



**MEASI INSTITUTE OF MANAGEMENT
CHENNAI-14**

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CASE STUDY
QUANTITATIVE AND RESEARCH METHODS IN BUSINESS

Case Study Number	I
Level of teaching	L3
Program outcomes covered	P01, P02, P03, P04, P05, P07,
Course outcomes covered	C102

Clear Picture TV Co. Decision Making... A Chain Reaction!

It was the third Saturday of July 2015. As per schedule, the Quarterly Review meeting was in progress and all members of the senior management were in attendance. The meeting was chaired by the CEO, Raj Singh; other senior members in attendance were Rajesh Subramaniam (CFO); Piyush Sharma (Marketing and Sales Head) and Suresh Mhatre (Operations head). Piyush, the Sales and Marketing Head was making his presentation; sales for the April- June 2015 quarter were down by 30% compared to the same period last year. He insisted that something had to be done and done real fast, if Clear Picture TV Co. was to survive in the market. Clear Picture TV Co. was established in the year 1979 to manufacture black and white colour televisions. The company manufactured and marketed two models – 14 inch and 21 inch televisions. Growth was robust in the initial years; by the year 1985, the company had a 30% share of the black and white television market in India. Colour transmission was introduced in India in 1982 to coincide with the Asian Games in New Delhi. Since the early 2000s the Indian TV industry witnessed drastic changes in terms of intensity of competition, and technology up gradation by the key players. Aggressive marketing, product quality and price sensitivity were the key factors to controlling the market. LG, ONIDA, Samsung, Videocon, Panasonic and Sony were the key players in this intensely competitive market place. Everyone was listening with rapt attention as Piyush tried to explain the reasons and his suggested plan of action to revive the dropping sales. Piyush explained that competition in the sector had increased sharply over the



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previous year, as the other major players including new entrants offered 5 years warranty on their picture tubes. Clear Picture TV Co. offered a 3 year warranty. When the meeting re convened, Suresh took centre stage. After reviewing the QC data on the life of the picture tubes (Exhibit I), he said that an additional proportion of TV tubes would have to be replaced if they would go for a 5 year warranty. Piyush had projected a sale of 100,000 units for next year

Assignment Questions

1. What is the additional percentage of tubes which will have to be replaced if the warranty is increased from 3 to 5 years? What is the total cost implication?

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Case Study Number	II
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P05, P07,
Course outcomes covered	C102.1

Mobile Continent's Expansion Dilemma

Mobile Continent, a Bangalore-based mobile factory and one of the growing mobile retailers in India, offered a comprehensive range of mobile phones with lot of promotional offers from all the available key brands (global). Since its inception in 2010, the company attempted to offer complete telecom solutions right from handset purchase to the choice of a service operator and miscellaneous services like monthly bill collections, etc. As its promotional offers were attractive, the number of customers day by day swelled to encouraging numbers. The company had grown to become a one-stop mobile solution shop, that sold multi-brand handsets, accessories, connections, provided repair services, etc., in a short span of time of 3 years. Based on past experience, the company estimated the cost and revenues of different choices of expansion along with market economy condition. It was deliberating its options to reach a decision. The caselet enables a discussion on the choices of the expansion plan and the dilemma of opting for expansion or to continue in the same status. This caselet enables an understanding of the application of Decision Tree Analysis.

Assignment Question

I. Analyze the options of expansion for Mobile Continent and suggest a suitable option.



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Case Study Number	III
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P06
Course outcomes covered	C102

