SEP_AIN3104

by Student Help

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PLANNING AND MANAGING A RESEARCH PROJECT

Executive Summary

This study reflects the effectiveness of conducting interviews in conducting data. The study further highlights the inefficiency of interviews in conducting data that is effective in taking managerial decisions. The study discloses critical evaluation of data accommodation through interviews. Additionally, this study stated the ways through which the outcomes can be predicted concerning the given data. The study also focuses on the relationship between the data of data ranking as well as Covid ranking. Moreover, the study made a critical evaluation of how availability of given data can reflect on the outcome of events. Furthermore, the study also showcased the processing of data collection on account of events.

Assessment 3: Collection, analysis, and reporting of data

Question 1

A. Explanation for the suitability of the adopted method

Interviews can be an effective medium for collecting data that can be beneficial to develop management strategies in a business organization. Accumulating data from the interview has provided researchers with an opportunity to identify various enablers, as well as barriers in this context. For instance, enablers include sharing purposes, and understanding, gain complimentary skills with an open mind. The enablers also included introducing new funding schemes which can contribute to the sustainability of business organizations. After conducting interviews, the barriers identified were power awareness of working individuals, variation in time scales, conflicting aims as well as burdens in administrative policies. Interviews reflecting the ways to collaborate effectively among the team members had certain advantages. As per the views of Graham, (2019, p.150), face-to-face interviews can help to put a keen eye on observing data along with adequate accuracy. Hence, this has helped to identify the demographic transition in an organization which reflects the working pattern of individuals.

Better strategies can be designed for the business organization while considering the style of working individuals. Influenced by the ideas of Mirick et al. (2019, p. 3066), interviews help in figuring out verbal as well as non-verbal questions, which involve body language disclosing the comfortability of the working individuals. This has helped to find communication gaps in a business enterprise. Additionally, this can also help to point out the level of enthusiasm, while discussing different topics during an interview. Therefore, interviews can help to find out the strengths as well as weaknesses of working individuals. According to Donaghy et al. (2019, p. 590), management officials can make effective decisions regarding the division of work processes within the working individuals. Management officials can identify talented working individuals and those individuals who lack certain skills. Hence, training programmers have to be conducted for those individuals with the aim to increase the labor efficiency of the business organization. During a face-to-face interview, the interviewer enjoys complete control over the interviewee, which implies that there are relatively lesser chances of error in data accumulation,

Limitation of the utilized tool for data collection

On the contrary, this interview with the help of thematic coding also involved certain limitations while gathering accurate data associated with effective collaboration. As per the views of Bergen, and Labonté, (2020, p. 785), there might be chances of acquiring false information from the interviewed individuals regarding screening questions like age, race or gender. The acquired data could have been accurate, if it can be gathered from secondary sources like authentic websites, journals, surveys, reports and many others. Hence, disclosing an effective opinion regarding effective collaboration will still include certain errors. Influenced by the ideas of Hoffmann, (2019 p. 906), collecting data from

secondary sources ensured that those data also reflected the viewpoints of both majority individuals as well as minority individuals. Additionally, the limitation also includes a collection of biased data, which can have a significant negative impact while reaching an individual opinion. Individuals might deliver biased opinions on account of peer pressure during the interview regarding effective collaboration. Moreover, the data accumulation process with the help of an interview also involved a limited sample size which can be seen as a major limitation.

B. Considering follow-up study

Research design to be followed and staging reason

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Quantitative research designs can be followed which involve both true experiments as well as Quasi experiments. As per the views of Bell et al. (2020 p. 5460), a true experiment is defined as an experiment, where an effort is made to put control over various other variable concepts except the one i.e. currently undergoing through experiment. The true experiment has four key elements control, random selection, random assignment and manipulation which helps to enjoy complete control over the outcome. Undertaking True experiments for effective collaboration could have delivered appropriate data to make effective management strategies. Hence, errors on account of data accommodation can be managed with the help of a true experiment. Quasi experiment is aimed at evaluating the obstructions in accumulating data to eradicate casualty for a better outcome. Quasi experiment would have helped to ascertain the major outcomes of the participants as well as non-participants to find out the diversion in accuracy. Hence, this also could have helped in acquiring accurate data. Non-experimental research designs can also be followed which involve conducting surveys, descriptive surveys, analyzing surveys, analyzing content, correlation studies and stimulating computers. Descriptive surveys included case studies, observational studies and collecting data which can be either qualitative or quantitative. Conducting descriptive surveys could also be an effective medium in terms of data accommodation.

Processing of setting data collection and reason

The primary quantitative mode of data collection can be considered to conduct surveys with close-ended questions. Hence, various surveys need to be conducted for the individuals, which can contribute effective data considering the point of view of both majorities as well as minority groups. As per the views of Roh et al. (2019 p. 1330), adding closed-ended questions in the survey will improve the response of the individuals to acquire effective data. Additionally, from the perspective of collecting secondary data, a simple random sampling

process can also be undertaken. Simple random sampling (SRS) involves collecting data from Google Scholar, authoritative websites and official websites.

Method of analyzing data

"Statistical Package for Social Sciences" (SPSS), helps in visualizing the environmental model effectively, which ranges from simple to complex environmental models. Thematic analysis survey (TAS) is referred to as the procedure to analyze qualitative data, which involves reading through a set of data and looking for the patterns for innovation and ideation of strategies. Influenced by the ideas of Douma et al. (2019 p.1420), TAS can be considered as a research approach that can help to find opinions, and gather knowledge and experience of the current circumstances to reform a quantitative set of data. The metadata dictionary delivers a centralized repository of information intending to visualize the data regarding the meaning, the correlation concerning other data, the origin of data, and the format of data and usage of data. Descriptive statistics includes methodologies offering frequencies, descriptive ration statistics and cross-tabulation. Bivariate statistics involves methodologies like correlation, non-parametric tests and analysis of variance (ANOVA). Numerical outcome prediction offers linear regression.

