

K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH,

Vidyavihar, Mumbai- 400077

Subject: Business Research - II

PGDM-Comm-SET1

Duration: 3hours

Maximum Marks: 50

Date: 26/03/2019

Instructions

- *Attempt total 5 questions. .(10 marks each)*
- *Q1 is compulsory and answer in the answer sheet only*
- *Take assumptions where ever necessary and make a note of it.*
- *Data is in excel file (all questions in separate worksheet)*
- *All data analysis Answers to be given in a single excel sheet and save all the SPSS data sheets and SPSS output sheet in same folder.*

Question 1

Why do start-up businesses fail?

About the project:

There has been an immense burgeoning of start-ups across the country, with many employees (especially youngsters) making the explicit decision to forgo stability in exchange for the promise of tremendous growth and the excitement of making immediate impact.

An increasing number of new generation start-ups have created something of a “euphoria” in major cities of India. Due to major shift in work culture, coupled by present government’s effort to boost entrepreneurship by their major flagship program “Start-up India”, Indian entrepreneurs have the much-needed momentum. But amidst this rosy picture there is a major chunk of start-ups that have failed and there is a development of “fail fast” culture. The mad rush in VC funding, mounting losses, instable business models have become the reality of this industry. *The research work undertaken tries to identify the common reasons of failure of start-ups across different sectors. A case by case analysis of few successful models and an analysis of few failed start-ups would be explored.*

Every start-up has its own story. The start-ups under consideration have been from different industries and following different business models. With the exploratory research conducted in this subject a concrete conclusion is not obtained. Further compartmentalization of start-ups industry wise would be required to arrive at a meaningful result.

However, from this research we have identified that majority of start-ups are funded through family money, emphasizing the lack of financial support entrepreneurs receive from the government and other related institutions. This seems to be prevalent across all sectors in India and steps need to be taken to improve on the same. In addition, the number of products seem to be dependent on the graduation degree of Employees being an Engineer. Also the unavailability of Incubation for several start-ups, would lead to their failure. Areas of improvement have been identified for several start-ups in which Marketing the product holds prime importance.

Since each Startup being different there is no common Magic story for all. Adaptability, Flexibility and Perseverance would lead to any startup being successful.

a. On the basis of the above information about the project develop Theoretical framework (defining all variables)

b. What is the sampling technique used?

c. What are other sampling errors and how you plan to control them (name any three).

Question 2

When one company buys another company it is not unusual that some of the workers are terminated. The severance benefits are paid to laid-off workers are often a matter of dispute. Suppose that a Lauier Company recently bought the Western Company and subsequently terminated 20 of its employees. As a part of the buyout agreement it is promised that the severance packages offered to the Western employees would be equivalent to those offered to Lauier employees who had been terminated in the past year. 36 year old Bill Smith who was with Western for last 10 years was asked to quit who was drawing a salary of \$ 32,000 /year. His severance package included an offer of 5 weeks' severance pay. Bill complained that his package was less than the package offered to Lauier employees when they were laid-off, in contravention of the buyout arrangement. A statistician was called to settle the dispute. He was told that the severance is determined by three factors: Age, length of service with the company and pay. To determine how generous the severance package has been a random sample of 50 Ex- Lauier's employees and the important attributes were recorded.

- Run a suitable analysis
- Comment on how well model fits the data.
- Do all the variables belong to the equation? Explain
- Perform an analysis to determine whether Bill is correct in his assessment of the severance package.

Question 3

Given the high cost of medical care, research that points the way to avoid medical illness is welcome. Previously performed research tells us that stress affects the immune system. Two scientists too this research and asked 114 healthy adults about their social circles, they were asked to list every group they had contact with at least once every 2 weeks – family, co-workers, neighbors, friends and religious and community groups. Participants also reported negative life events over the past one year, including death of family or relative, divorce or a job related problems. The participants were divided into four groups:

Group 1: Highly social and highly stressed

Group 2: Not highly social and highly stressed

Group 3: Highly social and not highly stressed

Group 4: Not highly social and not highly stressed.

Each individual was classified in this way. In addition whether each person contracted cold over the next 12 weeks was recorded (1= cold, 2=no cold). Can we infer that there are difference between the four groups in terms of contracting a cold?

Question 4.

The vintage restaurant is located on Captivia Island, a resort community near Fort Myers, Florida. The restaurant is owned and operated by Karen, which just completed its fourth year of operation. During this time Karen sought to establish a reputation for the restaurant as high quality dining establishment that specializes in sea food. Her efforts were successful and her restaurant is known as one of the best in current times. Karen concluded that to work efficiently she has to get her forecasting system better which enable her to forecast the demand of food and beverages a year in advance.

months	I year	II year	III year
January	202	203	202
February	235	238	255
march	232	247	265
April	178	193	205
may	184	193	210
June	140	149	160
July	145	157	166
aug	152	161	174
sept	110	122	126
oct	130	130	148
nov	152	167	173
dec	246	240	245

Managerial report:

Perform an analysis of sales data for Karen that summarizes four findings, forecast and recommendations. Include the following:

- A graph of time series
- An analysis of seasonality of data. Indicate seasonal index for each month using Ratio to trend method. Do the seasonal indexes make an intuitive sense? Discuss
- Forecast Jan-Dec in fourth year.
- Assume that January sale for the fourth year turned out to be \$295. What will be your forecast error? If there is any uncertainty in forecasting how will you resolve it for her?

Question 5

The following inventory pattern has been observed in the ABC Corporation over 12 months:

Month	Inventory	Month	Inventory
January	2,544	July	2,208
February	2,913	August	3,467
March	2,028	September	3,101
April	2,178	October	2,662
May	2554	November	3,432
June	2,910	December	3,443

Use both use exponential smoothing method using coefficient as 0.6 and 0.4 to forecast the inventory for the next January. Use root-mean-squared error (RMSE) to evaluate these two forecasts.

Question 6

Refer question 1, data is collected to know about awareness level of startup product in the market. Use Multiple response analysis to summarize the information given in sheet 6.