B-School Selection Criteria Influencers

KIMS is a premier B-School located in the central part of India offering AICTE approved 2-year Post Graduate Diploma in Management programme in varied streams. It has been consistently ranked amongst the top 50 B-Schools in the country. Although in the past many studies have been carried out to find out the factors which influence the B-School selection criteria, one of the second year student of PGDM Batch 2013-2015 Vijaya Srivastava (Vijaya) was keen to find the factors which influenced the decision of students (PGDM Batch 2014-2016) to join, in particular, KIMS for pursuing the management programme. Vijaya had chosen Business Analytics as one of her elective courses and she proposed to carry out this study as a project for the course. Vijaya started with her initial literature review to find the factors which influenced the choice of B-School. Based on the outcome of her survey, she constructed the questionnaire to carry out the study. After the questionnaire had been approved, of course with a few iterations, she hosted the same on Google Docs and communicated to the first year students to respond to the same. The initial part of the questionnaire had few questions related to the respondents profile like name, age, graduation details and work experience, status, etc. One of the questions was to identify the factors that attributed to their decision of pursuing management education. Besides these Vijaya requested them to rank their preference for B-School rankings by providing few well-known B-school survey details. The remaining part of the questionnaire focused to address on the factors which influenced them to choose KIMS. She identified close to



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sixteen factors like placement record, fee, scholarship details, approvals, accreditations, etc., and asked the respondents to indicate their importance on these factors using a five point scale rating ranging from least important (1) to most important (5). Out of the batch of 360 students, 233 students had responded to the survey resulting in the response rate being close to 65%. This caselet enables an understanding of the application of descriptive and inferential statistics for data analysis. The caselet revolves around identifying the factors that influence the students to pursue management education and in particular those that encourage them to choose a particular top rated B-School. The caselet is structured on the data collected from the 233 respondents who had enrolled for a PGDM program in a premier B-School and the same was utilized to demonstrate methods and suitability of finding few descriptive statistical measures and use of statistical test to find the impact of gender on factors that influence in selection of a B-School.

Assignment Questions

- I. Analyze and identify the most influential factor for pursuing management education.
- II. Analyze the data and categorize the factors which highly influenced for selection of the premier B- School.
- III. Does gender, as a criterion, influence the factors in selection of a B-School?



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Case Study Number	IV
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P06, P07
Course outcomes covered	C102, C103

Estimating the Probabilities of Sales at Maxwell

Maxwell, a Bangalore-based electronics retailer and one of the growing retailers in India, offered a comprehensive range of electronic gadgets with a great deal of promotional offers from all the key brands (global) available. Maxwell attempted to offer many on the spot promotional offers targeted at impulsive buyers. As its promotional offers attracted huge customers, it had grown to become a popular electronics retailer – selling all types of electronic gadgets including multi-brand handsets, accessories, network connections, providing repair services, etc. Since its inception in 2010, it had increased its range of products available at its store. This caselet enables an understanding of the application of Discrete Probability Distribution. Maxwell is an upcoming electronics retailer in Bangalore, India. Through its huge promotional offers, it had continued attracting a lot of window purchasers. The company sold all types of electronic gadgets including multibrand handsets, accessories, network connections, provided repair services, etc. As the founder observed that not all the visitors became Maxwell’s customers. Based on his past experience and recommendation from consultant, he wanted to estimate the probability of the number of customers who may make purchases based on discrete probability distribution.

Assignment Question

1. Analyze the purchase decisions of the sample customers at Maxwell.



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Case Study Number	V
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P05, P06
Course outcomes covered	C102.4

Gitanjali Group: Analysis of Retail Expansion

The Gitanjali Group (Gitanjali), the popular and the largest organized branded jewelry retailer in the Indian Market, right from inception, expanded its retail outlets by acquiring many international and domestic brands. For instance, in December 2012, Gitanjali acquired two Indian jewelry brands, Nirvana¹ and Viola². These acquisitions helped Gitanjali strengthen its retail network. By 2012, Gitanjali had more than 4,000 points of sale and 1,100 retail sales points with different retail formats. According to the company sources, due to its aggressive retail expansion, the company witnessed continuous increase in sales and profitability. This caselet enables an understanding of the application of Simple Regression Analysis. The caselet gives details of the Gitanjali Group, the largest integrated branded jewellery retailer-manufacturer in the Indian market. The caselet traces the aggressive expansion of Gitanjali Retail and its efforts to establish organized multiple formats of retail stores in the Indian jewelry market. It throws light on different formats of Gitanjali retail stores. The caselet gives scope to discuss the relationship between expansion of retail stores and the sales revenue of the company using regression analysis.