Question 2

A. Type of research design used in the study and considering it advantages, as well as disadvantages

“Regression analysis” (RA) can be used as a quantitative research methodology. RA can be referred to as a statistical method disclosing relationships between two varied variables. Normally RA is expressed in graphs, stating either direct relationship or in direct relationship between two of the variables. Influenced by the ideas of Ray (2019 p. 37), the given graph discloses the indirect relationship between FIFA ranking and Covid ranking. RA helps in identifying the impact of variables with respect to the topic of interest. It helps to understand whether the statistical data showcases correlation among the assigned variables. The regression model helps to understand the correlation of data with respect to statistical principles. Based on the ideas of Cui *et al*. (2020 p. 3355), the outcome of regression models is represented in the form of an Algebraic equation, which makes it relatively easier to predict the outcome. Additionally, the advantage of the regression model is ascertained in terms of correlation coefficients and various other statistical parameters. As per the views of Cui *et al*. (2020 p. 3355), predictive capability of regression models might be effective as compared to various other competitive models. RA includes all the variables that are required in the appropriate representation of the model. Additionally, RA models are pervasive. Majority of

data mining packages involve the statistical packages along with various other regression tools. MS Excel spreadsheets can deliver the capabilities of simple regression models.

On the contrary, RA models also have certain disadvantages. As opined by Yang *et al*. (2020 p. 5755), RA models cannot work effectively if the allocated data involves errors. Additionally, if the pre-processed data cannot work perfectly in order remove the missing values or imbalanced data of distribution. As per the views of Fryer *et al*. (2019 p. 280), Regression Analysis Models (RAM) can help in building strong linear correlation among the independent variables. The independent variables will interfere in each other's predictive power and the regression coefficients will lose the rigidness, whenever both the independent variables are strongly correlated to each other. Increase in variables implies that there is a significant decrease in the reliability of RAM. RAM generally works effectively whenever a smaller number of variables are included. Furthermore, RAM does not consider non-linearity among the variables automatically. Hence the user needs to identify the variety of additional terms that needs to be included in RAM for further improvement. RAM effectively works with datasets that contain numerical values; however, it does not contain categorical values. Therefore, there are certain ways to treat categorical values on account of creating various models of new variables.

B. Whether it is possible to claim based on provided graph

The graph showcases an indirect relationship between two variables FIFA ranking and Covid ranking. As per the views of Battineni *et al*. (2020 p.21), the graph also showcases that both CI as well as PI is 95 %. However, there are certain factors that need to be addressed for effective representation of data in the form of graphs. The graph still needs improvement and needs to be assessed again in order to predict the outcome accurately while ascertaining the given data. Hence, it is relatively hard to predict the outcome after analyzing graphical representation of data. RA can be further categorized into three distinct types of intervals "Confidence intervals" (CI), "Tolerance intervals" (TI) and "Prediction intervals" (PI). As per the views of Bayle *et al*. (2020 p. 163341), intervals refer to those ascertaining methods in statistics, where the sample data discloses ranges in the values. CI refers to the estimation of sample data that produces a range of values containing population, CI can help in figuring various aspects of data in the form of visual representation. Based on the views of Sultana *et al*. (2019 p. 1690), PI tends to predict the values of independent values with respect to independent variables while considering a particular setting, CI of the prediction is much more likely to contain average value of dependent variable. PI is a range that generally contains a dependent variable denoting new observations with respect to assigned values of

the independent variable. Additionally, there is a greater chance to inaccurately predict the individual value of PI in comparison to the mean value. Hence, a PI is always wider than CI of prediction.

C. Connection between international football matches and COVID cases numbers

The connection between in Covid ranks and FIFA ranking showcases regression analysis of data. Additionally, the graphical representation of data also indicates inverse correlation between FIFA ranking and Covid ranking. Using the TAS approach can help to add flexibility to the research pattern (Lin *et al*. 2021 p. 8380). Hence, it will be relatively easy to avoid errors in data representation. Moreover, SPSS delivers data documentation which assists the researchers in storing the Metadata dictionary. It is evident from the graph that the places which contains higher number of COVID cases have not been capable of holding the top-most FIFA ranking. It is crucial for the authority to ensure that they reduce number of cases in this regard to accelerate their overall development in the field of football in this regard.

D. Disadvantage of proposed research design

SPSS can be an expensive alternative for calculating data. SPSS showcases limited functionality and also showcases functions similar to excel. Based on the views of Shree *et al*. (2022 p. 210), additionally, the approach also involves additional training to exploit the features available. The SPSS enables the user with various statistical functions which include frequencies, bivariate statistics as well as cross-tabulation. The SPSS enables researchers to validate predictive models which use advanced versions of statistical procedures. SPSS also delivers limited support in terms of newer data along with limited applicability in the research studies, SPSS does not offer in-built reporting capabilities, which indicates that the researchers have to export data and take help of other software in order to generate reports. Based on the views of Lin *et al*. (2021 p. 8380), SPSS cannot be utilized to analyze large sets of data, which can be recognized as a major limitation of SPSS. SPSS can showcase effective visualization in analyzing the environmental models, still SPSS has certain limitations which can affect while analyzing data.

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