Statistics in business

Finance

Statistics in Business Question Definition Statistics is a discipline that entails the collection and analysis of numerical information or data for the purpose of making inferences that provide a reflection of whole from a representative sample. In the business context, statistics involves financial analysis, audit operations, econometrics, and marketing research among other processes (Woolley, 2013).

Question 2: Levels and Types of Statistics

Types

i. The first type or statistical category is descriptive statistics which is a measurement level that provides summaries of particular sets of data and other measures. The measures of central tendencies and the measures of variation for example mean and standard deviations are examples of descriptive statistics.

ii. Inferential statistics is the second type that deals with the collection of samples from a large statistical set of data and deducing general conclusions. Therefore, descriptive statistics summarizes business data while inferential statistics computes the same information in the form of representative samples.

Levels

i. Nominal statistics. It is the categorical discrete data for example names that represent the units being measured. In business such names may include examples like the types of cars being sold or the organizational department involved in a particular transaction

ii. Ordinal or Rank. Refers to the ordering or ranking of the quantities being measured. A business empire may choose to rate its departments in a particular order of merit when conducting statistical analysis

iii. Interval data. It is similar to ordinal in terms of ranking except for the fact the intervals between statistical values are split on an equal basis. Financial information appertaining to a business can be split orderly to create equal intervals to aid in statistical analysis

iv. Ratios. Show statistical relationships between various sets of data. Therefore, comparison of financial and other statistical business information is made possible. Examples of business ratios are liquidity, profitability and efficiency

Question 3: Role of Statistics in Business Decision Making

Statistics gives a scope of the market and enable the managing body of a business to plan appropriately for the customers. When statistical analysis is conducted on a representative sample of customers, the process becomes cost-effective because not every customer has to be involved. Therefore, the organization is able to formulate a cost-effective financial plan in relation to the target market.

Leaders in business organizations make vital decisions for the business. Such decisions should be supported by an accurate and substantive basis. Statistical data can be used to express the effectiveness of a particular decision. The same data can also enhance persuasion of stakeholders to support certain decisions or take risks because they are provided with the statistical returns on capital that would accrue to the business (Florin, 2014).

Financial analysis is a core business activity that uses statistical concepts. The analysis reveals important business data for example profitability, efficiency and the financial situation of the business. Therefore, the management is able to make decisions on how to use the available funds to make the business more efficient and profitable.

Question 4: Problematic Situations in which Statistics may be applied

i. Non-profitability. The main aim of business ventures is profit making. Businesses cannot thrive without adequate returns on capital. Profitability is determined using financial ratios that are statistical data sets. Therefore, statistical financial analysis reviews the performance of the Enterprise and provides a room for corrective measures to be initiated if the Enterprise is not profitable.

ii. Inappropriate decision-making. Decision making is an integral aspect of business activities. Careless decisions may lead to the insolvency of an, organization. However, backing business decisions with accurate statistical information makes them credible. Statistics provide the expected results in relation to particular decisions.

References

Florin, B. (2014). Development of Decision Making By Managers with Financial and Accounting Information. Annals of the University Of Oradea, Economic Science Series, 23(1), 837-844.

Woolley, T. W. (2013). Teaching outside the Box: Business Statistics in the Context of Big Questions of Meaning and Value. Journal of the Academy Of Business Education, 1497-106.