Assignment Questions

- I. How do you measure the relationship between the retail expansion and financial growth of Gitanjali? Analyse the relationship and measure the strength of the relationship.
- II. Based on the analysis, what do you think about the retail expansion of Gitanjali? Elaborate



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Case Study Number	VI
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P05, P06
Course outcomes covered	C102,2

Application of Sampling and Sampling Distribution at Quickfire

Quickfire, a well-established manufacturer of safety matches in South India since 1990, supplied cardboard and wax matchsticks. The company used automatic machines, skilled and semi-skilled employees for the entire process including packaging. Once the matchsticks were ready, they were stored in cardboard boxes. Each box had 70/80/100 matchsticks. These boxes were packed in a corrugated cardboard carton. Each carton would have the counting of 1,000 match boxes. With its reliable quality at affordable prices, the company witnessed a steady growth and soon occupied a remarkable position in the domestic and international markets. The Founding Director found to his dismay that past success is not getting converted into substantial sales. So, the company announced few special offers like increased margin for distributors, incentive schemes, etc., to attract new customers. This caselet facilitates an understanding of the application of sampling and sampling distribution. Quickfire, a well-established safety matches manufacturing company in South India, used automatic machines and semi-skilled employees for the entire manufacturing process including packaging. A potential customer while discussing about the packing, had doubts about the number of boxes in a carton pack. Based on the past experience, the supervisor informed that the boxes are normally distributed with a mean of 1,008 with a standard deviation of 45. It was decided that the potential customer will reject the order, if in the first lot, the sample mean is not within the sample acceptable limit. This caselet attempts to discuss how the sampling distribution can be adjusted to improve the quality or characteristics of



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a population.

Assignment Questions

- I. What is the probability that the batch will be acceptable to the customer? Is the probability high enough to possess an acceptable level of performance?
- II. To increase the probability of acceptance, the supervisor plans to adjust the population mean and standard deviation of the number of match boxes in a carton.

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Case Study Number	VII
Level of teaching	L3
Program outcomes covered	P02, P03, P04, P05
Course outcomes covered	C102

COMMERCIAL PITCH FOR CAFÉ DAY

The ability to come up with business idea can be transformed into a viable business where ideas supported by feasibility and a business plan can be sold to interested investors firms, and interested parties for a lump sum or a management contractor, are as agreed business ideas, if introduce at the right time, when demand for search service are product introduced by the ideas is expected to surge, can lead to a very profitable business. Business ideas are always available through different sources; how ever it's the application applied on this ideas, and timing makes all the different in failure or successes. After discussing some good business ideas, Babu and Hari have decided that their best option is to open a small cafe. They believe that their background and experience in the hospitality industry will help them to succeed. Hari is keen to start up the business straight away and has already found what he things is a good location. How where, Babu is not sure and won to spend more time researching the market before they commit to anything. Babu can see the benefit in being fully prepared before infesting time and money in to starting the busines

Questions:

- (i) Explain why you think Babu and Hari should conduct market research before starting their business. What could they find out by researching their Market?
- (ii) Describe some methods the Babu and Hari could use to learn more about the potential customers, competitors and business locations



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Case Study Number	VIII
Level of teaching	L3
Program outcomes covered	P02, P04, P05, P06
Course outcomes covered	C102.2
OPERATIONAL DISPOSITION FOR EMPLOYING NEW FLA...	
<p>Durai joined in organization for a fortnight and he had conversation with him Raj. Durai was hired as company counselor, felt that he was fed up with him team of non-performa. Three had been two major merger and the responsibilities had increased somewhat. When Durai went to meet Shankar Jha, the bright star who had joined six months back, he has reported absent and seemed to be suffering from tension and angina pain. The band III executive, was also being with company for 5-15 Years and yet had not been able to make to band II position. They were laid back, extremely, critical and yet surprisingly not moving. Raj also making some structural changes suggested by Vasthu expert to nullify de evil spirits. The company had a great infrastructure, attractive compensation packages and yet the place reeked of apathy. It was like a stagnant pool of best talent. Was it possible to undertake operation clean up.</p> <p>(i) Formulate research problem and objective. (ii) Can you suggest a theoretical frame work. (iii) Develop a working hypothesis for this study</p>	



