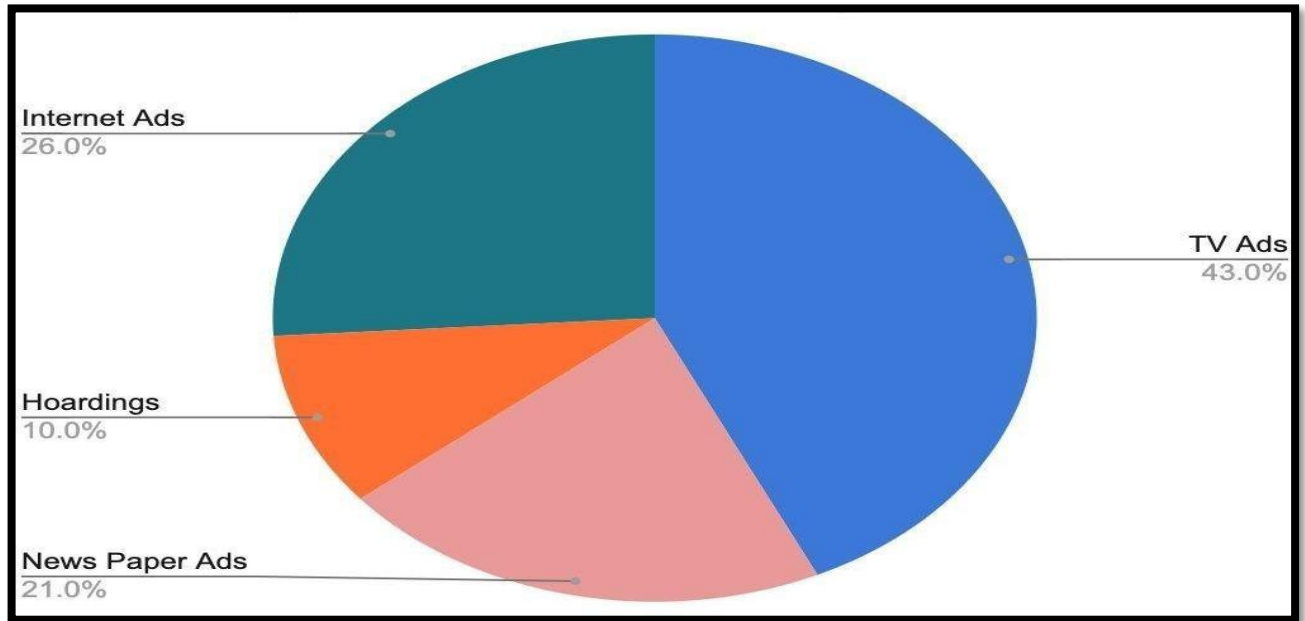
GenderwiseAdmissionforvariouscourses



INTERPETATION: Amongall100respondents,there60.00%malesand40.00%females

HowtherespondentscametoknowaboutSystech?

	Frequency	percent	Validpercent	Cumulative percent
TVads	43	43	43	43.0
Newspaperads	21	21	21	64.0
Hoardings	10	10	10	74.0
Internetads	26	26	26	100.0
Total	100	100	100	



INTERPRETATION: there were 43.00% respondents knew through TV Ads, 10.00% knew through hoardings, 26.00% knew through Internet Ads and 21.00% respondents knew through Newspaper Ads.

CONCLUSION:

- Systech Computer Education helps the understudies to get ready for the most pinedfor exams. systech go for building a classroom where there is an exchange and notonly a workshop room where a monolog is directed. The instructors are effortlesslyagreeable and exceptionally supportive. Thinking about the essentialness of theseexamstheinstitutegivestheirunderstudiescommittedworkforce,bestcoursecontent andlegitimateinvestigation management.
- systech staff gives careful consideration towards every single student and gets readybest course material to influence them to comprehend those inquiries that are toendeavor and those not to be, which is the trickiest piece of such examinations. Thefoundationlikewiseleadsdifferentinstructiveworkshops,courses,andvisitoraddresse s on a consistent premise to hold the focal point of the understudies. Themodernframework givessound showingconditions in the classes.
- The understudiesare energizedfor introducingthemselves and talk sessions arelikewise held.The pointof thisinstitute is to buildupanaggressive mentalityalongside a scholarly base that is driven by quality education as well as individualconsideration. Overall, it's an amazing institute to invest your trust, time, and moneyin.
- Systechoffersadiverserangeofcourses,someofwhichareessentialandotherswhichareextr aordinary.
- Systechprovidecustomizedsolutionswithqualityandcosteffectiveproductrange.Astrong customer focus approach and constant quest for top class quality and serviceshaveenabled us to attainand sustain leadership position.
- Following a customer's engagement with systech, we should ensure that they becomebrandloyal and track their activity on the platform.

REFERENCES:

- BusinessAnalytics:DataAnalysis&Decision Making.2015
- BusinessIntelligenceGuidebook:From Data IntegrationtoAnalytics.2015
- .LouisColumbus, 2016 BigData,AdvancedAnalytics,andCloudDeveloperUpdate
- ClintBoulton,Visualizationanalyticshelpsutilityproviderescape 'Excelhell'
- "Big Data Demystified: How To Use Big Data, Data Science And AI To Make BetterBusiness DecisionsAndGainCompetitiveAdvantage"byDavidStephensonPhD
- "Data Science For Business: What You Need To Know About Data Mining And Data-AnalyticThinking"byFosterProvost& TomFawcett
- "Data Analytics For Beginners: Your Ultimate Guide To Learn And Master Data Analysis.GetYourBusinessIntelligenceRight–AccelerateGrowthAndCloseMoreSales"byVictorFinch