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Case Study Number	IX
Level of teaching	L3
Program outcomes covered	P02, P04, P05, P06
Course outcomes covered	C102.2

U.S BLUE BELLS VENDING MACHINE AT MALLS

Ice cream giant of U.S. Blue Bells want to set up various soft cones vending machines at various shopping malls and other shopping places. The USP of the ice-cream is that it is less sweet, low calories and yet very thick and creamy. They have 5 flavors i.e. Vanilla, dark cocoa, coffee, butterscotch and strawberry. They also have unique real fruit flavor's in orange, kiwi, black current and mixed fruit. Before they launch the ice cream they need to know the taste preferences, buyers' behavior towards their spending power and frequency of eating ice cream. The ice cream is targeted to health conscious consumers.

- (a) Explain the research process for the above case.
- (b) As a researcher which research design would you use? Justify your choice.
- (c) Which scaling technique you would recommend for the measurement of the data collected?



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Case Study Number	X
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P05, PO6
Course outcomes covered	C102.2
NEXTGEN MORNING – STAR ENGLISH DAILY MEDIA ASSESSMENT	
<p>Pradip Sinha CEO of Nextgen Media Ltd. was in midst of a major decision exercise for launching ‘NextGen Morning - Star’ a new English daily. He was looking at the recently released IRS press note on IRS 2006 data, which stated, “Reach of mass media seems to have stagnated in the last three years. Press reach has been hovering around at 24 per cent, TV at 55 per cent, Radio at 21 per cent and Internet at 1.5 per cent at the All India level. In urban India, Press and TV have actually declined in the last three years”. Comparing reach of media of IRS 2006 R 1 with that of IRS 2005 R 1, Press has grown by 5.7 per cent, TV by 7.2 per cent, C and S by 13.5 per cent and Radio has increased by 5.4 per cent. FM Radio has increased by 21 per cent and Cinema by 21.5 per cent, Internet showing a modest growth of 6.8 per cent. The numbers clearly show that only Press has shown a marginal drop in reach in there cent IRS round, while all other mediums have registered healthy growth. However, if you compare the current Press reach with that of IRS 2005 R1, there is a decent growth of 5.7 per cent. Thus, press reach has increased over the period. To understand trends in mass media reach, Sinha looked at the combined reach of ‘TV and Press’. It has consistently shown growth across the past three rounds. Thus, the reach of mass media is increasing. As per the data, the combined reach of TV and Press has grown by 9.5 percent since IRS 2005. “The overall reach of mass media is on the rise, as one would expect due to increasing literacy levels. The relative share of each medium may vary depending on technology and market developments. For example, sudden increase in the number of 24 hour news channels, free internet editions, level of promotions and so on. Even as IRS emphasizes that media reach has increased in the last year, a point to be noted is that mass</p>	



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media consumption is still stagnating. Sinha also noted that there is a general decline or stagnancy in very large genres and vehicles. The top five programmed on STAR plus have gone down on their TVRs by 10 per cent year over year. With this data working on his mind Sinha called his VP-marketing Vinod Gupta to help him make the major impending decision to go for a new next-Generation news paper in Mumbai which will not only compete with the main stream national dailies from Mumbai but also compete with the business dailies with a exclusive supplement on money matters. Gupta opined the need to be Niche player with focus marketing to the growing middle class population with investment habits in the country. He also opined the need to go for a thorough Market Research study to help them in this major business decision. You have been retained by Mr. Gupta to help Nextgen Media to help them through a Market Research on the marketing problem.

- (1) What is the marketing problem here and what should be the Hypothesis?
- (2) Work out the secondary sources for this study.
- (3) What will be your sample frame, sampling Unit and Sampling Technique-justify your recommendation.